This is the Documentation for the Freelite.NET Project, which is only a .NET Wrapper around the Freelite Library. You can find the Documentation for the Freelite Library here.

## Changelog

**v3.17.0.4**
- Added `CreateView(Int32, Int32, Int32, Int32)` method
- Renamed `GetThumbnailImage(Int32, Boolean)` to `MakeThumbnail(Int32, Boolean)`
- Updated `FREE_IMAGE_COLOR_OPTIONS` enumeration
- Added `FREE_IMAGE_RESCALE_FLAGS` enumeration
- Added `RescaleRect(Int32, Int32, Int32, Int32, Int32, Int32, FREE_IMAGE_FILTER, FREE_IMAGE_RESCALE_FLAGS)` method

**v3.17.0.3**
- Improved Documentation
- Moved `WICMetadataHandler` from FreeliteAPI to FreeliteAPI.Metadata namespace

**v3.17.0.2**
- Added support for Windows Imaging Component Metadata Handler (`WICMetadataHandler` class, `GetWICMetadataHandler` method)

**v3.17.0.1**
- Added FIF_JXR and FIF_WEBP to `FREE_IMAGE_FORMAT` enumeration
- Added WebP and JPEG XR save flags to
FREE_IMAGE_SAVE_FLAGS enumeration

- Added RAW_HALFSIZE, RAW_UNPROCESSED and FIF_LOAD_NOPIXELS to FREE_IMAGE_LOAD_FLAGS enumeration
- Added FIFSupportsNoPixels(FREE_IMAGE_FORMAT) function to the FreeImage class

v3.17.0.0
- Initial code released with FreeImage 3.17.0

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FreeImage.NET Class Library Reference

FreeImageAPI Namespace

Classes

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<td>Provides access to call the native functions</td>
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<td>FreImageBitmap</td>
<td>Encapsulates a FreImage-bitmap.</td>
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<td>FreImageEngine</td>
<td>Class handling non-bitmap related functions.</td>
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<td>MemoryArrayT</td>
<td>Represents unmanaged memory, containing an array of a given structure.</td>
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<tr>
<td>Palette</td>
<td>Provides methods for working with the standard bitmap palette.</td>
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<tr>
<td>ScanlineT</td>
<td>Provides methods for working with generic bitmap scanlines.</td>
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Structures

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<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BITMAP</td>
<td>The <strong>BITMAP</strong> structure defines the type, width, height, color format, and bit values of a bitmap.</td>
</tr>
<tr>
<td>Structure</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>BITMAPINFO</td>
<td>The BITMAPINFO structure defines the dimensions and color information for a DIB.</td>
</tr>
<tr>
<td>BITMAPINFOHEADER</td>
<td>This structure contains information about the dimensions and color format of a device-independent bitmap (DIB).</td>
</tr>
<tr>
<td>FI16RGB555</td>
<td>The FI16RGB555 structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 5 bits and so, takes values in the range from 0 to 31.</td>
</tr>
<tr>
<td>FI16RGB565</td>
<td>The FI16RGB565 structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 5 bits and so, takes values in the range from 0 to 31.</td>
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<tr>
<td>FI1BIT</td>
<td>The FI1BIT structure represents a single bit. It's value can be 0 or 1.</td>
</tr>
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</table>
| FI4BIT      | The FI4BIT structure represents the half of a
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<th>Structure</th>
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<td>Byte</td>
<td>It's value range is between 0 and 15.</td>
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<tr>
<td>FIBITMAP</td>
<td>The FIBITMAP structure is a handle to a FreeImage bimtap.</td>
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<td>FICOMPLEX</td>
<td>The FICOMPLEX structure describes a color consisting of a real and an imaginary part. Each part is using 4 bytes of data.</td>
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<tr>
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<td>FIMEMORY</td>
<td>The FIMEMORY structure is a handle to an opened memory stream.</td>
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<td>The FIMETADATA structure is an unique search handle for metadata search operations.</td>
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<td>The FIMULTIBITMAP structure is a handle to a FreeImage multipaged bimtap.</td>
</tr>
<tr>
<td>FIRational</td>
<td>The FIRational structure represents a fraction via two Int32 instances which are interpreted as numerator and denominator.</td>
</tr>
<tr>
<td>Structure</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>FIRGB16</strong></td>
<td>The <strong>FIRGB16</strong> structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 16 bits and so, takes values in the range from 0 to 65535.</td>
</tr>
<tr>
<td><strong>FIRGBA16</strong></td>
<td>The <strong>FIRGBA16</strong> structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 16 bits and so, takes values in the range from 0 to 65535.</td>
</tr>
<tr>
<td><strong>FIRGBAF</strong></td>
<td>The <strong>FIRGBAF</strong> structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 32 bits and takes values in the range from 0 to 1.</td>
</tr>
<tr>
<td><strong>FIRGBF</strong></td>
<td>The <strong>FIRGBF</strong> structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color</td>
</tr>
<tr>
<td>Structure</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>FITAG</td>
<td>The FITAG structure is a handle to a FreeImage metadata tag.</td>
</tr>
<tr>
<td>FIURational</td>
<td>The FIURational structure represents a fraction via two UInt32 instances which are interpreted as numerator and denominator.</td>
</tr>
<tr>
<td>RGBQUAD</td>
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</tr>
<tr>
<td>RGBTRIPLE</td>
<td>The RGBTRIPLE structure describes a color consisting of relative intensities of red, green and blue value. Each single color component consumes 8 bits and so, takes values in the range from 0 to 255.</td>
</tr>
<tr>
<td>Delegate</td>
<td>Description</td>
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<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
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<th>Description</th>
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<td>Color channels. Constants used in color manipulation routines.</td>
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<tr>
<td>FREE_IMAGE_COLOR_DEPTH</td>
<td>Enumeration used for color conversions. FREE_IMAGE_COLOR_DEPTH contains several colors to convert to. The default 'FICD_AUTO'.</td>
</tr>
<tr>
<td>FREE_IMAGE_COLOR_OPTIONS</td>
<td>Constants used in color filling routines.</td>
</tr>
<tr>
<td>FREE_IMAGE_COLOR_TYPE</td>
<td>Image color types used in FreelImage.</td>
</tr>
<tr>
<td>FREE_IMAGE_COMPARE_FLAGS</td>
<td>List of combinable compare modes.</td>
</tr>
<tr>
<td>FREE_IMAGE_DITHER</td>
<td>Dithering algorithms. Used in FreelImage_Dither.</td>
</tr>
<tr>
<td>FREE_IMAGE_FILTER</td>
<td>Upsampling / downsampling filters. Constants used in FreelImage_Rescale.</td>
</tr>
<tr>
<td>FREE_IMAGE_FORMAT</td>
<td>I/O image format identifiers.</td>
</tr>
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<td>FREE_IMAGE_JPEG_OPERATION</td>
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</tr>
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<tr>
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<tr>
<td>FREE_IMAGE_MDMODEL</td>
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<tr>
<td>Metadata models supported by FreeImage.</td>
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<tr>
<td>FREE_IMAGE_MDTYPE</td>
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</tr>
<tr>
<td>Tag data type information (based on TIFF specifications). Note: RATIONALs are the ratio of two 32-bit integer values.</td>
<td></td>
</tr>
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<td>FREE_IMAGE_METADATA_COPY</td>
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</tr>
<tr>
<td>Flags for copying data from one bitmap to another.</td>
<td></td>
</tr>
<tr>
<td>FREE_IMAGE_QUANTIZE</td>
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<tr>
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<tr>
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<tr>
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</tr>
<tr>
<td>Constants used in FreeImage_ToneMapping.</td>
<td></td>
</tr>
<tr>
<td>FREE_IMAGE_TYPE</td>
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</tr>
<tr>
<td>Image types used in FreeImage.</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
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</tr>
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**BITMAP Structure**

The **BITMAP** structure defines the type, width, height, color format, and bit values of a bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct BITMAP
```

The **BITMAP** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from <strong>Value nk.</strong>.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns the hash code for this instance. (Inherited from <strong>ValueType.</strong>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object.</strong>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance.</td>
</tr>
</tbody>
</table>
(Inherited from `ValueType`.)

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>bmBits</code></td>
<td>Pointer to the location of the bit values for the bitmap. The <code>bmBits</code> member must be a long pointer to an array of character (1-byte) values.</td>
</tr>
<tr>
<td><code>bmBitsPixel</code></td>
<td>Specifies the number of bits required to indicate the color of a pixel.</td>
</tr>
<tr>
<td><code>bmHeight</code></td>
<td>Specifies the height, in pixels, of the bitmap. The height must be greater than zero.</td>
</tr>
<tr>
<td><code>bmPlanes</code></td>
<td>Specifies the count of color planes.</td>
</tr>
<tr>
<td><code>bmType</code></td>
<td>Specifies the bitmap type. This member must be zero.</td>
</tr>
<tr>
<td><code>bmWidth</code></td>
<td>Specifies the width, in pixels, of the bitmap. The width must be greater than zero.</td>
</tr>
<tr>
<td><code>bmWidthBytes</code></td>
<td>Specifies the number of bytes in each scan line. This value must be divisible by 2, because the system assumes that the bit values of a bitmap form an array that is word aligned.</td>
</tr>
</tbody>
</table>
Remarks

The bitmap formats currently used are monochrome and color. The monochrome bitmap uses a one-bit, one-plane format. Each scan is a multiple of 32 bits. Scans are organized as follows for a monochrome bitmap of height \( n \):

```
Scan 0
Scan 1
.
.
.
Scan n-2
Scan n-1
```

The pixels on a monochrome device are either black or white. If the corresponding bit in the bitmap is 1, the pixel is set to the foreground color; if the corresponding bit in the bitmap is zero, the pixel is set to the background color.

All devices that have the RC_BITBLT device capability support bitmaps. For more information, see `GetDeviceCaps`.

Each device has a unique color format. To transfer a bitmap from one device to another, use the `GetDIBits` and `SetDIBits` functions.

See Also

Reference

FreelImageAPI Namespace
The `BITMAP` type exposes the following members.

## Methods

<table>
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<tr>
<th>Name</th>
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<tr>
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<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Returns the fully qualified type name of this instance. (Inherited from <code>ValueType</code>.)</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - `BITMAP Structure`
  - `FreelImageAPI Namespace`

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### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>bmBits</td>
<td>Pointer to the location of the bit values for the bitmap. The bmBits member must be a long pointer to an array of character (1-byte) values.</td>
</tr>
<tr>
<td>bmBitsPixel</td>
<td>Specifies the number of bits required to indicate the color of a pixel.</td>
</tr>
<tr>
<td>bmHeight</td>
<td>Specifies the height, in pixels, of the bitmap. The height must be greater than zero.</td>
</tr>
<tr>
<td>bmPlanes</td>
<td>Specifies the count of color planes.</td>
</tr>
<tr>
<td>bmType</td>
<td>Specifies the bitmap type. This member must be zero.</td>
</tr>
<tr>
<td>bmWidth</td>
<td>Specifies the width, in pixels, of the bitmap. The width must be greater than zero.</td>
</tr>
</tbody>
</table>
| bmWidthBytes   | Specifies the number of bytes in each scan line. This value must be divisible by 2, because the system assumes that the bit
values of a bitmap form an array that is word aligned.

See Also

Reference
BITMAP Structure
FreelmageAPI Namespace
BITMAP bmBits Field

Pointer to the location of the bit values for the bitmap. The **bmBits** member must be a long pointer to an array of character (1-byte) values.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public IntPtr bmBits
```

### Field Value

**Type:** IntPtr

### See Also

- Reference
  - BITMAP Structure
  - FreeImageAPI Namespace

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BITMAPbmBitsPixel Field

Specifies the number of bits required to indicate the color of a pixel.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public ushort bmBitsPixel
```

Field Value
Type: UInt16

See Also

Reference
BITMAP Structure
FreeImageAPI Namespace

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BITMAPbmHeight Field

Specifies the height, in pixels, of the bitmap. The height must be greater than zero.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public int bmHeight
```

### Field Value

Type: **Int32**

### See Also

Reference  
BITMAP Structure  
FreeImageAPI Namespace

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BITMAPbmPlanes Field

Specifies the count of color planes.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public ushort bmPlanes
```

### Field Value

**Type:** UInt16

### See Also

**Reference**  
BITMAP Structure  
FreeImageAPI Namespace

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BITMAP\n
bmType Field

Specifies the bitmap type. This member must be zero.

**Namespace:**  FreeImageAPI  
**Assembly:**  FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public int bmType
```

### Field Value

Type: **Int32**

### See Also

**Reference**

- BITMAP Structure
- FreeImageAPI Namespace

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 BITMAPbmWidth Field

Specifies the width, in pixels, of the bitmap. The width must be greater than zero.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public int bmWidth
```

Field Value
Type: Int32

See Also

Reference
- BITMAP Structure
- FreeImageAPI Namespace

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BITMAPbmWidthBytes Field

Specifies the number of bytes in each scan line. This value must be divisible by 2, because the system assumes that the bit values of a bitmap form an array that is word aligned.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int bmWidthBytes
```

Field Value  
Type: Int32

### See Also

**Reference**  
BITMAP Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The BITMAPINFO structure defines the dimensions and color information for a DIB.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct BITMAPINFO : IEquatable<BITMAPINFO>
```

The BITMAPINFO type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a BITMAPINFO structure and is equivalent to this BITMAPINFO structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(BITMAPINFO)</td>
<td>Tests whether the specified BITMAPINFO structure is equivalent to this BITMAPINFO structure.</td>
</tr>
</tbody>
</table>
GetHashCode

Returns a hash code for this BITMAPINFO structure.
(Overrides ValueType.GetHashCode.)

GetType

Gets the Type of the current instance.
(Inherited from Object.)

ToString

Returns the fully qualified type name of this instance.
(Inherited from ValueType.)

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Operators

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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified BITMAPINFO structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified BITMAPINFO structures are different.</td>
</tr>
</tbody>
</table>

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Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bmiColors</td>
<td>The bmiColors member contains one of the following: An array of RGBQUAD. The elements of the array that make up the color table.</td>
</tr>
</tbody>
</table>
An array of 16-bit unsigned integers that specifies indexes into the currently realized logical palette. This use of `bmiColors` is allowed for functions that use DIBs. When `bmiColors` elements contain indexes to a realized logical palette, they must also call the following bitmap functions: `CreateDIBitmap`, `CreateDIBPatternBrush`, `CreateDIBSection`

The `iUsage` parameter of `CreateDIBSection` must be set to `DIB_PAL_COLORS`. The number of entries in the array depends on the values of the `biBitCount` and `biClrUsed` members of the `BITMAPINFOHEADER` structure. The colors in the `bmiColors` table appear in order of importance. For more information, see the Remarks section.

| `bmiHeader` | Specifies a `BITMAPINFOHEADER` structure that contains information about the dimensions of color format. |

**Remarks**

A DIB consists of two distinct parts: a `BITMAPINFO` structure describing the dimensions and colors of the bitmap, and an array of bytes defining the pixels of the bitmap. The bits in the array are packed together, but each scan line must be padded with zeroes to end on a `LONG` data-type boundary. If the height of the bitmap is positive, the bitmap is a bottom-up DIB and its origin is the lower-left corner. If the height is negative, the bitmap is a top-down DIB and its origin is the upper left corner. A bitmap is packed when the bitmap array immediately follows the
**BITMAPINFO** header. Packed bitmaps are referenced by a single pointer. For packed bitmaps, the `biClrUsed` member must be set to an even number when using the DIB_PAL_COLORS mode so that the DIB bitmap array starts on a **DWORD** boundary.

**Note** The `bmiColors` member should not contain palette indexes if the bitmap is to be stored in a file or transferred to another application.

Unless the application has exclusive use and control of the bitmap, the bitmap color table should contain explicit RGB values.

**See Also**

Reference

FreImageAPI Namespace

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The **BITMAPINFO** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <strong>BITMAPINFO</strong> structure and is equivalent to this <strong>BITMAPINFO</strong> structure. (Overrides overriding ValueTypeEquals(Object).)</td>
</tr>
<tr>
<td>Equals(BITMAPINFO)</td>
<td>Tests whether the specified <strong>BITMAPINFO</strong> structure is equivalent to this <strong>BITMAPINFO</strong> structure.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <strong>BITMAPINFO</strong> structure. (Overrides ValueTypeGetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance. (Inherited from <strong>ValueType</strong>.)</td>
</tr>
</tbody>
</table>
See Also

Reference
BITMAPINFO Structure
FreelImageAPI Namespace

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# BITMAPINFO Equals Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a BITMAPINFO structure and is equivalent to this BITMAPINFO structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(BITMAPINFO)</td>
<td>Tests whether the specified BITMAPINFO structure is equivalent to this BITMAPINFO structure.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - BITMAPINFO Structure
  - FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
BITMAPINFOEquals Method (Object)

Tests whether the specified object is a BITMAPINFO structure and is equivalent to this BITMAPINFO structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

**obj**

Type: `SystemObject`  
The object to test.

### Return Value

Type: `Boolean`  
`true` if `obj` is a BITMAPINFO structure equivalent to this BITMAPINFO structure; otherwise, `false`.

### See Also

**Reference**  
BITMAPINFO Structure  
Equals Overload  
FreeImageAPI Namespace
BITMAPINFO Equals Method (BITMAPINFO)

Tests whether the specified BITMAPINFO structure is equivalent to this BITMAPINFO structure.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool Equals(BITMAPINFO other)
```

**Parameters**

- `other`  
  Type: FreeImageAPIBITMAPINFO  
  A BITMAPINFO structure to compare to this instance.

**Return Value**

Type: Boolean  
true if `obj` is a BITMAPINFO structure equivalent to this BITMAPINFO structure; otherwise, false.

**Implements**

IEquatableTEquals(T)

**See Also**

Reference
BITMAPINFO Structure
Equals Overload
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
BITMAPINFO GetHashCode Method

Returns a hash code for this BITMAPINFO structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public override int GetHashCode()
```

Return Value

Type: Int32
An integer value that specifies the hash code for this BITMAPINFO.

See Also

Reference
BITMAPINFO Structure
FreeImageAPI Namespace

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The `BITMAPINFO` type exposes the following members.

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <code>BITMAPINFO</code> structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <code>BITMAPINFO</code> structures are different.</td>
</tr>
</tbody>
</table>

## See Also

- **Reference**
  - `BITMAPINFO` Structure
  - `FreeImageAPI` Namespace

Contact/Feedback: [FreeImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
BITMAPINFO Equality Operator

Tests whether two specified BITMAPINFO structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static bool operator ==(BITMAPINFO left, BITMAPINFO right)
```

### Parameters

**left**
- Type: FreeImageAPIBITMAPINFO  
The BITMAPINFO that is to the left of the equality operator.

**right**
- Type: FreeImageAPIBITMAPINFO  
The BITMAPINFO that is to the right of the equality operator.

### Return Value

Type: Boolean  
**true** if the two BITMAPINFO structures are equal; otherwise, **false**.

### See Also

Reference  
BITMAPINFO Structure
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
BITMAPINFO Inequality Operator

Tests whether two specified BITMAPINFO structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(
    BITMAPINFO left,
    BITMAPINFO right
)
```

### Parameters

- **left**
  - Type: FreeImageAPIBITMAPINFO
  - The BITMAPINFO that is to the left of the inequality operator.

- **right**
  - Type: FreeImageAPIBITMAPINFO
  - The BITMAPINFO that is to the right of the inequality operator.

### Return Value

- Type: Boolean
  - **true** if the two BITMAPINFO structures are different; otherwise, false.

### See Also

- Reference
BITMAPINFO Structure
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
The **BITMAPINFO** type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bmiColors</td>
<td>The <code>bmiColors</code> member contains one of the following: An array of <code>RGBQUAD</code>. The elements of the array that make up the color table. An array of 16-bit unsigned integers that specifies indexes into the currently realized logical palette. This use of <code>bmiColors</code> is allowed for functions that use DIBs. When <code>bmiColors</code> elements contain indexes to a realized logical palette, they must also call the following bitmap functions: <code>CreateDIBitmap</code>, <code>CreateDIBPatternBrush</code>, <code>CreateDIBSection</code>. The <code>iUsage</code> parameter of <code>CreateDIBSection</code> must be set to <code>DIB_PAL_COLORS</code>. The number of entries in the array depends on the values of the <code>biBitCount</code> and <code>biClrUsed</code> members of the <code>BITMAPINFOHEADER</code> structure. The colors in the <code>bmiColors</code> table appear in order of importance. For more information, see the Remarks section.</td>
</tr>
<tr>
<td>bmiHeader</td>
<td>Specifies a <code>BITMAPINFOHEADER</code></td>
</tr>
</tbody>
</table>
structure that contains information about the dimensions of color format.

See Also

Reference
BITMAPINFO Structure
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
The `bmiColors` member contains one of the following: An array of `RGBQUAD`. The elements of the array that make up the color table. An array of 16-bit unsigned integers that specifies indexes into the currently realized logical palette. This use of `bmiColors` is allowed for functions that use DIBs. When `bmiColors` elements contain indexes to a realized logical palette, they must also call the following bitmap functions: `CreateDIBitmap`, `CreateDIBPatternBrush`.

### CreateDIBSection

The `iUsage` parameter of `CreateDIBSection` must be set to DIB_PAL_COLORS.

The number of entries in the array depends on the values of the `biBitCount` and `biClrUsed` members of the `BITMAPINFOHEADER` structure.

The colors in the `bmiColors` table appear in order of importance. For more information, see the Remarks section.

### Namespace: FreeImageAPI

### Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public RGBQUAD[] bmiColors
```

### Field Value

Type: `RGBQUAD`
BITMAPINFO bmiHeader

Field

Specifies a BITMAPINFOHEADER structure that contains information about the dimensions of color format.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

public BITMAPINFOHEADER bmiHeader

Field Value
Type: BITMAPINFOHEADER

See Also

Reference
BITMAPINFO Structure
FreeImageAPI Namespace
BITMAPINFOHEADER Structure

This structure contains information about the dimensions and color format of a device-independent bitmap (DIB).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct BITMAPINFOHEADER : IEquatable<BITMAPINFOHEADER>
```

The BITMAPINFOHEADER type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔄 Equals(Object)</td>
<td>Tests whether the specified object is a BITMAPINFOHEADER structure and is equivalent to this BITMAPINFOHEADER structure. (Overrides ValueTypeEquals(Object).)</td>
</tr>
<tr>
<td>🔄 Equals(BITMAPINFOHEADER)</td>
<td>Tests whether the</td>
</tr>
</tbody>
</table>
specified BITMAPINFOHEADER structure is equivalent to this BITMAPINFOHEADER structure.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this BITMAPINFOHEADER structure. (Overides ValueType.GetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance (Inherited from ValueType.)</td>
</tr>
</tbody>
</table>

### Top

#### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified BITMAPINFOHEADER structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified BITMAPINFOHEADER structures are different.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>biBitCount</td>
<td>Specifies the number of bits per pixel. The biBitCount member of the BITMAPINFOHEADER structure determines the number of bits that define each pixel and the maximum number of colors in the bitmap. This member must be one of the following values.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Windows 98/Me, Windows 2000/XP: The number of bits-per-pixel is specified or is implied by the JPEG or PNG format.</td>
</tr>
<tr>
<td>1</td>
<td>The bitmap is monochrome, and the bmiColors member of BITMAPINFO contains two entries. Each bit in the bitmap array represents a pixel. If the bit is clear, the pixel is displayed with the color of the first entry in the bmiColors table; if the bit is set, the pixel has the color of the second entry in the table.</td>
</tr>
<tr>
<td>4</td>
<td>The bitmap has a</td>
</tr>
</tbody>
</table>
maximum of 16 colors, and the `bmiColors` member of `BITMAPINFO` contains up to 16 entries. Each pixel in the bitmap is represented by a 4-bit index into the color table. For example, if the first byte in the bitmap is 0x1F, the byte represents two pixels. The first pixel contains the color in the second table entry, and the second pixel contains the color in the sixteenth table entry.

| 8   | The bitmap has a maximum of 256 colors, and the `bmiColors` member of `BITMAPINFO` contains up to 256 entries. In this case, each byte in the array represents a single pixel. |
| 16  | The bitmap has a maximum of $2^{16}$ colors. If the `biCompression` member of the `BITMAPINFOHEADER` is `BI_RGB`, the `bmiColors` member of |
**BITMAPINFO** is NULL. Each **WORD** in the bitmap array represents a single pixel. The relative intensities of red, green, and blue are represented with five bits for each color component. The value for blue is in the least significant five bits, followed by five bits each for green and red. The most significant bit is not used. The **bmiColors** color table is used for optimizing colors used on palette-based devices, and must contain the number of entries specified by the **biClrUsed** member of the **BITMAPINFOHEADER**. If the **biCompression** member of the **BITMAPINFOHEADER** is **BI_BITFIELDS**, the **bmiColors** member contains three **DWORD** color masks that specify the red, green, and blue components, respectively, of each pixel. Each **WORD** in the bitmap array represents a single pixel.

**Windows NT/Windows 2000/XP:** When the
biCompression member is BI_BITFIELDS, bits set in each DWORD mask must be contiguous and should not overlap the bits of another mask. All the bits in the pixel do not have to be used.

Windows 95/98/Me:
When the biCompression member is BI_BITFIELDS, the system supports only the following 16bpp color masks: A 5-5-5 16-bit image, where the blue mask is 0x001F, the green mask is 0x03E0, and the red mask is 0x7C00; and a 5-6-5 16-bit image, where the blue mask is 0x001F, the green mask is 0x07E0, and the red mask is 0xF800.

The bitmap has a maximum of $2^{24}$ colors, and the bmiColors member of BITMAPINFO is NULL. Each 3-byte triplet in the bitmap array represents the relative intensities of blue, green, and red, respectively, for a pixel. The bmiColors color table is used for optimizing colors used on palette-based
devices, and must contain the number of entries specified by the biClrUsed member of the BITMAPINFOHEADER.

32 The bitmap has a maximum of $2^{32}$ colors. If the biCompression member of the BITMAPINFOHEADER is BI_RGB, the bmiColors member of BITMAPINFO is NULL. Each DWORD in the bitmap array represents the relative intensities of blue, green, and red, respectively, for a pixel. The high byte in each DWORD is not used. The bmiColors color table is used for optimizing colors used on palette-based devices, and must contain the number of entries specified by the biClrUsed member of the BITMAPINFOHEADER. If the biCompression member of the BITMAPINFOHEADER is BI_BITFIELDS, the bmiColors member contains three DWORD
color masks that specify the red, green, and blue components, respectively, of each pixel. Each DWORD in the bitmap array represents a single pixel.

**Windows NT/2000:**
When the `biCompression` member is `BI_BITFIELDS`, bits set in each DWORD mask must be contiguous and should not overlap the bits of another mask. All the bits in the pixel do not need to be used.

**Windows 95/98/Me:**
When the `biCompression` member is `BI_BITFIELDS`, the system supports only the following 32-bpp color mask: The blue mask is 0x000000FF, the green mask is 0x0000FF00, and the red mask is 0x00FF0000.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>biClrImportant</code></td>
<td>Specifies the number of color indexes that are required for displaying the bitmap. If this value is zero, all colors are required.</td>
</tr>
<tr>
<td><code>biClrUsed</code></td>
<td>Specifies the number of color indexes in the color table that are actually used by the bitmap. If this value is zero, the bitmap uses the maximum number of colors corresponding to the value of the</td>
</tr>
</tbody>
</table>
biBitCount member for the compression mode specified by biCompression. If iClrUsed is nonzero and the biBitCount member is less than 16, the biClrUsed member specifies the actual number of colors the graphics engine or device driver accesses. If biBitCount is 16 or greater, the biClrUsed member specifies the size of the color table used to optimize performance of the system color palettes. If biBitCount equals 16 or 32, the optimal color palette starts immediately following the three DWORD masks.

When the bitmap array immediately follows the BITMAPINFO structure, it is a packed bitmap. Packed bitmaps are referenced by a single pointer. Packed bitmaps require that the biClrUsed member must be either zero or the actual size of the color table.

<table>
<thead>
<tr>
<th>biCompression</th>
<th>Specifies the type of compression for a compressed bottom-up bitmap (top-down DIBs cannot be compressed).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Meaning</td>
</tr>
<tr>
<td>BI_RGB</td>
<td>An uncompressed format.</td>
</tr>
<tr>
<td>BI_RLE8</td>
<td>A run-length encoded (RLE) format for bitmaps with 8 bpp. The compression format is a 2-</td>
</tr>
</tbody>
</table>
byte format consisting of a count byte followed by a byte containing a color index.

<table>
<thead>
<tr>
<th>BI_RLE4</th>
<th>An RLE format for bitmaps with 4 bpp. The compression format is a 2-byte format consisting of a count byte followed by two word-length color indexes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI_BITFIELDS</td>
<td>Specifies that the bitmap is not compressed and that the color table consists of three <strong>DWORD</strong> color masks that specify the red, green, and blue components, respectively, of each pixel. This is valid when used with 16- and 32-bpp bitmaps.</td>
</tr>
<tr>
<td>BI_JPEG</td>
<td>Windows 98/Me, Windows 2000/XP: Indicates that the image is a JPEG image.</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BI_PNG</td>
<td>Windows 98/Me, Windows 2000/XP: Indicates that the image is a PNG image.</td>
</tr>
</tbody>
</table>

- **biHeight**
  Specifies the height of the bitmap, in pixels. If `biHeight` is positive, the bitmap is a bottom-up DIB and its origin is the lower-left corner. If `biHeight` is negative, the bitmap is a top-down DIB and its origin is the upper-left corner. If `biHeight` is negative, indicating a top-down DIB, `biCompression` must be either BI_RGB or BI_BITFIELDS. Top-down DIBs cannot be compressed.

  **Windows 98/Me, Windows 2000/XP:** If `biCompression` is BI_JPEG or BI_PNG, the `biHeight` member specifies the height of the decompressed JPEG or PNG image file, respectively.

- **biPlanes**
  Specifies the number of planes for the target device. This value must be set to 1.

- **biSize**
  Specifies the size of the structure,
### Remarks

The **BITMAPINFO** structure combines the **BITMAPINFOHEADER** structure and a color table to provide a complete definition of the dimensions and colors of a DIB.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| **biSizeImage** | Specifies the size, in bytes, of the image. This may be set to zero for BI_RGB bitmaps.  
**Windows 98/Me, Windows 2000/XP:** If **biCompression** is BI_JPEG or BI_PNG, **biSizeImage** indicates the size of the JPEG or PNG image buffer, respectively. |
| **biWidth** | Specifies the width of the bitmap, in pixels.  
**Windows 98/Me, Windows 2000/XP:** If **biCompression** is BI_JPEG or BI_PNG, the **biWidth** member specifies the width of the decompressed JPEG or PNG image file, respectively. |
| **biXPelsPerMeter** | Specifies the horizontal resolution, in pixels-per-meter, of the target device for the bitmap. An application can use this value to select a bitmap from a resource group that best matches the characteristics of the current device. |
| **biYPelsPerMeter** | Specifies the vertical resolution, in pixels-per-meter, of the target device for the bitmap. |
See Also

Reference
FreelImageAPI Namespace

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The `BITMAPINFOHEADER` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>BITMAPINFOHEADER</code> structure and is equivalent to this <code>BITMAPINFOHEADER</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(BITMAPINFOHEADER)</code></td>
<td>Tests whether the specified <code>BITMAPINFOHEADER</code> structure is equivalent to this <code>BITMAPINFOHEADER</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>BITMAPINFOHEADER</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance. (Inherited from <strong>Value​​Type</strong>.)</td>
</tr>
</tbody>
</table>

**See Also**

- Reference
  - BITMAPINFOHEADER Structure
  - FreelImageAPI Namespace

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# BITMAPINFOHEADER.Equals Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>BITMAPINFOHEADER</code> structure and is equivalent to this <code>BITMAPINFOHEADER</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(BITMAPINFOHEADER)</code></td>
<td>Tests whether the specified <code>BITMAPINFOHEADER</code> structure is equivalent to this <code>BITMAPINFOHEADER</code> structure.</td>
</tr>
</tbody>
</table>

## See Also

- **Reference**
  - `BITMAPINFOHEADER` Structure
  - `FreeImageAPI` Namespace

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BITMAPINFOHEADER Equals Method (Object)

Tests whether the specified object is a BITMAPINFOHEADER structure and is equivalent to this BITMAPINFOHEADER structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

**Parameters**

- **obj**
  
  Type: SystemObject  
  The object to test.

**Return Value**

Type: Boolean  
**true** if **obj** is a BITMAPINFOHEADER structure equivalent to this BITMAPINFOHEADER structure; otherwise, **false**.

### See Also

**Reference**

BITMAPINFOHEADER Structure  
Equals Overload  
FreeImageAPI Namespace
BITMAPINFOHEADER.Equals Method (BITMAPINFOHEADER)

Tests whether the specified BITMAPINFOHEADER structure is equivalent to this BITMAPINFOHEADER structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

C# Syntax:

```csharp
public bool Equals(  
    BITMAPINFOHEADER other
)
```

**Parameters**

*other*
Type: FreeImageAPIBITMAPINFOHEADER  
A BITMAPINFOHEADER structure to compare to this instance.

**Return Value**
Type: Boolean  
true if obj is a BITMAPINFOHEADER structure equivalent to this BITMAPINFOHEADER structure; otherwise, false.

**Implements**  
IEquatable<T>Equals(T)

**See Also**
BITMAPINFOHEADER GetHashCode Method

Returns a hash code for this BITMAPINFOHEADER structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public override int GetHashCode()
```

Return Value
Type: Int32
An integer value that specifies the hash code for this BITMAPINFOHEADER.

See Also

Reference
BITMAPINFOHEADER Structure
FreeImageAPI Namespace

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The `BITMAPINFOHEADER` type exposes the following members.

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQUALITY</td>
<td>Tests whether two specified <code>BITMAPINFOHEADER</code> structures are equivalent.</td>
</tr>
<tr>
<td>INEQUALITY</td>
<td>Tests whether two specified <code>BITMAPINFOHEADER</code> structures are different.</td>
</tr>
</tbody>
</table>

## See Also

**Reference**
- `BITMAPINFOHEADER` Structure
- `FreeImageAPI` Namespace

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Help improve this Documentation: [Join the Project](#)
BITMAPINFOHEADER Equality Operator

Tests whether two specified BITMAPINFOHEADER structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(BITMAPINFOHEADER left, BITMAPINFOHEADER right)
```

### Parameters

**left**  
Type: FreeImageAPIBITMAPINFOHEADER  
The BITMAPINFOHEADER that is to the left of the equality operator.

**right**  
Type: FreeImageAPIBITMAPINFOHEADER  
The BITMAPINFOHEADER that is to the right of the equality operator.

### Return Value

Type: Boolean  
**true** if the two BITMAPINFOHEADER structures are equal; otherwise, **false**.
See Also

Reference
BITMAPINFOHEADER Structure
FreelimageAPI Namespace

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BITMAPINFOHEADER Inequality Operator

Tests whether two specified BITMAPINFOHEADER structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(
    BITMAPINFOHEADER left,
    BITMAPINFOHEADER right
)
```

### Parameters

- **left**
  - Type: FreeImageAPIBITMAPINFOHEADER  
  - The BITMAPINFOHEADER that is to the left of the inequality operator.

- **right**
  - Type: FreeImageAPIBITMAPINFOHEADER  
  - The BITMAPINFOHEADER that is to the right of the inequality operator.

### Return Value

Type: Boolean  
**true** if the two BITMAPINFOHEADER structures are different; otherwise, **false**.
See Also

Reference
BITMAPINFOHEADER Structure
FreelmageAPI Namespace

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**BITMAPINFOHEADER Fields**

The **BITMAPINFOHEADER** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>biBitCount</td>
<td>Specifies the number of bits per pixel. The biBitCount member of the <strong>BITMAPINFOHEADER</strong> structure determines the number of bits that define each pixel and the maximum number of colors in the bitmap. This member must be one of the following values.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td><strong>Windows 98/Me,</strong> <strong>Windows 2000/XP:</strong> The number of bits-per-pixel is specified or is implied by the JPEG or PNG format.</td>
</tr>
<tr>
<td>1</td>
<td>The bitmap is monochrome, and the bmiColors member of <strong>BITMAPINFO</strong> contains two entries. Each bit in the bitmap array represents a pixel. If the bit is clear, the pixel is displayed with the color</td>
</tr>
</tbody>
</table>
of the first entry in the bmiColors table; if the bit is set, the pixel has the color of the second entry in the table.

4 The bitmap has a maximum of 16 colors, and the bmiColors member of BITMAPINFO contains up to 16 entries. Each pixel in the bitmap is represented by a 4-bit index into the color table. For example, if the first byte in the bitmap is 0x1F, the byte represents two pixels. The first pixel contains the color in the second table entry, and the second pixel contains the color in the sixteenth table entry.

8 The bitmap has a maximum of 256 colors, and the bmiColors member of BITMAPINFO contains up to 256 entries. In this case, each byte in the array represents a single pixel.

16 The bitmap has a
maximum of $2^{16}$ colors. If the
biCompression
member of the
BITMAPINFOHEADER
is BI_RGB, the
bmiColors member of
BITMAPINFO is NULL.
Each WORD in the
bitmap array represents
a single pixel. The
relative intensities of
red, green, and blue are
represented with five
bits for each color
component. The value
for blue is in the least
significant five bits,
followed by five bits
each for green and red.
The most significant bit
is not used. The
bmiColors color table
is used for optimizing
colors used on palette-
based devices, and
must contain the
number of entries
specified by the
biClrUsed member of
the
BITMAPINFOHEADER.
If the biCompression
member of the
BITMAPINFOHEADER
is BI_BITFIELDS, the
bmiColors member
contains three DWORD
color masks that specify
the red, green, and blue components, respectively, of each pixel. Each **WORD** in the bitmap array represents a single pixel.

**Windows NT/Windows 2000/XP:** When the **biCompression** member is **BI_BITFIELDS**, bits set in each **DWORD** mask must be contiguous and should not overlap the bits of another mask. All the bits in the pixel do not have to be used.

**Windows 95/98/Me:** When the **biCompression** member is **BI_BITFIELDS**, the system supports only the following 16bpp color masks: A 5-5-5 16-bit image, where the blue mask is 0x001F, the green mask is 0x03E0, and the red mask is 0x7C00; and a 5-6-5 16-bit image, where the blue mask is 0x001F, the green mask is 0x07E0, and the red mask is 0xF800.

The bitmap has a maximum of $2^{24}$ colors, and the **bmiColors** member of **BITMAPINFO** is NULL. Each 3-byte triplet in the bitmap array represents the relative
intensities of blue, green, and red, respectively, for a pixel. The **bmiColors** color table is used for optimizing colors used on palette-based devices, and must contain the number of entries specified by the **biClrUsed** member of the **BITMAPINFOHEADER**.

32 The bitmap has a maximum of $2^{32}$ colors. If the **biCompression** member of the **BITMAPINFOHEADER** is **BI_RGB**, the **bmiColors** member of **BITMAPINFO** is NULL. Each **DWORD** in the bitmap array represents the relative intensities of blue, green, and red, respectively, for a pixel. The high byte in each **DWORD** is not used. The **bmiColors** color table is used for optimizing colors used on palette-based devices, and must contain the number of entries specified by the
biClrUsed member of the BITMAPINFOHEADER. If the biCompression member of the BITMAPINFOHEADER is BI_BITFIELDS, the bmiColors member contains three DWORD color masks that specify the red, green, and blue components, respectively, of each pixel. Each DWORD in the bitmap array represents a single pixel.

Windows NT/2000: When the biCompression member is BI_BITFIELDS, bits set in each DWORD mask must be contiguous and should not overlap the bits of another mask. All the bits in the pixel do not need to be used.

Windows 95/98/Me: When the biCompression member is BI_BITFIELDS, the system supports only the following 32-bpp color mask: The blue mask is 0x000000FF, the green mask is 0x0000FF00, and the red mask is 0x00FF0000.

biClrImportant Specifies the number of color indexes that are required for displaying the bitmap. If this value
is zero, all colors are required.

| biClrUsed       | Specifies the number of color indexes in the color table that are actually used by the bitmap. If this value is zero, the bitmap uses the maximum number of colors corresponding to the value of the biBitCount member for the compression mode specified by biCompression. If iClrUsed is nonzero and the biBitCount member is less than 16, the biClrUsed member specifies the actual number of colors the graphics engine or device driver accesses. If biBitCount is 16 or greater, the biClrUsed member specifies the size of the color table used to optimize performance of the system color palettes. If biBitCount equals 16 or 32, the optimal color palette starts immediately following the three DWORD masks. When the bitmap array immediately follows the BITMAPINFO structure, it is a packed bitmap. Packed bitmaps are referenced by a single pointer. Packed bitmaps require that the biClrUsed member must be either zero or the actual size of the color table. |

| biCompression   | Specifies the type of compression for a compressed bottom-up bitmap (top-down DIBs cannot be compressed). |

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI_RGB</td>
<td>An uncompressed format.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BI_RLE8</td>
<td>A run-length encoded (RLE) format for bitmaps with 8 bpp. The compression</td>
</tr>
<tr>
<td></td>
<td>format is a 2-byte format consisting of a count byte followed by a byte</td>
</tr>
<tr>
<td></td>
<td>containing a color index.</td>
</tr>
<tr>
<td>BI_RLE4</td>
<td>An RLE format for bitmaps with 4 bpp. The compression format is a 2-byte</td>
</tr>
<tr>
<td></td>
<td>format consisting of a count byte followed by two word-length color indexes.</td>
</tr>
<tr>
<td>BI_BITFIELDS</td>
<td>Specifies that the bitmap is not compressed and that the color table</td>
</tr>
<tr>
<td></td>
<td>consists of three DWORD color masks that specify the red, green, and blue</td>
</tr>
<tr>
<td></td>
<td>components,</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
respectively, of each pixel. This is valid when used with 16- and 32-bpp bitmaps.

<table>
<thead>
<tr>
<th>BI_JPEG</th>
<th>Windows 98/Me, Windows 2000/XP: Indicates that the image is a JPEG image.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI_PNG</td>
<td>Windows 98/Me, Windows 2000/XP: Indicates that the image is a PNG image.</td>
</tr>
</tbody>
</table>

| biHeight      | Specifies the height of the bitmap, in pixels. If biHeight is positive, the bitmap is a bottom-up DIB and its origin is the lower-left corner. If biHeight is negative, the bitmap is a top-down DIB and its origin is the upper-left corner. If biHeight is negative, indicating a top-down DIB, biCompression must be either BI_RGB or BI_BITFIELDS. Top-down DIBs cannot be compressed. Windows 98/Me, Windows 2000/XP: If biCompression is BI_JPEG or BI_PNG, the biHeight member specifies the height of the decompressed JPEG or PNG |
image file, respectively.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>biPlanes</td>
<td>Specifies the number of planes for the target device. This value must be set to 1.</td>
</tr>
<tr>
<td>biSize</td>
<td>Specifies the size of the structure, in bytes.</td>
</tr>
<tr>
<td>biSizeImage</td>
<td>Specifies the size, in bytes, of the image. This may be set to zero for BI_RGB bitmaps. Windows 98/Me, Windows 2000/XP: If biCompression is BI_JPEG or BI_PNG, biSizeImage indicates the size of the JPEG or PNG image buffer, respectively.</td>
</tr>
<tr>
<td>biWidth</td>
<td>Specifies the width of the bitmap, in pixels. Windows 98/Me, Windows 2000/XP: If biCompression is BI_JPEG or BI_PNG, the biWidth member specifies the width of the decompressed JPEG or PNG image file, respectively.</td>
</tr>
<tr>
<td>biXPelsPerMeter</td>
<td>Specifies the horizontal resolution, in pixels-per-meter, of the target device for the bitmap. An application can use this value to select a bitmap from a resource group that best matches the characteristics of the current device.</td>
</tr>
<tr>
<td>biYPelsPerMeter</td>
<td>Specifies the vertical resolution, in pixels-per-meter, of the target device for the bitmap.</td>
</tr>
</tbody>
</table>
See Also

Reference
BITMAPINFOHEADER Structure
FreeImageAPI Namespace

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**BITMAPINFOHEADER.biBitCount Field**

Specifies the number of bits per pixel. The biBitCount member of the BITMAPINFOHEADER structure determines the number of bits that define each pixel and the maximum number of colors in the bitmap. This member must be one of the following values.

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td><strong>Windows 98/Me, Windows 2000/XP:</strong> The number of bits-per-pixel is specified or is implied by the JPEG or PNG format.</td>
</tr>
<tr>
<td>1</td>
<td>The bitmap is monochrome, and the bmiColors member of BITMAPINFO contains two entries. Each bit in the bitmap array represents a pixel. If the bit is clear, the pixel is displayed with the color of the first entry in the bmiColors table; if the bit is set, the pixel has the color of the second entry in the table.</td>
</tr>
<tr>
<td>4</td>
<td>The bitmap has a maximum of 16 colors, and the bmiColors member of BITMAPINFO contains up to 16 entries. Each pixel in the bitmap is represented by a 4-bit index into the color table. For example, if the first byte in the bitmap is 0x1F, the byte represents two pixels. The first pixel contains the color in the second table entry, and the second pixel contains the color in the sixteenth table entry.</td>
</tr>
<tr>
<td>8</td>
<td>The bitmap has a maximum of 256 colors, and the bmiColors member of BITMAPINFO contains up to 256 entries. In this case, each byte in the array represents a single pixel.</td>
</tr>
</tbody>
</table>
16 The bitmap has a maximum of $2^{16}$ colors. If the `biCompression` member of the `BITMAPINFOHEADER` is `BI_RGB`, the `bmiColors` member of `BITMAPINFO` is NULL. Each `WORD` in the bitmap array represents a single pixel. The relative intensities of red, green, and blue are represented with five bits for each color component. The value for blue is in the least significant five bits, followed by five bits each for green and red. The most significant bit is not used. The `bmiColors` color table is used for optimizing colors used on palette-based devices, and must contain the number of entries specified by the `biClrUsed` member of the `BITMAPINFOHEADER`. If the `biCompression` member of the `BITMAPINFOHEADER` is `BI_BITFIELDS`, the `bmiColors` member contains three `DWORD` color masks that specify the red, green, and blue components, respectively, of each pixel. Each `WORD` in the bitmap array represents a single pixel.

**Windows NT/Windows 2000/XP:** When the `biCompression` member is `BI_BITFIELDS`, bits set in each `DWORD` mask must be contiguous and should not overlap the bits of another mask. All the bits in the pixel do not have to be used.

**Windows 95/98/Me:** When the `biCompression` member is `BI_BITFIELDS`, the system supports only the following 16bpp color masks: A 5-5-5 16-bit image, where the blue mask is 0x001F, the green mask is 0x03E0, and the red mask is 0x7C00; and a 5-6-5 16-bit image, where the blue mask is 0x001F, the green mask is 0x07E0, and the red mask is 0xF800.

24 The bitmap has a maximum of $2^{24}$ colors, and the `bmiColors` member of `BITMAPINFO` is NULL. Each 3-byte triplet in the bitmap array represents the relative intensities of blue, green, and red, respectively, for a pixel. The `bmiColors` color table is used for optimizing colors used on palette-based devices, and must contain the number of entries specified by the `biClrUsed` member of the `BITMAPINFOHEADER`.

32 The bitmap has a maximum of $2^{32}$ colors. If the
biCompression member of the BITMAPINFOHEADER is BI_RGB, the bmiColors member of BITMAPINFO is NULL. Each DWORD in the bitmap array represents the relative intensities of blue, green, and red, respectively, for a pixel. The high byte in each DWORD is not used. The bmiColors color table is used for optimizing colors used on palette-based devices, and must contain the number of entries specified by the biClrUsed member of the BITMAPINFOHEADER.

If the biCompression member of the BITMAPINFOHEADER is BI_BITFIELDS, the bmiColors member contains three DWORD color masks that specify the red, green, and blue components, respectively, of each pixel. Each DWORD in the bitmap array represents a single pixel.

Windows NT/ 2000: When the biCompression member is BI_BITFIELDS, bits set in each DWORD mask must be contiguous and should not overlap the bits of another mask. All the bits in the pixel do not need to be used.

Windows 95/98/Me: When the biCompression member is BI_BITFIELDS, the system supports only the following 32-bpp color mask: The blue mask is 0x000000FF, the green mask is 0x0000FF00, and the red mask is 0x00FF0000.

---

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```
C#
public ushort biBitCount
```

Field Value
Type: UInt16

**See Also**
<table>
<thead>
<tr>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>BITMAPINFOHEADER Structure</td>
</tr>
<tr>
<td>FreelImageAPI Namespace</td>
</tr>
</tbody>
</table>

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BITMAPINFOHEADER.biClrImportant Field

Specifies the number of color indexes that are required for displaying the bitmap. If this value is zero, all colors are required.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public uint biClrImportant
```

Field Value
Type: UInt32

See Also

Reference
BITMAPINFOHEADER Structure
FreeImageAPI Namespace

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BITMAPINFOHEADER.biClrUsed Field

Specifies the number of color indexes in the color table that are actually used by the bitmap. If this value is zero, the bitmap uses the maximum number of colors corresponding to the value of the biBitCount member for the compression mode specified by biCompression.

If iClrUsed is nonzero and the biBitCount member is less than 16, the biClrUsed member specifies the actual number of colors the graphics engine or device driver accesses. If biBitCount is 16 or greater, the biClrUsed member specifies the size of the color table used to optimize performance of the system color palettes. If biBitCount equals 16 or 32, the optimal color palette starts immediately following the three DWORD masks.

When the bitmap array immediately follows the BITMAPINFO structure, it is a packed bitmap. Packed bitmaps are referenced by a single pointer. Packed bitmaps require that the biClrUsed member must be either zero or the actual size of the color table.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public uint biClrUsed
```

Field Value

Type: UInt32

See Also

Reference
BITMAPINFOHEADER Structure
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
The `BITMAPINFOHEADER.biCompression` field specifies the type of compression for a compressed bottom-up bitmap (top-down DIBs cannot be compressed).

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI_RGB</td>
<td>An uncompressed format.</td>
</tr>
<tr>
<td>BI_RLE8</td>
<td>A run-length encoded (RLE) format for bitmaps with 8 bpp. The compression format is a 2-byte format consisting of a count byte followed by a byte containing a color index.</td>
</tr>
<tr>
<td>BI_RLE4</td>
<td>An RLE format for bitmaps with 4 bpp. The compression format is a 2-byte format consisting of a count byte followed by two word-length color indexes.</td>
</tr>
<tr>
<td>BI_BITFIELDS</td>
<td>Specifies that the bitmap is not compressed and that the color table consists of three DWORD color masks that specify the red, green, and blue components, respectively, of each pixel. This is valid when used with 16- and 32-bpp bitmaps.</td>
</tr>
<tr>
<td>BI_JPEG</td>
<td>Windows 98/Me, Windows 2000/XP: Indicates that the image is a JPEG image.</td>
</tr>
<tr>
<td>BI_PNG</td>
<td>Windows 98/Me, Windows 2000/XP: Indicates that the image is a PNG image.</td>
</tr>
</tbody>
</table>

**Namespace:** FreelImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll)  
**Version:** 3.17.0.4 (3.17.0)
## Syntax

```c#
public uint biCompression
```

## Field Value

Type: `UInt32`

## See Also

### Reference

- BITMAPINFOHEADER Structure
- FreelImageAPI Namespace

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BITMAPINFOHEADER biHeight Field

Specifies the height of the bitmap, in pixels. If `biHeight` is positive, the bitmap is a bottom-up DIB and its origin is the lower-left corner. If `biHeight` is negative, the bitmap is a top-down DIB and its origin is the upper-left corner.

If `biHeight` is negative, indicating a top-down DIB, `biCompression` must be either BI_RGB or BI_BITFIELDS. Top-down DIBs cannot be compressed.

Windows 98/Me, Windows 2000/XP: If `biCompression` is BI_JPEG or BI_PNG, the `biHeight` member specifies the height of the decompressed JPEG or PNG image file, respectively.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int biHeight
```

### Field Value

Type: Int32

### See Also

Reference  
BITMAPINFOHEADER Structure  
FreeImageAPI Namespace

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BITMAPINFOHEADER.biPlanes Field

Specifies the number of planes for the target device. This value must be set to 1.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ushort biPlanes
```

### Field Value

**Type:** UInt16

### See Also

- Reference: BITMAPINFOHEADER Structure  
- FreeImageAPI Namespace

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BITMAPINFOHEADER biSize Field

Specifies the size of the structure, in bytes.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C#  
```
public uint biSize
```

### Field Value

Type: UInt32

### See Also

**Reference**

BITMAPINFOHEADER Structure  
FreeImageAPI Namespace

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BITMAPINFOHEADER biSizeImage

Field

Specifies the size, in bytes, of the image. This may be set to zero for BI_RGB bitmaps.

Windows 98/Me, Windows 2000/XP: If biCompression is BI_JPEG or BI_PNG, biSizeImage indicates the size of the JPEG or PNG image buffer, respectively.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public uint biSizeImage
```

Field Value

Type: UInt32

See Also

Reference

BITMAPINFOHEADER Structure
FreeImageAPI Namespace

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BITMAPINFOHEADER.biWidth Field

Specifies the width of the bitmap, in pixels. **Windows 98/Me, Windows 2000/XP**: If `biCompression` is `BI_JPEG` or `BI_PNG`, the `biWidth` member specifies the width of the decompressed JPEG or PNG image file, respectively.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int biWidth
```

### Field Value

**Type**: Int32

### See Also

Reference  
BITMAPINFOHEADER Structure  
FreeImageAPI Namespace

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BITMAPINFOHEADER.biXPelsPerMeter Field

Specifies the horizontal resolution, in pixels-per-meter, of the target device for the bitmap. An application can use this value to select a bitmap from a resource group that best matches the characteristics of the current device.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int biXPelsPerMeter
```

### Field Value

Type: **Int32**

### See Also

**Reference**
- BITMAPINFOHEADER Structure
- FreeImageAPI Namespace

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FIELD

Specifies the vertical resolution, in pixels-per-meter, of the target device for the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int biYPelsPerMeter
```

**Field Value**  
Type: Int32

**See Also**

Reference  
BITMAPINFOHEADER Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The **FI16RGB555** structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 5 bits and so, takes values in the range from 0 to 31.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FI16RGB555 : IComparable,
    IComparable<FI16RGB555>, IEquatable<FI16RGB555>, IEquatable<FI16RGB555, IEquatable<FI16RGB555>
```

The **FI16RGB555** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![FI16RGB555]</td>
<td>Initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Blue]</td>
<td>Gets or sets the blue color component.</td>
</tr>
</tbody>
</table>
### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
<tr>
<td>Green</td>
<td>Gets or sets the green color component.</td>
</tr>
<tr>
<td>Red</td>
<td>Gets or sets the red color component.</td>
</tr>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FI16RGB555)</td>
<td>Compares this instance with a specified FI16RGB555 object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FI16RGB555 structure and is equivalent to this FI16RGB555 structure. (Overrides ValueTypeEquals(Object).)</td>
</tr>
<tr>
<td>Equals(FI16RGB555)</td>
<td>Tests whether the specified FI16RGB555 structure is equivalent to this FI16RGB555 structure.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this FI16RGB555 structure. (Overrides ValueTypeGetHashCode.)</td>
</tr>
</tbody>
</table>
**GetType**

Gets the Type of the current instance. (Inherited from Object.)

**ToString**

Converts the numeric value of the FI16RGB555 object to its equivalent string representation. (Overrides ValueType.ToString.)

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FI16RGB555 structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FI16RGB555)</td>
<td>Converts the value of a Color structure to a FI16RGB555 structure.</td>
</tr>
<tr>
<td>(FI16RGB555 to Color)</td>
<td>Converts the value of a FI16RGB555 structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FI16RGB555 structures are different.</td>
</tr>
</tbody>
</table>

## Remarks

For easy integration of the underlying structure into the .NET framework, the FI16RGB555 structure implements implicit
conversion operators to convert the represented color to and from the Color type. This makes the Color type a real replacement for the FI16RGB555 structure and may be used in all situations which require an FI16RGB555 type.

## Examples

The following code example demonstrates the various conversions between the FI16RGB555 structure and the Color structure.

```csharp
FI16RGB555 fi16rgb;
// Initialize the structure using a native .NET Color
fi16rgb = new FI16RGB555(Color.Indigo);
// Initialize the structure using the implicit operator.
fi16rgb = Color.DarkSeaGreen;
// Convert the FI16RGB555 instance into a native
// using its implicit operator.
Color color = fi16rgb;
// Using the structure's Color property for converting
// into a native .NET Color.
Color another = fi16rgb.Color;
```

## See Also

Reference
FreImageAPI Namespace

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FI16RGB555 Constructor

Initializes a new instance based on the specified Color.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FI16RGB555(
    Color color
)
```

Parameters

- `color`  
  Type: System.Drawing.Color  
  Color to initialize with.

See Also

- Reference  
  FI16RGB555 Structure  
  FreeImageAPI Namespace

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FI16RGB555 Properties

The FI16RGB555 type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>Gets or sets the blue color component.</td>
</tr>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
<tr>
<td>Green</td>
<td>Gets or sets the green color component.</td>
</tr>
<tr>
<td>Red</td>
<td>Gets or sets the red color component.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FI16RGB555 Structure
- FreelImageAPI Namespace

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FI16RGB555Blue Property

Gets or sets the blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte Blue { get; set; }
```

### Property Value

**Type:** Byte

### See Also

- **Reference**
  - FI16RGB555 Structure
  - FreeImageAPI Namespace
FI16RGB555Color Property

Gets or sets the Color of the structure.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Color Color { get; set; }
```

Property Value

Type: Color

See Also

Reference
FI16RGB555 Structure  
FreeImageAPI Namespace

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FI16RGB555Green Property

Gets or sets the green color component.

Namespace: FreelImageAPI
Assembly: FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public byte Green { get; set; }
```

Property Value
Type: Byte

See Also

Reference
FI16RGB555 Structure
FreelImageAPI Namespace

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FI16RGB555Red Property

Gets or sets the red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte Red { get; set; }
```

### Property Value

Type: Byte

### See Also

Reference  
FI16RGB555 Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The **FI16RGB555** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CompareTo(Object)</strong></td>
<td>Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
<tr>
<td><strong>CompareTo(FI16RGB555)</strong></td>
<td>Compares this instance with a specified <strong>FI16RGB555</strong> object.</td>
</tr>
<tr>
<td><strong>Equals(Object)</strong></td>
<td>Tests whether the specified object is a <strong>FI16RGB555</strong> structure and is equivalent to this <strong>FI16RGB555</strong> structure. (Overrides <strong>ValueType.Equals(Object)</strong>.)</td>
</tr>
<tr>
<td><strong>Equals(FI16RGB555)</strong></td>
<td>Tests whether the specified <strong>FI16RGB555</strong> structure is equivalent to this <strong>FI16RGB555</strong> structure.</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Returns a hash code for this <strong>FI16RGB555</strong> structure. (Overrides <strong>ValueType.GetHashCode</strong>.)</td>
</tr>
<tr>
<td><strong>GetType</strong></td>
<td>Gets the <strong>Type</strong> of the <strong>FI16RGB555</strong> structure.</td>
</tr>
</tbody>
</table>
current instance. (Inherited from Object.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the FI16RGB555 object to its equivalent string representation. (Overrides ValueType.ToString.)</td>
</tr>
</tbody>
</table>

See Also

Reference
FI16RGB555 Structure
FreelImageAPI Namespace

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FI16RGB555CompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FI16RGB555)</td>
<td>Compares this instance with a specified FI16RGB555 object.</td>
</tr>
</tbody>
</table>

See Also

Reference
FI16RGB555 Structure
FreelImageAPI Namespace

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FI16RGB555CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
    Object obj
)
```

### Parameters

- **obj**
  
  Type: SystemObject  
  An object to compare with this instance.

### Return Value

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

**Implements**

IComparable.CompareTo(Object)

### Exceptions
ArgumentException

obj is not a FI16RGB555.

See Also

Reference
FI16RGB555 Structure
CompareTo Overload
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FI16RGB555CompareTo Method (FI16RGB555)

Compares this instance with a specified FI16RGB555 object.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int CompareTo(
    FI16RGB555 other
)
```

**Parameters**

- **other**
  - Type: FreeImageAPIFI16RGB555
  - A FI16RGB555 to compare.

**Return Value**

- Type: Int32
  - A signed number indicating the relative values of this instance and other.

**Implements**

IComparableTCompareTo(T)

**See Also**

Reference

FI16RGB555 Structure
CompareTo Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
# FI16RGB555Equals Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FI16RGB555 structure and is equivalent to this FI16RGB555 structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FI16RGB555)</td>
<td>Tests whether the specified FI16RGB555 structure is equivalent to this FI16RGB555 structure.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FI16RGB555 Structure
- FreeImageAPI Namespace

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Help improve this Documentation: [Join the Project](#)
FI16RGB555Equals Method (Object)

Tests whether the specified object is a FI16RGB555 structure and is equivalent to this FI16RGB555 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(Object obj)
```

### Parameters

**obj**

- Type: `SystemObject`
- The object to test.

### Return Value

- Type: `Boolean`
- **true** if `obj` is a FI16RGB555 structure equivalent to this FI16RGB555 structure; otherwise, **false**.

### See Also

- Reference
  - FI16RGB555 Structure
  - Equals Overload
  - FreeImageAPI Namespace
FI16RGB555Equals Method (FI16RGB555)

Tests whether the specified FI16RGB555 structure is equivalent to this FI16RGB555 structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool Equals(FI16RGB555 other)
```

Parameters

- `other`
  - Type: FreeImageAPIFI16RGB555
  - A FI16RGB555 structure to compare to this instance.

Return Value

- Type: Boolean
  - `true` if `obj` is a FI16RGB555 structure equivalent to this FI16RGB555 structure; otherwise, `false`.

Implements

- IEquatableTEquals(T)

See Also

- Reference
FI16RGB555 Structure
Equals Overload
FreelImageAPI Namespace

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**FI16RGB555 GetHashCode Method**

Returns a hash code for this *FI16RGB555* structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override int GetHashCode()
```

**Return Value**

Type: *Int32*

An integer value that specifies the hash code for this *FI16RGB555*.

**See Also**

Reference

*FI16RGB555 Structure*  
*FreeImageAPI Namespace*
FI16RGB555ToString Method

Converts the numeric value of the FI16RGB555 object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

**Return Value**  
Type: `String`  
The string representation of the value of this instance.

### See Also

Reference  
- FI16RGB555 Structure  
- FreeImageAPI Namespace

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The **FI16RGB555** type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <strong>FI16RGB555</strong> structures are equivalent.</td>
</tr>
<tr>
<td>(Color to <strong>FI16RGB555</strong>)</td>
<td>Converts the value of a <strong>Color</strong> structure to a <strong>FI16RGB555</strong> structure.</td>
</tr>
<tr>
<td>(<strong>FI16RGB555</strong> to Color)</td>
<td>Converts the value of a <strong>FI16RGB555</strong> structure to a <strong>Color</strong> structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <strong>FI16RGB555</strong> structures are different.</td>
</tr>
</tbody>
</table>

### See Also

- **Reference**
  - **FI16RGB555** Structure
  - **FreeImageAPI** Namespace

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FI16RGB555Equality Operator

Tests whether two specified FI16RGB555 structures are equivalent.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool operator ==(FI16RGB555 left,
                             FI16RGB555 right)
```

**Parameters**

- **left**
  Type: FreeImageAPIFI16RGB555
  The FI16RGB555 that is to the left of the equality operator.

- **right**
  Type: FreeImageAPIFI16RGB555
  The FI16RGB555 that is to the right of the equality operator.

**Return Value**

Type: Boolean
**true** if the two FI16RGB555 structures are equal; otherwise, **false**.

**See Also**

Reference
FI16RGB555 Structure
FreelimageAPI Namespace

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## FI16RGB555 Conversion Operators

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Color to FI16RGB555" /></td>
<td>Converts the value of a <code>Color</code> structure to a <code>FI16RGB555</code> structure.</td>
</tr>
<tr>
<td><img src="image" alt="FI16RGB555 to Color" /></td>
<td>Converts the value of a <code>FI16RGB555</code> structure to a <code>Color</code> structure.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FI16RGB555 Structure
  - FreelImageAPI Namespace
FI16RGB555 Conversion (Color to FI16RGB555)

Converts the value of a `Color` structure to a `FI16RGB555` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FI16RGB555 (Color value)
```

### Parameters

**value**  
Type: `System.DrawingColor`  
A `Color` structure.

### Return Value

Type: `FI16RGB555`  
A new instance of `FI16RGB555` initialized to `value`.

### See Also

- Reference: `FI16RGB555 Structure`  
- Overload  
- FreeImageAPI Namespace
FI16RGB555 Conversion (FI16RGB555 to Color)

Converts the value of a FI16RGB555 structure to a Color structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static implicit operator Color (FI16RGB555 value)
```

### Parameters

`value`  
Type: FreeImageAPI.FI16RGB555  
A FI16RGB555 structure.

### Return Value

Type: Color  
A new instance of Color initialized to `value`.

### See Also

Reference  
FI16RGB555 Structure  
Overload  
FreeImageAPI Namespace
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FI16RGB555Inequality Operator

Tests whether two specified FI16RGB555 structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(
    FI16RGB555 left,
    FI16RGB555 right
)
```

**Parameters**

- **left**
  
  Type: FreeImageAPIFI16RGB555  
  The FI16RGB555 that is to the left of the inequality operator.

- **right**
  
  Type: FreeImageAPIFI16RGB555  
  The FI16RGB555 that is to the right of the inequality operator.

**Return Value**

Type: Boolean  
true if the two FI16RGB555 structures are different; otherwise, false.

### See Also

Reference
FI16RGB555 Structure
FreelImageAPI Namespace

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The **FI16RGB565** structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 5 bits and so, takes values in the range from 0 to 31.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]  
public struct FI16RGB565 : IComparable,  
    IComparable<FI16RGB565>, IEquatable<FI16RGB565>
```

The **FI16RGB565** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![FI16RGB565]</td>
<td>Initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Blue]</td>
<td>Gets or sets the blue color component.</td>
</tr>
</tbody>
</table>
### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color</strong></td>
<td>Gets or sets the Color of the structure.</td>
</tr>
<tr>
<td><strong>Green</strong></td>
<td>Gets or sets the green color component.</td>
</tr>
<tr>
<td><strong>Red</strong></td>
<td>Gets or sets the red color component.</td>
</tr>
<tr>
<td><strong>compareTo(Object)</strong></td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td><strong>compareTo(FI16RGB565)</strong></td>
<td>Compares this instance with a specified FI16RGB565 object.</td>
</tr>
<tr>
<td><strong>Equals(Object)</strong></td>
<td>Tests whether the specified object is a FI16RGB565 structure and is equivalent to this FI16RGB565 structure. (Overrides ValueType Equals(Object).)</td>
</tr>
<tr>
<td><strong>Equals(FI16RGB565)</strong></td>
<td>Tests whether the specified FI16RGB565 structure is equivalent to this FI16RGB565 structure.</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Returns a hash code for this FI16RGB565 structure. (Overrides ValueType GetHashCode.)</td>
</tr>
</tbody>
</table>
### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FI16RGB565 structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FI16RGB565)</td>
<td>Converts the value of a Color structure to a FI16RGB565 structure.</td>
</tr>
<tr>
<td>(FI16RGB565 to Color)</td>
<td>Converts the value of a FI16RGB565 structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FI16RGB565 structures are different.</td>
</tr>
</tbody>
</table>

### Remarks

For easy integration of the underlying structure into the .NET framework, the FI16RGB565 structure implements implicit...
conversion operators to convert the represented color to and from the `Color` type. This makes the `Color` type a real replacement for the `FI16RGB565` structure and may be used in all situations which require an `FI16RGB565` type.

### Examples

The following code example demonstrates the various conversions between the `FI16RGB565` structure and the `Color` structure.

```csharp
FI16RGB565 fi16rgb;
// Initialize the structure using a native .NET (fi16rgb = new FI16RGB565(Color.Indigo);
// Initialize the structure using the implicit operator.
fi16rgb = Color.DarkSeaGreen;
// Convert the FI16RGB565 instance into a native
// using its implicit operator.
Color color = fi16rgb;
// Using the structure's Color property for conversion
// into a native .NET Color.
Color another = fi16rgb.Color;
```

### See Also

- Reference
- FreelImageAPI Namespace

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FI16RGB565 Constructor

Initializes a new instance based on the specified `Color`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FI16RGB565(
    Color color
)
```

**Parameters**

- `color`  
  Type: `System.DrawingColor`  
  `Color` to initialize with.

### See Also

- Reference  
  FI16RGB565 Structure  
  FreeImageAPI Namespace

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FI16RGB565 Properties

The FI16RGB565 type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>Gets or sets the blue color component.</td>
</tr>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
<tr>
<td>Green</td>
<td>Gets or sets the green color component.</td>
</tr>
<tr>
<td>Red</td>
<td>Gets or sets the red color component.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FI16RGB565 Structure
- FreelImageAPI Namespace

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FI16RGB565Blue Property

Gets or sets the blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte Blue { get; set; }
```

### Property Value
Type: **Byte**

### See Also

**Reference**  
FI16RGB565 Structure  
FreeImageAPI Namespace
FI16RGB565Color Property

Gets or sets the Color of the structure.

**Namespace:** FreelImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Color Color { get; set; }
```

### Property Value

Type: `Color`

### See Also

Reference
- FI16RGB565 Structure
- FreelImageAPI Namespace

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FI16RGB565Green Property

Gets or sets the green color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte Green { get; set; }
```

### Property Value

**Type:** Byte

### See Also

Reference  
- FI16RGB565 Structure  
- FreeImageAPI Namespace

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FI16RGB565Red Property

Gets or sets the red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte Red { get; set; }
```

### Property Value

Type: **Byte**

### See Also

**Reference**  
FI16RGB565 Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The **FI16RGB565** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| ```compareTo(Object)``` | Compares this instance with a specified ```Object```.
<p>| <code>compareTo(FI16RGB565)</code> | Compares this instance with a specified <code>FI16RGB565</code> object. |
| <code>Equals(Object)</code> | Tests whether the specified object is a <code>FI16RGB565</code> structure and is equivalent to this <code>FI16RGB565</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.) |
| <code>Equals(FI16RGB565)</code> | Tests whether the specified <code>FI16RGB565</code> structure is equivalent to this <code>FI16RGB565</code> structure. |
| <code>GetHashCode</code> | Returns a hash code for this <code>FI16RGB565</code> structure. (Overrides <code>ValueType.GetHashCode</code>.) |
| <code>GetType</code> | Gets the <code>Type</code> of the |</p>
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the numeric value of the <strong>FI16RGB565</strong> object to its equivalent string representation. (Overrides <strong>ValueType.ToString</strong>.)</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
- FI16RGB565 Structure
- FreelmageAPI Namespace

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## FI16RGB565 CompareTo Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FI16RGB565)</td>
<td>Compares this instance with a specified FI16RGB565 object.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FI16RGB565 Structure
- FreelImageAPI Namespace
FI16RGB565.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
    Object obj
)
```

### Parameters

- **obj**  
  Type: SystemObject  
  An object to compare with this instance.

### Return Value

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

**Implements**

IComparable.CompareTo(Object)

### Exceptions
ArgumentException

obj is not a FI16RGB565.

See Also

Reference
FI16RGB565 Structure
CompareTo Overload
FreeImageAPI Namespace

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FI16RGB565CompareTo Method (FI16RGB565)

Compares this instance with a specified FI16RGB565 object.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public int CompareTo(
    FI16RGB565 other
)
```

Parameters

- `other`  
  Type: FreeImageAPIFI16RGB565  
  A FI16RGB565 to compare.

Return Value

Type: Int32  
A signed number indicating the relative values of this instance and `other`.

Implements

IComparableTCompareTo(T)

See Also

Reference  
FI16RGB565 Structure
CompareTo Overload
FreelimageAPI Namespace

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### FI16RGB565Equals Method

#### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FI16RGB565 structure and is equivalent to this FI16RGB565 structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FI16RGB565)</td>
<td>Tests whether the specified FI16RGB565 structure is equivalent to this FI16RGB565 structure.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FI16RGB565 Structure
- FreeImageAPI Namespace
FI16RGB565Equals Method (Object)

Tests whether the specified object is a FI16RGB565 structure and is equivalent to this FI16RGB565 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

- **obj**  
  Type: SystemObject  
  The object to test.

### Return Value

Type: Boolean  
true if obj is a FI16RGB565 structure equivalent to this FI16RGB565 structure; otherwise, false.

### See Also

- Reference  
  FI16RGB565 Structure  
  Equals Overload  
  FreeImageAPI Namespace
FI16RGB565Equals Method (FI16RGB565)

Tests whether the specified FI16RGB565 structure is equivalent to this FI16RGB565 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool Equals(FI16RGB565 other)
```

**Parameters**

other

Type: FreeImageAPIFI16RGB565

A FI16RGB565 structure to compare to this instance.

**Return Value**

Type: Boolean

true if obj is a FI16RGB565 structure equivalent to this FI16RGB565 structure; otherwise, false.

**Implements**  
IEquatableTEquals(T)

**See Also**

Reference
FI16RGB565 Structure
Equals Overload
FreelmageAPI Namespace

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**FI16RGB565 GetHashCode Method**

Returns a hash code for this FI16RGB565 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override int GetHashCode()
```

**Return Value**

**Type:** Int32  
An integer value that specifies the hash code for this FI16RGB565.

**See Also**

- Reference: FI16RGB565 Structure  
- FreeImageAPI Namespace

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FI16RGB565ToString Method

Converts the numeric value of the FI16RGB565 object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

- Reference  
  - FI16RGB565 Structure  
  - FreeImageAPI Namespace

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FI16RGB565 Operators and Type Conversions

The FI16RGB565 type exposes the following members.

Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FI16RGB565 structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FI16RGB565)</td>
<td>Converts the value of a Color structure to a FI16RGB565 structure.</td>
</tr>
<tr>
<td>(FI16RGB565 to Color)</td>
<td>Converts the value of a FI16RGB565 structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FI16RGB565 structures are different.</td>
</tr>
</tbody>
</table>

See Also

Reference

FI16RGB565 Structure
FreelImageAPI Namespace

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FI16RGB565Equality Operator

Tests whether two specified FI16RGB565 structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool operator ==(FI16RGB565 left, FI16RGB565 right)
```

### Parameters

- **left**
  - Type: FreeImageAPIFI16RGB565  
  - The FI16RGB565 that is to the left of the equality operator.

- **right**
  - Type: FreeImageAPIFI16RGB565  
  - The FI16RGB565 that is to the right of the equality operator.

### Return Value

- Type: Boolean  
  - true if the two FI16RGB565 structures are equal; otherwise, false.

### See Also

- Reference  
  - FI16RGB565 Structure
## FI16RGB565 Conversion Operators

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Color to FI16RGB565)</td>
<td>Converts the value of a Color structure to a FI16RGB565 structure.</td>
</tr>
<tr>
<td>(FI16RGB565 to Color)</td>
<td>Converts the value of a FI16RGB565 structure to a Color structure.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FI16RGB565 Structure
  - FreelImageAPI Namespace
FI16RGB565 Conversion (Color to FI16RGB565)

Converts the value of a Color structure to a FI16RGB565 structure.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4

```
public static implicit operator FI16RGB565 (Color value)
```

**Parameters**

`value`
Type: System.DrawingColor
A Color structure.

**Return Value**
Type: FI16RGB565
A new instance of FI16RGB565 initialized to value.

**See Also**

Reference
FI16RGB565 Structure
Overload
FreeImageAPI Namespace
FI16RGB565 Conversion
(FI16RGB565 to Color)

Converts the value of a \texttt{FI16RGB565} structure to a \texttt{Color} structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator Color (FI16RGB565 value)
```

### Parameters

**value**
- Type: FreeImageAPI\FI16RGB565
- A \texttt{FI16RGB565} structure.

### Return Value

**Type:** Color  
A new instance of \texttt{Color} initialized to \textit{value}.

### See Also

**Reference**
- FI16RGB565 Structure
- Overload
- FreeImageAPI Namespace
FI16RGB565Inequality Operator

Tests whether two specified FI16RGB565 structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static bool operator !=(
    FI16RGB565 left,
    FI16RGB565 right
)
```

**Parameters**

- **left**
  - Type: FreeImageAPIFI16RGB565  
  - The FI16RGB565 that is to the left of the inequality operator.

- **right**
  - Type: FreeImageAPIFI16RGB565  
  - The FI16RGB565 that is to the right of the inequality operator.

**Return Value**

- Type: Boolean  
  - **true** if the two FI16RGB565 structures are different; otherwise, **false**.

### See Also

Reference
The **FI1BIT** structure represents a single bit. Its value can be 0 or 1.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
[SerializableAttribute]
public struct FI1BIT
```

The **FI1BIT** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from ValueType.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns the hash code for this instance. (Inherited from ValueType.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the FI1BIT object to its equivalent string representation.</td>
</tr>
</tbody>
</table>
(Overrides `ValueType.ToString`.)

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>(Byte to FI1BIT)</code></td>
<td>Converts the value of a <code>Byte</code> structure to a <code>FI1BIT</code> structure.</td>
</tr>
<tr>
<td><code>(FI1BIT to Byte)</code></td>
<td>Converts the value of a <code>FI1BIT</code> structure to a <code>Byte</code> structure.</td>
</tr>
</tbody>
</table>

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>MaxValue</code></td>
<td>Represents the largest possible value of <code>FI1BIT</code>. This field is constant.</td>
</tr>
<tr>
<td><code>MinValue</code></td>
<td>Represents the smallest possible value of <code>FI1BIT</code>. This field is constant.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- `FreelmageAPI Namespace`

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Help improve this Documentation: *Join the Project*
The `FI1BIT` type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Equals</code></td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from <code>ValueTyp</code>e.)</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns the hash code for this instance. (Inherited from <code>ValueTyp</code>e.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the numeric value of the <code>FI1BIT</code> object to its equivalent string representation. (Overrides <code>ValueTyp</code>eToString.)</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - `FI1BIT` Structure
  - FreeImageAPI Namespace
FI1BITToString Method

Converts the numeric value of the FI1BIT object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

Type: **String**  
The string representation of the value of this instance.

### See Also

Reference  
FI1BIT Structure  
FreeImageAPI Namespace

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## FI1BIT Type Conversions

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Byte to FI1BIT)</td>
<td>Converts the value of a <code>Byte</code> structure to a <code>FI1BIT</code> structure.</td>
</tr>
<tr>
<td>(FI1BIT to Byte)</td>
<td>Converts the value of a <code>FI1BIT</code> structure to a <code>Byte</code> structure.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FI1BIT Structure
  - FreelImageAPI Namespace

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# FI1BIT Conversion Operators

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Byte to FI1BIT)</td>
<td>Converts the value of a <code>Byte</code> structure to a <code>FI1BIT</code> structure.</td>
</tr>
<tr>
<td>(FI1BIT to Byte)</td>
<td>Converts the value of a <code>FI1BIT</code> structure to a <code>Byte</code> structure.</td>
</tr>
</tbody>
</table>

## See Also

**Reference**
- FI1BIT Structure
- FreelImageAPI Namespace

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FI1BIT Conversion (Byte to FI1BIT)

Converts the value of a Byte structure to a FI1BIT structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FI1BIT (byte value)
```

### Parameters

*value*  
Type: `SystemByte`  
A Byte structure.

### Return Value

Type: `FI1BIT`  
A new instance of `FI1BIT` initialized to `value`.

### See Also

- Reference  
- FI1BIT Structure  
- Overload  
- FreeImageAPI Namespace
FI1BIT Conversion (FI1BIT to Byte)

Converts the value of a FI1BIT structure to a Byte structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator byte (FI1BIT value)
```

**Parameters**

- `value`  
  Type: FreeImageAPIFI1BIT  
  A FI1BIT structure.

**Return Value**

Type: Byte  
A new instance of FI1BIT initialized to `value`.

### See Also

- Reference  
  FI1BIT Structure  
  Overload  
  FreeImageAPI Namespace
The **FI1BIT** type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>MaxValue</code></td>
<td>Represents the largest possible value of <strong>FI1BIT</strong>. This field is constant.</td>
</tr>
<tr>
<td><code>MinValue</code></td>
<td>Represents the smallest possible value of <strong>FI1BIT</strong>. This field is constant.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- FI1BIT Structure
- FreeImageAPI Namespace

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FI1BITMaxValue Field

Represents the largest possible value of FI1BIT. This field is constant.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public const byte MaxValue
```

Field Value  
Type: Byte

### See Also

Reference  
FI1BIT Structure  
FreeImageAPI Namespace

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FI1BIT MinValue Field

Represents the smallest possible value of FI1BIT. This field is constant.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const byte MinValue
```

Field Value  
Type: Byte

### See Also

Reference  
FI1BIT Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The **FI4BIT** structure represents the half of a **Byte**. It's valuerange is between 0 and 15.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
[SerializableAttribute]
public struct FI4BIT
```

The **FI4BIT** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![](https://freedownloadmanager.org) Equals | Indicates whether this instance and a specified object are equal.  
(Inherited from **ValueType**.) |
| ![](https://freedownloadmanager.org) GetHashCode | Returns the hash code for this instance.  
(Inherited from **ValueType**) |
| ![](https://freedownloadmanager.org) GetType | Gets the **Type** of the current instance.  
(Inherited from **Object**) |
| ![](https://freedownloadmanager.org) ToString | Converts the numeric value of the **FI4BIT** object to its equivalent |
string representation.
(Overrides ValueType.ToString.)

<table>
<thead>
<tr>
<th>Top</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operators</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Byte to FI4BIT]</td>
<td>Converts the value of a <strong>Byte</strong> structure to a <strong>FI4BIT</strong> structure.</td>
</tr>
<tr>
<td>![FI4BIT to Byte]</td>
<td>Converts the value of a <strong>FI4BIT</strong> structure to a <strong>Byte</strong> structure.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fields</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![MaxValue]</td>
<td>Represents the largest possible value of <strong>FI4BIT</strong>. This field is constant.</td>
</tr>
<tr>
<td>![MinValue]</td>
<td>Represents the smallest possible value of <strong>FI4BIT</strong>. This field is constant.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>See Also</strong></td>
</tr>
</tbody>
</table>

Reference
FreelImageAPI Namespace

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The **FI4BIT** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from ValueType.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns the hash code for this instance. (Inherited from ValueType.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the FI4BIT object to its equivalent string representation.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueTypeToString.)</td>
</tr>
</tbody>
</table>

See Also

- Reference
  - FI4BIT Structure
  - FreelImageAPI Namespace

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FI4BITToString Method

Converts the numeric value of the FI4BIT object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

**Reference**  
FI4BIT Structure  
FreeImageAPI Namespace
## FI4BIT Type Conversions

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Byte to FI4BIT)</td>
<td>Converts the value of a Byte structure to a FI4BIT structure.</td>
</tr>
<tr>
<td>(FI4BIT to Byte)</td>
<td>Converts the value of a FI4BIT structure to a Byte structure.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FI4BIT Structure
  - FreelImageAPI Namespace
FI4BIT Conversion Operators

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Byte to FI4BIT)</td>
<td>Converts the value of a Byte structure to a FI4BIT structure.</td>
</tr>
<tr>
<td>(FI4BIT to Byte)</td>
<td>Converts the value of a FI4BIT structure to a Byte structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FI4BIT Structure
- FreelImageAPI Namespace

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FI4BIT Conversion (Byte to FI4BIT)

Converts the value of a Byte structure to a FI4BIT structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FI4BIT (byte value)
```

### Parameters

- **value**
  - Type: SystemByte
  - A Byte structure.

### Return Value

- Type: FI4BIT  
- A new instance of FI4BIT initialized to `value`.

### See Also

- Reference  
- FI4BIT Structure  
- Overload  
- FreeImageAPI Namespace
FI4BIT Conversion (FI4BIT to Byte)

Converts the value of a FI4BIT structure to a Byte structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator byte (FI4BIT value)
```

### Parameters

- **value**
  - Type: FreeImageAPIFI4BIT
  - A FI4BIT structure.

### Return Value

- Type: Byte
  - A new instance of FI4BIT initialized to value.

### See Also

- Reference
  - FI4BIT Structure
  - Overload
  - FreeImageAPI Namespace
The **FI4BIT** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MaxValue</td>
<td>Represents the largest possible value of <strong>FI4BIT</strong>. This field is constant.</td>
</tr>
<tr>
<td>MinValue</td>
<td>Represents the smallest possible value of <strong>FI4BIT</strong>. This field is constant.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - **FI4BIT Structure**
  - **FreeImageAPI Namespace**

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Help improve this Documentation: [Join the Project](https://github.com/FreeImageNet/FreImage.NET)
FI4BITMaxValue Field

Represents the largest possible value of FI4BIT. This field is constant.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public const byte MaxValue
```

Field Value
Type: Byte

See Also

Reference
FI4BIT Structure
FreeImageAPI Namespace

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FI4BIT MinValue Field

Represents the smallest possible value of FI4BIT. This field is constant.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const byte MinValue
```

### Field Value

Type: **Byte**

### See Also

Reference
- FI4BIT Structure
- FreeImageAPI Namespace
FIBITMAP Structure

The FIBITMAP structure is a handle to a FreeImage bimtap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
[SerializableAttribute]
public struct FIBITMAP : IComparable, IComparable<FIBITMAP>, IEquatable<FIBITMAP>
```

The FIBITMAP type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![oriously var nol]</td>
<td>IsNull</td>
</tr>
</tbody>
</table>

Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![oriously var nol]</td>
<td>CompareTo(Object)</td>
</tr>
<tr>
<td>![oriously var nol]</td>
<td>CompareTo(FIBITMAP)</td>
</tr>
</tbody>
</table>
object.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equals(Object)</strong></td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><strong>Equals(FIBITMAP)</strong></td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Returns a hash code for this <code>FIBITMAP</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><strong>GetType</strong></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>SetNull</strong></td>
<td>Sets the handle to <code>null</code>.</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the numeric value of the <code>FIBITMAP</code> object to its equivalent string representation. (Overrides <code>ValueType.ToString</code>.)</td>
</tr>
</tbody>
</table>

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**Operators**

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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equality</strong></td>
<td>Tests whether two specified <code>FIBITMAP</code> structures are equivalent.</td>
</tr>
</tbody>
</table>
Inequality

Tests whether two specified FIBITMAP structures are different.

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

Remarks

The handle represented by a FIBITBAP structure provides access to either a singlepage bitmap or exactly one page of a multipage bitmap.

See Also

Reference
FreeImageAPI Namespace

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The **FIBITMAP** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>IsNull</code></td>
<td>Gets whether the handle is a null or not.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - **FIBITMAP Structure**
  - **FreImageAPI Namespace**
FIBITMAPIsNull Property

Gets whether the handle is a null or not.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool IsNull { get; }
```

**Property Value**

Type: **Boolean**

- **true** if this FIBITMAP handle is a null; otherwise, **false**.

**See Also**

- Reference  
  - FIBITMAP Structure  
  - FreeImageAPI Namespace

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The **FIBITMAP** type exposes the following members.

## Methods

<table>
<thead>
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<th>Name</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIBITMAP)</td>
<td>Compares this instance with a specified FIBITMAP object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified Object is equal to the current Object. (Overrides ValueTypeEquals(Object).)</td>
</tr>
<tr>
<td>Equals(FIBITMAP)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this FIBITMAP structure. (Overrides ValueTypeGetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>SetNull</td>
<td>Sets the handle to null.</td>
</tr>
</tbody>
</table>
ToString

Converts the numeric value of the FIBITMAP object to its equivalent string representation. (Overrides ValueType.ToString.)

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See Also

Reference
FIBITMAP Structure
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
## FIBITMAP CompareTo Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIBITMAP)</code></td>
<td>Compares this instance with a specified <code>FIBITMAP</code> object.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FIBITMAP Structure
- FreelImageAPI Namespace
FIBITMAP CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(Object obj)
```

#### Parameters

- `obj`  
  - Type: SystemObject  
  - An object to compare with this instance.

#### Return Value

- Type: Int32  
  - A 32-bit signed integer indicating the lexical relationship between the two comparands.

#### Implements

- IComparable.CompareTo(Object)

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>


ArgumentException  

obj is not a FIBITMAP.

See Also

Reference
FIBITMAP Structure
CompareTo Overload
FreeImageAPI Namespace

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FIBITMAP.CompareTo Method (FIBITMAP)

Compares this instance with a specified FIBITMAP object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(FIBITMAP other)
```

### Parameters

- `other`  
  Type: FreeImageAPIFIBITMAP  
  A FIBITMAP to compare.

### Return Value

Type: Int32  
A signed number indicating the relative values of this instance and `other`.  
Implements IComparable.CompareTo(T)

### See Also

Reference  
FIBITMAP Structure
CompareTo Overload
FreelImageAPI Namespace

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## FIBITMAP Equals Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Equals(Object)</code></td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FIBITMAP)</code></td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FIBITMAP Structure
  - FreelImageAPI Namespace

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FIBITMAP Equals Method (Object)

Determines whether the specified `Object` is equal to the current `Object`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C#  

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

- **obj**  
  Type: `SystemObject`  
  The `Object` to compare with the current `Object`.

### Return Value

Type: `Boolean`  
`true` if the specified `Object` is equal to the current `Object`; otherwise, `false`.

### See Also

Reference  
- FIBITMAP Structure  
- Equals Overload  
- FreeImageAPI Namespace
FIBITMAPEquals Method (FIBITMAP)

Indicates whether the current object is equal to another object of the same type.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool Equals(FIBITMAP other)
```

Parameters

- `other`
  Type: FreeImageAPIFIBITMAP
  An object to compare with this object.

Return Value

Type: Boolean
true if the current object is equal to the other parameter; otherwise, false.

Implements
IEquatableTEquals(T)

See Also

Reference
FIBITMAP Structure
Equals Overload
FreelimageAPI Namespace

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FIBITMAP GetHashCode Method

Returns a hash code for this FIBITMAP structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

### Return Value
Type: **Int32**  
An integer value that specifies the hash code for this FIBITMAP.

### See Also

**Reference**  
FIBITMAP Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIBITMAP SetNull Method

Sets the handle to \textit{null}.

\textbf{Namespace:} FreeImageAPI  
\textbf{Assembly:} FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

\section*{Syntax}

\begin{verbatim}
public void SetNull()
\end{verbatim}

\section*{See Also}

Reference  
FIBITMAP Structure  
FreeImageAPI Namespace
FIBITMAPToString Method

Converts the numeric value of the FIBITMAP object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

Reference  
FIBITMAP Structure  
FreeImageAPI Namespace
The **FIBITMAP** type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <strong>FIBITMAP</strong> structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <strong>FIBITMAP</strong> structures are different.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- **FIBITMAP Structure**
- **FreeImageAPI Namespace**
FIBITMAPEquality Operator

Tests whether two specified FIBITMAP structures are equivalent.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static bool operator ==(
    FIBITMAP left,
    FIBITMAP right
)
```

Parameters

**left**
Type: FreeImageAPIFIBITMAP
The FIBITMAP that is to the left of the equality operator.

**right**
Type: FreeImageAPIFIBITMAP
The FIBITMAP that is to the right of the equality operator.

Return Value
Type: Boolean
**true** if the two FIBITMAP structures are equal; otherwise, **false**.

See Also

Reference
FIBITMAP Structure
FreeImageAPI Namespace
FIBITMAP Inequality Operator

Tests whether two specified FIBITMAP structures are different.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool operator !=(FIBITMAP left,
                                FIBITMAP right)
```

Parameters

- **left**
  - Type: FreeImageAPIFIBITMAP
  - The FIBITMAP that is to the left of the inequality operator.

- **right**
  - Type: FreeImageAPIFIBITMAP
  - The FIBITMAP that is to the right of the inequality operator.

Return Value

Type: Boolean
- **true** if the two FIBITMAP structures are different; otherwise, **false**.

See Also

Reference
- FIBITMAP Structure
- FreeImageAPI Namespace
The FIBITMAP type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FIBITMAP Structure
- FreelImageAPI Namespace
FIBITMAPZero Field

A read-only field that represents a handle that has been initialized to zero.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIBITMAP Zero
```

### Field Value

Type: FIBITMAP

### See Also

Reference  
FIBITMAP Structure  
FreeImageAPI Namespace

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The **FICOMPLEX** structure describes a color consisting of a real and an imaginary part. Each part is using 4 bytes of data.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
[SerializableAttribute]
public struct FICOMPLEX : IComparable, IComparable<IEquatable<FICOMPLEX>>
```

The **FICOMPLEX** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FICOMPLEX)</code></td>
<td>Compares this instance with a specified <code>FICOMPLEX</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>FICOMPLEX</code> structure and is equivalent to this <code>FICOMPLEX</code> structure.</td>
</tr>
</tbody>
</table>
Equals(FICOMPLEX) Tests whether the specified FICOMPLEX structure is equivalent to this FICOMPLEX structure.

GetHashCode Returns a hash code for this FICOMPLEX structure. (Overrids ValueType GetHashCode.)

GetType Gets the Type of the current instance. (Inherited from Object.)

ToString Returns the fully qualified type name of this instance. (Inherited from ValueType.)

---

**Operators**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FICOMPLEX structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FICOMPLEX structures are different.</td>
</tr>
</tbody>
</table>
### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>imag</td>
<td>Imaginary part of the color.</td>
</tr>
<tr>
<td>real</td>
<td>Real part of the color.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**

FreelimageAPI Namespace

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The **FICOMPLEX** type exposes the following members.

## Methods

<table>
<thead>
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<th>Name</th>
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<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
<tr>
<td>CompareTo(FICOMPLEX)</td>
<td>Compares this instance with a specified <strong>FICOMPLEX</strong> object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <strong>FICOMPLEX</strong> structure and is equivalent to this <strong>FICOMPLEX</strong> structure. (Overrides <strong>ValueTypeEquals(Object)</strong>.)</td>
</tr>
<tr>
<td>Equals(FICOMPLEX)</td>
<td>Tests whether the specified <strong>FICOMPLEX</strong> structure is equivalent to this <strong>FICOMPLEX</strong> structure.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <strong>FICOMPLEX</strong> structure. (Overrides <strong>ValueTypeGetHashCode</strong>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the</td>
</tr>
</tbody>
</table>
current instance.
(Inherited from Object.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
</table>
| ToString  | Returns the fully qualified type name of this instance.
  (Inherited from ValueType.) |

See Also

Reference
FICOMPLEX Structure
FreelmageAPI Namespace

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FICOMPLEXCompareTo Method

Overload List

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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FICOMPLEX)</td>
<td>Compares this instance with a specified FICOMPLEX object.</td>
</tr>
</tbody>
</table>

See Also

Reference
FICOMPLEX Structure
FreeImageAPI Namespace
FICOMPLEX CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(Object obj)
```

### Parameters

*obj*  
Type: System.Object  
An object to compare with this instance.

### Return Value

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

**Implements**  
IComparable.CompareTo(Object)

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

ArgumentException

$obj$ is not a FICOMPLEX.

See Also

Reference
FICOMPLEX Structure
CompareTo Overload
FreeImageAPI Namespace

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FICOMPLEX CompareTo Method (FICOMPLEX)

Compares this instance with a specified FICOMPLEX object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(  
    FICOMPLEX other
)
```

### Parameters

- **other**  
  Type: FreeImageAPI.FICOMPLEX  
  A FICOMPLEX to compare.

### Return Value

- Type: Int32  
  A signed number indicating the relative values of this instance and other.

- Implements IComparable<T> CompareTo(T)

### See Also

- Reference  
  FICOMPLEX Structure
# FICOMPLEX Equals Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FICOMPLEX structure and is equivalent to this FICOMPLEX structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FICOMPLEX)</td>
<td>Tests whether the specified FICOMPLEX structure is equivalent to this FICOMPLEX structure.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - FICOMPLEX Structure
  - FreelImageAPI Namespace

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FICOMPLEX Equals Method (Object)

Tests whether the specified object is a FICOMPLEX structure and is equivalent to this FICOMPLEX structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public override bool Equals(Object obj)
```

### Parameters

**obj**

Type: SystemObject  
The object to test.

### Return Value

Type: Boolean  
**true** if obj is a FICOMPLEX structure equivalent to this FICOMPLEX structure; otherwise, **false**.

## See Also

**Reference**

FICOMPLEX Structure  
Equals Overload  
FreeImageAPI Namespace
Tests whether the specified FICOMPLEX structure is equivalent to this FICOMPLEX structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(
    FICOMPLEX other
)
```

**Parameters**

- `other`  
  Type: FreeImageAPIFICOMPLEX  
  A FICOMPLEX structure to compare to this instance.

**Return Value**  
Type: Boolean  
**true** if `obj` is a FICOMPLEX structure equivalent to this FICOMPLEX structure; otherwise, **false**.

**Implements**  
IEquatableTEquals(T)

### See Also

Reference
FICOMPLEX Structure
Equals Overload
FreelmageAPI Namespace

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**FICOMPLEX GetHashCode Method**

Returns a hash code for this `FICOMPLEX` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

**Return Value**

Type: `Int32`

An integer value that specifies the hash code for this `FICOMPLEX`.

### See Also

Reference
- `FICOMPLEX` Structure
- `FreeImageAPI` Namespace

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The **FICOMPLEX** type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <strong>FICOMPLEX</strong> structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <strong>FICOMPLEX</strong> structures are different.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - **FICOMPLEX** Structure
  - FreeImageAPI Namespace

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Help improve this Documentation: [Join the Project](https://github.com/AlexeyKuznetsov-FreeImageNET/FreeImage.NET)
FICOMPLEX Equality Operator

Tests whether two specified FICOMPLEX structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(
    FICOMPLEX left,  
    FICOMPLEX right
)
```

### Parameters

**left**  
Type: FreeImageAPI.FICOMPLEX  
The FICOMPLEX that is to the left of the equality operator.

**right**  
Type: FreeImageAPI.FICOMPLEX  
The FICOMPLEX that is to the right of the equality operator.

### Return Value

Type: Boolean  
`true` if the two FICOMPLEX structures are equal; otherwise, `false`.

### See Also

Reference  
FICOMPLEX Structure
FICOMPLEX Inequality Operator

Tests whether two specified FICOMPLEX structures are different.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static bool operator !=(
    FICOMPLEX left,
    FICOMPLEX right
)
```

Parameters

- **left**
  Type: FreeImageAPIFICOMPLEX
  The FICOMPLEX that is to the left of the inequality operator.

- **right**
  Type: FreeImageAPIFICOMPLEX
  The FICOMPLEX that is to the right of the inequality operator.

Return Value

Type: Boolean
- **true** if the two FICOMPLEX structures are different; otherwise, **false**.

See Also

Reference
FICOMPLEX Structure
FICOMPLEX Fields

The FICOMPLEX type exposes the following members.

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>imag</td>
<td>Imaginary part of the color.</td>
</tr>
<tr>
<td>real</td>
<td>Real part of the color.</td>
</tr>
</tbody>
</table>

See Also

Reference
FICOMPLEX Structure
FreeImageAPI Namespace

Contact/Feedback:  FreeImage.NET Homepage
Help improve this Documentation:  Join the Project
FICOMPLEX imag Field

Imaginary part of the color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public double imag
```

### Field Value

Type: **Double**

### See Also

Reference  
FICOMPLEX Structure  
FreeImageAPI Namespace

Contact/Feedback:  
FreeImage.NET Homepage  
Help improve this Documentation:  
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FICOMPLEX real Field

Real part of the color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4  
(3.17.0)

### Syntax

```csharp
public double real
```

### Field Value

**Type:** Double

### See Also

**Reference**
- FICOMPLEX Structure
- FreeImageAPI Namespace

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FIICCPROFILE Structure

This Structure contains ICC-Profile data.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

[C#]
```
[SerializableAttribute]
public struct FIICCPROFILE
```

The **FIICCPROFILE** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIICCPROFILE(FIBITMAP, Byte)</td>
<td>Creates a new ICC-Profile for <em>dib</em>.</td>
</tr>
<tr>
<td>FIICCPROFILE(FIBITMAP, Byte, Int32)</td>
<td>Creates a new ICC-Profile for <em>dib</em>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
<td>Copy of the ICC-Profiles data.</td>
</tr>
<tr>
<td>DataPointer</td>
<td>Points to a block of contiguous</td>
</tr>
</tbody>
</table>
memory containing the profile.

<table>
<thead>
<tr>
<th>Flags</th>
<th>Info flag of the profile.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IsCMYK</td>
<td>Indicates whether the profile is CMYK.</td>
</tr>
<tr>
<td>Size</td>
<td>Profile's size measured in bytes.</td>
</tr>
</tbody>
</table>

**Methods**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from <code>ValueType</code>.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns the hash code for this instance. (Inherited from <code>ValueType</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance. (Inherited from <code>ValueType</code>.)</td>
</tr>
</tbody>
</table>

**See Also**

Reference

FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
## FIICCPROFILE Constructor

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>FIICCPROFILE(FIBITMAP, Byte)</code></td>
<td>Creates a new ICC-Profile for <em>dib</em>.</td>
</tr>
<tr>
<td><code>FIICCPROFILE(FIBITMAP, Byte, Int32)</code></td>
<td>Creates a new ICC-Profile for <em>dib</em>.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - `FIICCPROFILE` Structure
  - `FreeImageAPI` Namespace

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Help improve this Documentation: [Join the Project](#)
FIICCPROFILE Constructor (FIBITMAP, Byte)

Creates a new ICC-Profile for `dib`.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FIICCPROFILE(
    FIBITMAP dib,
    byte[] data
)
```

### Parameters

- **`dib`**
  - Type: `FreeImageAPIFIBITMAP`
  - Handle to a FreeImage bitmap.

- **`data`**
  - Type: `SystemByte`
  - The ICC-Profile data.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> is null.</td>
</tr>
</tbody>
</table>

### See Also
FIICCPROFILE Constructor
(FIBITMAP, Byte, Int32)

Creates a new ICC-Profile for `dib`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FIICCPROFILE(
    FIBITMAP dib,
    byte[] data,
    int size
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP  
  - Handle to a FreeImage bitmap.

- **data**
  - Type: SystemByte  
  - The ICC-Profile data.

- **size**
  - Type: SystemInt32  
  - Number of bytes to use from data.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

**Copy**
ArgumentNullException

dib is null.

See Also

Reference
FIICCPROFILE Structure
FIICCPROFILE Overload
FreeImageAPI Namespace

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The $\text{FIICCPROFILE}$ type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
<td>Copy of the ICC-Profiles data.</td>
</tr>
<tr>
<td>DataPointer</td>
<td>Points to a block of contiguous memory containing the profile.</td>
</tr>
<tr>
<td>Flags</td>
<td>Info flag of the profile.</td>
</tr>
<tr>
<td>IsCMYK</td>
<td>Indicates whether the profile is CMYK.</td>
</tr>
<tr>
<td>Size</td>
<td>Profile's size measured in bytes.</td>
</tr>
</tbody>
</table>

### See Also

Reference  
$\text{FIICCPROFILE Structure}$  
$\text{FreeImageAPI Namespace}$

Contact/Feedback:  
FreeImage.NET Homepage  
Help improve this Documentation:  
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Copy of the ICC-Profiles data.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public byte[] Data { get; }
```

**Property Value**

Type: **Byte**

**See Also**

- Reference  
  - FIICCPROFILE Structure  
  - FreeImageAPI Namespace

Contact/Feedback: [FreeImage.NET Homepage](http://www.freeimage-api.net)  
Help improve this Documentation: [Join the Project](http://www.freeimage-api.net/Join)
FIICCPROFILE.DataPointer Property

Points to a block of contiguous memory containing the profile.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public IntPtr DataPointer { get; }
```

### Property Value

Type: IntPtr

### See Also

- Reference  
- FIICCPROFILE Structure  
- FreeImageAPI Namespace

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FIICCPROFILEFlags Property

Info flag of the profile.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ICC_FLAGS Flags { get; }
```

### Property Value

Type: ICC_FLAGS

### See Also

- Reference
  - FIICCPROFILE Structure
  - FreeImageAPI Namespace

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FIICCPROFILE.IsCMYK Property

Indicates whether the profile is CMYK.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsCMYK { get; }
```

### Property Value

Type: Boolean

### See Also

- Reference
  - FIICCPROFILE Structure
  - FreeImageAPI Namespace

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FIICCPROFILE Size Property

Profile's size measured in bytes.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public uint Size { get; }
```

### Property Value

Type: UInt32

### See Also

Reference  
FIICCPROFILE Structure  
FreeImageAPI Namespace

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The **FIICCPROFILE** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equals</strong></td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from <strong>ValueType</strong>.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Returns the hash code for this instance. (Inherited from <strong>ValueType</strong>.)</td>
</tr>
<tr>
<td><strong>GetType</strong></td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Returns the fully qualified type name of this instance. (Inherited from <strong>ValueType</strong>.)</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- **FIICCPROFILE Structure**
- **FreelImageAPI Namespace**
FIMEMORY Structure

The **FIMEMORY** structure is a handle to an opened memory stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FIMEMORY : IComparable, IComparable<FIMEMORY>, IEquatable<FIMEMORY>
```

The **FIMEMORY** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Icon" /></td>
<td><strong>IsNull</strong> Gets whether the pointer is a null pointer or not.</td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Icon" /></td>
<td><strong>CompareTo(Object)</strong> Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
<tr>
<td><img src="image.png" alt="Icon" /></td>
<td><strong>CompareTo(FIMEMORY)</strong> Compares this instance</td>
</tr>
</tbody>
</table>
with a specified FIMEMORY object.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equals(Object)</strong></td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType Equals(Object).)</td>
</tr>
<tr>
<td><strong>Equals(FIMEMORY)</strong></td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Returns a hash code for this FIMEMORY structure.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType GetHashCode.)</td>
</tr>
<tr>
<td><strong>GetType</strong></td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td><strong>SetNull</strong></td>
<td>Sets the handle to null.</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the numeric value of the FIMEMORY object to its equivalent string representation.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType ToString.)</td>
</tr>
</tbody>
</table>

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified</td>
</tr>
</tbody>
</table>
FIMEMORY structures are equivalent.

| Inequality | Tests whether two specified FIMEMORY structures are different. |

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**

FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
The `FIMEMORY` type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>IsNull</code></td>
<td>Gets whether the pointer is a null pointer or not.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- `FIMEMORY Structure`
- `FreelImageAPI Namespace`
FIMEMORY IsNull Property

Gets whether the pointer is a null pointer or not.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public bool IsNull { get; }
```

### Property Value

Type: `Boolean`

- `true` if this `FIMEMORY` is a null pointer; otherwise, `false`.

## See Also

Reference
- `FIMEMORY Structure`
- `FreeImageAPI Namespace`

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Help improve this Documentation: [Join the Project](#)
The FIMEMORY type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIMEMORY)</td>
<td>Compares this instance with a specified FIMEMORY object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIMEMORY)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this FIMEMORY structure.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType.GetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>SetNull</td>
<td>Sets the handle to null.</td>
</tr>
</tbody>
</table>
ToString

Converts the numeric value of the FIMEMORY object to its equivalent string representation. (Overrides ValueType.ToString.)

See Also

Reference
FIMEMORY Structure
FreelImageAPI Namespace

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FIMEMORY CompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIMEMORY)</td>
<td>Compares this instance with a specified FIMEMORY object.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIMEMORY Structure
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
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FIMEMORY.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
        Object obj
    )
```

### Parameters

- **obj**
  Type: SystemObject  
  An object to compare with this instance.

### Return Value

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

**Implements**  
IComparable.CompareTo(Object)

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

ArgumentException

obj is not a FIMEMORY.

See Also

Reference
FIMEMORY Structure
CompareTo Overload
FreeImageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
 compares this instance with a specified \texttt{FIMEMORY} object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
    FIMEMORY other
)
```

### Parameters

- **other**  
  Type: FreeImageAPI\texttt{FIMEMORY}  
  A \texttt{FIMEMORY} to compare.

### Return Value

Type: Int32  
A signed number indicating the relative values of this instance and \texttt{other}.

Implements  
\texttt{IComparable\texttt{T\texttt{CompareTo\texttt{T}}}}

### See Also

Reference  
\texttt{FIMEMORY Structure}
CompareTo Overload
FreeImageAPI Namespace

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FIMEMORY Equals Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified Object is equal to the current Object. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIMEMORY)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIMEMORY Structure
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FIMEMORY Equals Method
(Object)

Determines whether the specified \texttt{Object} is equal to the current \texttt{Object}.

\textbf{Namespace:} FreeImageAPI
\textbf{Assembly:} FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

\section*{Syntax}

\begin{verbatim}
public override bool Equals(
    Object obj
)
\end{verbatim}

\section*{Parameters}

\textit{obj}

Type: \texttt{SystemObject}

The \texttt{Object} to compare with the current \texttt{Object}.

\section*{Return Value}

Type: \texttt{Boolean}

\texttt{true} if the specified \texttt{Object} is equal to the current \texttt{Object}; otherwise, \texttt{false}.

\section*{See Also}

Reference
FIMEMORY Structure
Equals Overload
FreeImageAPI Namespace
FIMEMORY Equals Method (FIMEMORY)

Indicates whether the current object is equal to another object of the same type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(
    FIMEMORY other
)
```

### Parameters

- `other`  
  Type: FreeImageAPI FIMEMORY  
  An object to compare with this object.

### Return Value

Type: Boolean

- `true` if the current object is equal to the other parameter; otherwise, `false`.

Implements `IEquatable<T> Equals(T)`

### See Also

Reference
<table>
<thead>
<tr>
<th>FIMEMORY Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals Overload</td>
</tr>
<tr>
<td>FreelImageAPI Namespace</td>
</tr>
</tbody>
</table>

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FIMEMORY GetHashCode Method

Returns a hash code for this FIMEMORY structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public override int GetHashCode()
```

Return Value

Type: Int32
An integer value that specifies the hash code for this FIMEMORY.

See Also

Reference
FIMEMORY Structure
FreeImageAPI Namespace
FIMEMORY.SetNull Method

Sets the handle to `null`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void SetNull()
```

**See Also**

Reference  
FIMEMORY Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIMEMORYToString Method

Converts the numeric value of the FIMEMORY object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

- Reference  
  - FIMEMORY Structure  
  - FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIMEMORY Operators

The FIMEMORY type exposes the following members.

Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIMEMORY structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIMEMORY structures are different.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIMEMORY Structure
- FreeImageAPI Namespace

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FIMEMORY Equality Operator

Tests whether two specified FIMEMORY structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static bool operator ==(FIMEMORY left,
                               FIMEMORY right)
```

### Parameters

- **left**
  - Type: FreeImageAPI FIMEMORY  
  - The FIMEMORY that is to the left of the equality operator.

- **right**
  - Type: FreeImageAPI FIMEMORY  
  - The FIMEMORY that is to the right of the equality operator.

### Return Value

- Type: Boolean  
  - *true* if the two FIMEMORY structures are equal; otherwise, *false*.

### See Also

- Reference:  
  - FIMEMORY Structure  
  - FreeImageAPI Namespace
Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FIMEMORY Inequality Operator

Tests whether two specified FIMEMORY structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(  
    FIMEMORY left,  
    FIMEMORY right  
)
```

### Parameters

- **left**  
  Type: FreeImageAPI.FIMEMORY  
  The FIMEMORY that is to the left of the inequality operator.

- **right**  
  Type: FreeImageAPI.FIMEMORY  
  The FIMEMORY that is to the right of the inequality operator.

### Return Value

Type: **Boolean**  
**true** if the two FIMEMORY structures are different; otherwise, **false**.

### See Also

Reference  
FIMEMORY Structure
The `FIMEMORY` type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- `FIMEMORY Structure`
- `FreelImageAPI Namespace`
FIMEMORYZero Field

A read-only field that represents a handle that has been initialized to zero.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIMEMORY Zero
```

### Field Value

Type: FIMEMORY

### See Also

- Reference
  - FIMEMORY Structure
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FIMETADATA Structure

The FIMETADATA structure is an unique search handle for metadata search operations.

**Namespace:**  FreeImageAPI  
**Assembly:**  FreeImageNET (in FreeImageNET.dll)  
**Version:**  3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FIMETADATA : IComparable,
    IComparable<FIMETADATA>, IEquatable<FIMETADATA>
```

The FIMETADATA type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Icon]</td>
<td>IsNull</td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Icon] CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
</tbody>
</table>
### CompareTo(FIMETADATA)
Compares this instance with a specified FIMETADATA object.

### Equals(Object)
Determines whether the specified Object is equal to the current Object. (Overrides ValueType Equals(Object).)

### Equals(FIMETADATA)
Indicates whether the current object is equal to another object of the same type.

### GetHashCode
Returns a hash code for this FIMETADATA structure. (Overrrides ValueType GetHashCode.)

### GetType
Gets the Type of the current instance. (Inherited from Object.)

### SetNull
Sets the handle to null.

### ToString
Converts the numeric value of the FIMETADATA object to its equivalent string representation. (Overrrides ValueType ToString.)

---

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Equality
Tests whether two specified FIMETADATA structures are equivalent.

### Inequality
Tests whether two specified FIMETADATA structures are different.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

## Remarks

The FIMETADATA structure is usually returned by the FindFirstMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, FITAG) function and then used on subsequent calls to FindNextMetadata(FIMETADATA, FITAG). When the FIMETADATA handle is no longer used, it needs to be freed by the FindCloseMetadata(FIMETADATA) function.

## See Also

Reference
FreeImageAPI Namespace

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FIMETADATA Properties

The FIMETADATA type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Image" /></td>
<td>IsNull</td>
</tr>
</tbody>
</table>

See Also

Reference

- FIMETADATA Structure
- FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
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FIMETADATAIsNull Property

Gets whether the pointer is a null pointer or not.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool IsNull { get; }
```

Property Value

Type: Boolean  
true if this FIMETADATA is a null pointer; otherwise, false.

See Also

Reference  
FIMETADATA Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
The **FIMETADATA** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
<tr>
<td>CompareTo(FIMETADATA)</td>
<td>Compares this instance with a specified <strong>FIMETADATA</strong> object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Overrides ValueTypeEquals(Object).)</td>
</tr>
<tr>
<td>Equals(FIMETADATA)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <strong>FIMETADATA</strong> structure. (Overrides ValueTypeGetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
</tbody>
</table>
### See Also

**Reference**
- FIMETADATA Structure
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIMETADATACompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIMETADATA)</td>
<td>Compares this instance with a specified FIMETADATA object.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIMETADATA Structure
- FreelImageAPI Namespace

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FIMETADATA.CompareTo Method (Object)

Compares this instance with a specified Object.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public int CompareTo(
    Object obj
)
```

Parameters

- **obj**
  - Type: SystemObject
  - An object to compare with this instance.

Return Value

- Type: Int32
  - A 32-bit signed integer indicating the lexical relationship between the two comparands.

Implements

- IComparable.CompareTo(Object)

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ArgumentException

$obj$ is not a FIMETADATA.

See Also

Reference

- FIMETADATA Structure
- CompareTo Overload
- FreeImageAPI Namespace

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FIMETADATA CompareTo Method (FIMETADATA)

Compares this instance with a specified FIMETADATA object.

**Namespace:** FreedImageAPI  
**Assembly:** FreedImageNET (in FreedImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public int CompareTo(
    FIMETADATA other
)
```

### Parameters

*other*  
Type: FreedImageAPIFIMETADATA  
A FIMETADATA to compare.

### Return Value

Type: Int32  
A signed number indicating the relative values of this instance and *other*.

Implements IComparable TCompareTo(T)

### See Also

Reference  
FIMETADATA Structure
CompareTo Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
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FIMETADATA.Equals Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIMETADATA)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIMETADATA Structure
FreelImageAPI Namespace

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FIMETADATAEquals Method (Object)

Determines whether the specified Object is equal to the current Object.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

**Parameters**

- **obj**
  - Type: SystemObject
  - The Object to compare with the current Object.

**Return Value**

- Type: Boolean
  - true if the specified Object is equal to the current Object; otherwise, false.

### See Also

- Reference
  - FIMETADATA Structure
  - Equals Overload
  - FreeImageAPI Namespace
FIMETADATAEquals Method (FIMETADATA)

Indicates whether the current object is equal to another object of the same type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool Equals(FIMETADATA other)
```

**Parameters**

- `other`  
  Type: FreeImageAPI.FIMETADATA  
  An object to compare with this object.

**Return Value**  
Type: Boolean  
`true` if the current object is equal to the other parameter; otherwise, `false`.

**Implements**  
IEquatable<T>Equals(T)

**See Also**

Reference
FIMETADATA Structure
Equals Overload
FreelmageAPI Namespace

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FIMETADATAGetHashCode Method

Returns a hash code for this FIMETADATAGetHashCode structure.

Namespace: FreeImageAPI
Assembly: FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Language: C#

```csharp
public override int GetHashCode()
```

Return Value
Type: Int32
An integer value that specifies the hash code for this FIMETADATAGetHashCode.

See Also
Reference
FIMETADATAGetHashCode Structure
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FIMETADATA SetNull Method

Sets the handle to null.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void SetNull()
```

See Also

Reference
- FIMETADATA Structure
- FreeImageAPI Namespace

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FIMETADATAToString Method

Converts the numeric value of the FIMETADATA object to its equivalent string representation.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public override string ToString()
```

Return Value

Type: String
The string representation of the value of this instance.

See Also

Reference
- FIMETADATA Structure
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIMETADATA Operators

The FIMETADATA type exposes the following members.

Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIMETADATA structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIMETADATA structures are different.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIMETADATA Structure
FreelImageAPI Namespace

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FIMETADATA Equality Operator

Tests whether two specified FIMETADATA structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(FIMETADATA left, FIMETADATA right)
```

### Parameters

**left**
- Type: FreeImageAPIFIMETADATA
- The FIMETADATA that is to the left of the equality operator.

**right**
- Type: FreeImageAPIFIMETADATA
- The FIMETADATA that is to the right of the equality operator.

### Return Value

Type: Boolean  
**true** if the two FIMETADATA structures are equal; otherwise, **false**.

### See Also

Reference  
FIMETADATA Structure
FIMETADATA Inequality Operator

Tests whether two specified FIMETADATA structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(FIMETADATA left, FIMETADATA right)
```

### Parameters

**left**
- Type: `FreeImageAPI.FIMETADATA`
  - The FIMETADATA that is to the left of the inequality operator.

**right**
- Type: `FreeImageAPI.FIMETADATA`
  - The FIMETADATA that is to the right of the inequality operator.

### Return Value

- Type: `Boolean`
  - `true` if the two FIMETADATA structures are different; otherwise, `false`.

### See Also

Reference
Contact/Feedback:  FreeImage.NET Homepage
Help improve this Documentation:  Join the Project
The `FIMETADATA` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- `FIMETADATA Structure`
- `FreelImageAPI Namespace`

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FIMETADATA Zero Field

A read-only field that represents a handle that has been initialized to zero.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static readonly FIMETADATA Zero
```

Field Value
Type: FIMETADATA

See Also

Reference
FIMETADATA Structure
FreeImageAPI Namespace

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The **FIMULTIBITMAP** structure is a handle to a FreeImage multipaged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FIMULTIBITMAP : IComparable, IComparable<FIMULTIBITMAP>, IEquatable<FIMULTIBITMAP>
```

The **FIMULTIBITMAP** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="folder" />IsNull</td>
<td>Gets whether the handle is a null or not.</td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![folder]CompareTo(Object)</td>
<td>Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
<tr>
<td>![folder]CompareTo(FIMULTIBITMAP)</td>
<td>Compares this instance with another <strong>FIMULTIBITMAP</strong> object.</td>
</tr>
</tbody>
</table>
with a specified FIMULTIBITMAP object.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIMULTIBITMAP)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this FIMULTIBITMAP structure.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType GetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>SetNull</td>
<td>Sets the handle to null.</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the FIMULTIBITMAP object to its equivalent string representation.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType ToString.)</td>
</tr>
</tbody>
</table>

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>
Equality  Tests whether two specified FIMULTIBITMAP structures are equivalent.

Inequality  Tests whether two specified FIMULTIBITMAP structures are different.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

### See Also

Reference
FreelmageAPI Namespace

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The `FIMULTIBITMAP` type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="IsNull" /></td>
<td><code>IsNull</code> Gets whether the handle is a null or not.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - `FIMULTIBITMAP Structure`
  - `FreeImageAPI Namespace`

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Help improve this Documentation: [Join the Project](#)
FIMULTIBITMAPIsNull Property

Gets whether the handle is a null or not.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsNull { get; }
```

**Property Value**  
Type: **Boolean**  
**true** if this **FIMULTIBITMAP** handle is a null; otherwise, **false**.

### See Also

- Reference  
  - **FIMULTIBITMAP Structure**  
  - FreeImageAPI Namespace

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FIMULTIBITMAP Methods

The FIMULTIBITMAP type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIMULTIBITMAP)</td>
<td>Compares this instance with a specified FIMULTIBITMAP object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIMULTIBITMAP)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this FIMULTIBITMAP structure.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueType.GetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SetNull</td>
<td>Sets the handle to <code>null</code>.</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the <code>FIMULTIBITMAP</code> object to its equivalent string representation. (Overrides <code>ValueType.ToString</code>.)</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- `FIMULTIBITMAP` Structure
- `FreelImageAPI` Namespace

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FIMULTIBITMAP.CompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIMULTIBITMAP)</td>
<td>Compares this instance with a specified FIMULTIBITMAP object.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIMULTIBITMAP Structure
- FreelImageAPI Namespace

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FIMULTIBITMAP.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(Object obj)
```

### Parameters

- **obj**  
  Type: System.Object  
  An object to compare with this instance.

### Return Value

- **Type:** Int32  
  A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

- IComparable.CompareTo(Object)

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>


ArgumentException  

obj is not a FIMULTIBITMAP.

See Also

Reference
FIMULTIBITMAP Structure
CompareTo Overload
FreeImageAPI Namespace

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FIMULTIBITMAP CompareTo Method (FIMULTIBITMAP)

Compares this instance with a specified FIMULTIBITMAP object.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public int CompareTo(
    FIMULTIBITMAP other
)
```

Parameters

other
Type: FreeImageAPI.FIMULTIBITMAP
A FIMULTIBITMAP to compare.

Return Value
Type: Int32
A signed number indicating the relative values of this instance and other.

Implements
IComparable T CompareTo(T)

See Also

Reference
FIMULTIBITMAP Structure
FIMULTIBITMAP.Equals Method

Overload List

<table>
<thead>
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<td>Equals(FIMULTIBITMAP)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
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</tbody>
</table>

See Also

Reference
FIMULTIBITMAP Structure
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FIMULTIBITMAP Equals Method (Object)

Determines whether the specified Object is equal to the current Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

- **obj**  
  Type: SystemObject  
  The Object to compare with the current Object.

### Return Value

Type: Boolean  
**true** if the specified Object is equal to the current Object; otherwise, **false**.

### See Also

Reference  
FIMULTIBITMAP Structure  
Equals Overload  
FreeImageAPI Namespace
Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FIMULTIBITMAP.Equals Method (FIMULTIBITMAP)

Indicates whether the current object is equal to another object of the same type.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool Equals(FIMULTIBITMAP other)
```

Parameters

other
Type: FreeImageAPI.FIMULTIBITMAP
An object to compare with this object.

Return Value
Type: Boolean
true if the current object is equal to the other parameter; otherwise, false.

Implements
IEquatable<T>.Equals(T)

See Also
Reference
FIMULTIBITMAP Structure
Equals Overload
FreeImageAPI Namespace

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FIMULTIBITMAP GetHashCode Method

Returns a hash code for this FIMULTIBITMAP structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

### Return Value

**Type:** Int32  
An integer value that specifies the hash code for this FIMULTIBITMAP.

### See Also

- Reference: FIMULTIBITMAP Structure  
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIMULTIBITMAP SetNull Method

Sets the handle to *null*.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public void SetNull()
```

### See Also

Reference  
FIMULTIBITMAP Structure  
FreeImageAPI Namespace
FIMULTIBITMAPToString Method

Converts the numeric value of the FIMULTIBITMAP object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

Reference  
FIMULTIBITMAP Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIMULTIBITMAP Operators

The FIMULTIBITMAP type exposes the following members.

Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIMULTIBITMAP structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIMULTIBITMAP structures are different.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIMULTIBITMAP Structure
FreelImageAPI Namespace
FIMULTIBITMAP Equality Operator

Tests whether two specified FIMULTIBITMAP structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(
    FIMULTIBITMAP left,
    FIMULTIBITMAP right
)
```

### Parameters

- **left**
  - Type: FreeImageAPI FIMULTIBITMAP  
  - The FIMULTIBITMAP that is to the left of the equality operator.

- **right**
  - Type: FreeImageAPI FIMULTIBITMAP  
  - The FIMULTIBITMAP that is to the right of the equality operator.

### Return Value

- **Type:** Boolean  
  - **true** if the two FIMULTIBITMAP structures are equal; otherwise, **false**.

### See Also
Reference
FIMULTIBITMAP Structure
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIMULTIBITMAP Inequality Operator

Tests whether two specified FIMULTIBITMAP structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(
    FIMULTIBITMAP left,
    FIMULTIBITMAP right
)
```

### Parameters

- **left**  
  Type: FreeImageAPI FIMULTIBITMAP  
  The FIMULTIBITMAP that is to the left of the inequality operator.

- **right**  
  Type: FreeImageAPI FIMULTIBITMAP  
  The FIMULTIBITMAP that is to the right of the inequality operator.

### Return Value

Type: Boolean  
**true** if the two FIMULTIBITMAP structures are different; otherwise, **false**.

### See Also
FIMULTIBITMAP Fields

The FIMULTIBITMAP type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIMULTIBITMAP Structure
- FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FIMULTIBITMAPZero Field

A read-only field that represents a handle that has been initialized to zero.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIMULTIBITMAP Zero
```

### Field Value

**Type:** FIMULTIBITMAP

### See Also

Reference  
FIMULTIBITMAP Structure  
FreeImageAPI Namespace
The `FIRational` structure represents a fraction via two `Int32` instances which are interpreted as numerator and denominator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FIRational : IConvertible, IComparable, IFormattable, IComparable<FIRational>
```

The `FIRational` type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>FIRational(Decimal)</code></td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td><code>FIRational(FITAG)</code></td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td><code>FIRational(Int32, Int32)</code></td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
</tbody>
</table>
## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator</td>
<td>The denominator of the fraction.</td>
</tr>
<tr>
<td>IsInteger</td>
<td>Returns whether the fraction is</td>
</tr>
<tr>
<td></td>
<td>representing an integer value.</td>
</tr>
<tr>
<td>Numerator</td>
<td>The numerator of the fraction.</td>
</tr>
</tbody>
</table>

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIRational)</td>
<td>Compares this instance with a specified FIRational object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FIRational structure and is</td>
</tr>
<tr>
<td></td>
<td>equivalent to this FIRational structure. (Overrides ValueTypeEquals(Object).)</td>
</tr>
<tr>
<td>Equals(FIRational)</td>
<td>Tests whether the specified FIRational structure is equivalent to this</td>
</tr>
<tr>
<td></td>
<td>FIRational structure.</td>
</tr>
</tbody>
</table>
**GetHashCode**
Returns a hash code for this **FIRational** structure. (Overrides **ValueType.GetHashCode**.)

**GetType**
Gets the **Type** of the current instance. (Inherited from **Object**.)

**ToString**
Converts the numeric value of the **FIRational** object to its equivalent string representation. (Overrides **ValueType.ToString**.)

**ToString(String, IFormatProvider)**
Formats the value of the current instance using the specified format.

**Truncate**
Returns the truncated value of the fraction.

---

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## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Decrement</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Division</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Equality</td>
<td>Standard implementation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(Boolean to FIRational)</td>
<td>Converts the value of a Boolean structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Decimal to FIRational)</td>
<td>Converts the value of a Decimal structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Double to FIRational)</td>
<td>Converts the value of a Double structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Int64 to FIRational)</td>
<td>Converts the value of an Int64 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Single to FIRational)</td>
<td>Converts the value of a Single structure to a FIRational structure.</td>
</tr>
<tr>
<td>(UInt32 to FIRational)</td>
<td>Converts the value of an UInt32 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(UInt64 to FIRational)</td>
<td>Converts the value of an UInt64 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(FIRational to Boolean)</td>
<td>Converts the value of a FIRational structure to a Boolean structure.</td>
</tr>
<tr>
<td>(FIRational to Byte)</td>
<td>Converts the value of a FIRational structure to a Byte structure.</td>
</tr>
<tr>
<td>(FIRational to Char)</td>
<td>Converts the value of a FIRational structure to a Char structure.</td>
</tr>
</tbody>
</table>
### FIRational to Int16
- Converts the value of a `FIRational` structure to an `Int16` structure.

### FIRational to Int32
- Converts the value of a `FIRational` structure to an `Int32` structure.

### FIRational to Int64
- Converts the value of a `FIRational` structure to an `Int64` structure.

### FIRational to SByte
- Converts the value of a `FIRational` structure to a `SByte` structure.

### FIRational to UInt16
- Converts the value of a `FIRational` structure to an `UInt16` structure.

### FIRational to UInt32
- Converts the value of a `FIRational` structure to an `UInt32` structure.

### FIRational to UInt64
- Converts the value of a `FIRational` structure to an `UInt64` structure.

### GreaterThan
- Standard implementation of the operator.

### GreaterThanOrEqual
- Standard implementation of the operator.

### Byte to FIRational
- Converts the value of a `Byte` structure to a `FIRational` structure.
<table>
<thead>
<tr>
<th>Conversion</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Char to FIRational)</td>
<td>Converts the value of a Char structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Int16 to FIRational)</td>
<td>Converts the value of an Int16 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Int32 to FIRational)</td>
<td>Converts the value of an Int32 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(SByte to FIRational)</td>
<td>Converts the value of a SByte structure to a FIRational structure.</td>
</tr>
<tr>
<td>(UInt16 to FIRational)</td>
<td>Converts the value of a UInt16 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(FIRational to Decimal)</td>
<td>Converts the value of a FIRational structure to a Decimal structure.</td>
</tr>
<tr>
<td>(FIRational to Double)</td>
<td>Converts the value of a FIRational structure to a Double structure.</td>
</tr>
<tr>
<td>(FIRational to Single)</td>
<td>Converts the value of a FIRational structure to a Single structure.</td>
</tr>
<tr>
<td>Increment</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Operator</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>LessThan</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>LessThanOrEqual</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Modulus</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Multiply</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>OnesComplement</td>
<td>Returns the reciprocal value of this instance.</td>
</tr>
<tr>
<td>Subtraction</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>UnaryNegation</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>UnaryPlus</td>
<td>Standard implementation of the operator.</td>
</tr>
</tbody>
</table>

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**Fields**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epsilon</td>
<td>Represents the smallest positive <code>FIRational</code> value greater than zero. This field is constant.</td>
</tr>
<tr>
<td>MaxValue</td>
<td>Represents the largest possible value of <code>FIRational</code>. This field is constant.</td>
</tr>
<tr>
<td>MinValue</td>
<td>Represents the smallest possible value of <code>FIRational</code>. This field is</td>
</tr>
</tbody>
</table>
constant.

## Remarks

The structure tries to approximate the value of `FIRational(Decimal)` when creating a new instance by using a better algorithm than FreeImage does.

The structure implements the following operators: `+`, `-`, `++`, `--`, `==`, `!=`, `>`, `>=`, `<`, `<=` and `~` (which switches nominator and denominator).

The structure can be converted into all .NET standard types either implicit or explicit.

## See Also

Reference

FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
### FIRational Constructor

#### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRational(Decimal)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td>FIRational(FITAG)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td>FIRational(Int32, Int32)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
</tbody>
</table>

#### See Also

- Reference
  - FIRational Structure
  - FreelImageAPI Namespace

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FIRational Constructor (Decimal)

Initializes a new instance based on the specified parameters.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FIRational(decimal value)
```

### Parameters

- **value**  
  Type: System.Decimal  
  The value to convert into a fraction.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>OverflowException</td>
<td>value cannot be converted into a fraction represented by two integer values.</td>
</tr>
</tbody>
</table>

### See Also

Reference  
FIRational Structure
FIRational Constructor (FITAG)

Initializes a new instance based on the specified parameters.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public FIRational(FITAG tag)
```

### Parameters

*tag*

Type: FreeImageAPIFITAG  
The tag to read the data from.

### See Also

**Reference**  
FIRational Structure  
FIRational Overload  
FreeImageAPI Namespace

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FIRational Constructor (Int32, Int32)

Initializes a new instance based on the specified parameters.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FIRational(
    int n,
    int d
)
```

### Parameters

- **n**
  - Type: `SystemInt32`  
  - The numerator.

- **d**
  - Type: `SystemInt32`  
  - The denominator.

### See Also

- Reference
  - FIRational Structure
  - FIRational Overload
  - FreeImageAPI Namespace
The **FIRational** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator</td>
<td>The denominator of the fraction.</td>
</tr>
<tr>
<td>IsInteger</td>
<td>Returns whether the fraction is representing an integer value.</td>
</tr>
<tr>
<td>Numerator</td>
<td>The numerator of the fraction.</td>
</tr>
</tbody>
</table>

### See Also

Reference

- **FIRational Structure**
- **FreeImageAPI Namespace**

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimageapi.com)
Help improve this Documentation: [Join the Project](https://github.com/FreeImageAPI)
**FIRationalDenominator Property**

The denominator of the fraction.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int Denominator { get; }
```

**Property Value**

Type: Int32

### See Also

**Reference**  
FIRational Structure  
FreeImageAPI Namespace

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FIRational.IsInteger Property

Returns whether the fraction is representing an integer value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsInteger { get; }
```

### Property Value

Type: Boolean

### See Also

Reference  
FIRational Structure  
FreeImageAPI Namespace

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**FIRationalNumerator Property**

The numerator of the fraction.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int Numerator { get; }
```

**Property Value**

Type: `Int32`

### See Also

**Reference**
- [FIRational Structure](#)
- [FreeImageAPI Namespace](#)

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Help improve this Documentation: [Join the Project](#)
The `FIRational` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIRational)</code></td>
<td>Compares this instance with a specified <code>FIRational</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>FIRational</code> structure and is equivalent to this <code>FIRational</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FIRational)</code></td>
<td>Tests whether the specified <code>FIRational</code> structure is equivalent to this <code>FIRational</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>FIRational</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
</tbody>
</table>
ToString

Converts the numeric value of the `FIRational` object to its equivalent string representation. (Overrides `ValueType.ToString`.)

ToString(String, IFormatProvider)

Formats the value of the current instance using the specified format.

Truncate

Returns the truncated value of the fraction.

See Also

Reference
FIRational Structure
FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FIRational.CompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIRational)</td>
<td>Compares this instance with a specified FIRational object.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRational Structure
- FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FIRational.CompareTo Method (Object)

Compared with this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(Object obj)
```

### Parameters

**obj**
- Type: System.Object
- An object to compare with this instance.

### Return Value

- Type: Int32
- A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

IComparable.CompareTo(Object)

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

Copy
ArgumentException

obj is not a FIRational.

See Also

Reference
FIRational Structure
CompareTo Overload
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIRational.CompareTo Method (FIRational)

Compares this instance with a specified FIRational object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(FIRational other)
```

### Parameters

**other**
- Type: FreeImageAPI.FIRational
- A FIRational to compare.

### Return Value

- Type: Int32
- A signed number indicating the relative values of this instance and other.

Implements
- IComparable.CompareTo(T)

### See Also

- Reference
- FIRational Structure
CompareTo Overload
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
# FIRational.Equals Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <code>FIRational</code> structure and is equivalent to this <code>FIRational</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(FIRational)</td>
<td>Tests whether the specified <code>FIRational</code> structure is equivalent to this <code>FIRational</code> structure.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FIRational Structure
- FreeImageAPI Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimageapi.com)
Help improve this Documentation: [Join the Project](https://github.com/FreeImageAPI/FreeImage.NET)
FIRational.Equals Method (Object)

Tests whether the specified object is a FIRational structure and is equivalent to this FIRational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override bool Equals(
    Object obj
)
```

**Parameters**

`obj`
- Type: SystemObject  
  The object to test.

**Return Value**

Type: Boolean  
- **true** if `obj` is a FIRational structure equivalent to this FIRational structure; otherwise, **false**.

**See Also**

Reference  
FIRational Structure  
Equals Overload  
FreeImageAPI Namespace
FIRationalEquals Method (FIRational)

Tests whether the specified FIRational structure is equivalent to this FIRational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool Equals(FIRational other)
```

Parameters

other
Type: FreeImageAPIFIRational
A FIRational structure to compare to this instance.

Return Value
Type: Boolean
true if obj is a FIRational structure equivalent to this FIRational structure; otherwise, false.

Implements
IEquatableTEquals(T)

See Also

Reference
FIRational Structure
Equals Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FIRational GetHashCode Method

Returns a hash code for this FIRational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public override int GetHashCode()
```

Return Value

Type: Int32
An integer value that specifies the hash code for this FIRational.

See Also

Reference
- FIRational Structure
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FIRationalToString Method

Overload List

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<td>Formats the value of the current instance using the specified format.</td>
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See Also

Reference
- FIRational Structure
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIRationalToString Method

Converts the numeric value of the FIRational object to its equivalent string representation.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public override string ToString()
```

Return Value

Type: String
The string representation of the value of this instance.

See Also

Reference
FIRational Structure
ToString Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FIRationalToString Method
(String, IFormatProvider)

Formats the value of the current instance using the specified format.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public string ToString(
    string format,
    IFormatProvider formatProvider
)
```

Parameters

- **format**
  Type: SystemString
  The String specifying the format to use.

- **formatProvider**
  Type: SystemIFormatProvider
  The IFormatProvider to use to format the value.

Return Value

Type: String
A String containing the value of the current instance in the specified format.

Implements

IFormattableToString(String, IFormatProvider)
See Also

Reference
FIRational Structure
ToString Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
**FIRational Truncate Method**

Returns the truncated value of the fraction.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public int Truncate()
```

### Return Value

Type: `Int32`

[Missing <returns> documentation for "M:FreeImageAPI.FIRational.Truncate"]

### See Also

Reference:
- FIRational Structure
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIRational Operators and Type Conversions

The FIRational type exposes the following members.

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UnaryNegation

Standard implementation of the operator.

UnaryPlus

Standard implementation of the operator.

See Also

Reference

FIRational Structure
FreeImageAPI Namespace

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FIRational Addition Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIRational operator +(  
    FIRational r1,  
    FIRational r2
)
```

### Parameters

**r1**  
Type: FreeImageAPI.FIRational  
[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Addition(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

**r2**  
Type: FreeImageAPI.FIRational  
[Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_Addition(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

### Return Value

Type: FIRational  
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Addition(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

## See Also
FIRationalDecrement Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIRational operator --(FIRational r1)
```

### Parameters

**r1**
Type: FreeImageAPI.FIRational  
[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Decrement(FreeImageAPI.FIRational)"

### Return Value

Type: FIRational  
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Decrement(FreeImageAPI.FIRational)"

### See Also

Reference  
FIRational Structure  
FreeImageAPI Namespace
FIRationalDivision Operator

Standard implementation of the operator.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIRational operator /(
    FIRational r1,
    FIRational r2
)
```

Parameters

**r1**
Type: FreeImageAPI.FIRational

[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Division(FreeImageAPI.FIRational,FreeImageAPI.FIRational"]

**r2**
Type: FreeImageAPI.FIRational

[Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_Division(FreeImageAPI.FIRational,FreeImageAPI.FIRational"]

Return Value
Type: FIRational

[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Division(FreeImageAPI.FIRational,FreeImageAPI.FIRationi"]

See Also
FIRationalEquality Operator

Standard implementation of the operator.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool operator ==(
    FIRational r1,
    FIRational r2
)
```

Parameters

$r1$
Type: FreeImageAPI.FIRational
[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Equality(FreeImageAPI.FIRational,FreeImageAPI.FIRational)."

$r2$
Type: FreeImageAPI.FIRational
[Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_Equality(FreeImageAPI.FIRational,FreeImageAPI.FIRational)."

Return Value
Type: Boolean
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Equality(FreeImageAPI.FIRational,FreeImageAPI.FIRational)."

See Also
Reference
FIRational Structure
FreelmageAPI Namespace

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# FIRational Conversion Operators

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<td>Converts the value of a FIRational structure to an UInt64 structure.</td>
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</table>

See Also

Reference
FIRational Structure
FreeImageAPI Namespace

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FIRational Conversion (Boolean to FIRational)

Converts the value of a Boolean structure to a FIRational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static explicit operator FIRational (bool value)
```

Parameters

value
  Type: SystemBoolean
  A Boolean structure.

Return Value
  Type: FIRational
  A new instance of FIRational initialized to value.

See Also

Reference
  FIRational Structure
  Overload
  FreeImageAPI Namespace
FIRational Conversion (Decimal to FIRational)

Converts the value of a Decimal structure to a FIRational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIRational (decimal value)
```

### Parameters

- **value**  
  Type: SystemDecimal  
  A Decimal structure.

### Return Value

Type: FIRational  
A new instance of FIRational initialized to value.

### See Also

- Reference  
  FIRational Structure  
  Overload  
  FreeImageAPI Namespace
FIRational Conversion (Double to FIRational)

Converts the value of a `Double` structure to a `FIRational` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIRational (double value)
```

### Parameters

`value`
- Type: `System.Double`
- A `Double` structure.

### Return Value

- Type: `FIRational`
- A new instance of `FIRational` initialized to `value`.

### See Also

- Reference
  - FIRational Structure
  - Overload
  - FreeImageAPI Namespace
FIRational Conversion (Int64 to FIRational)

Converts the value of an Int64 structure to a FIRational structure.

**Namespace:** FreelImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIRational (long value)
```

**Parameters**

- `value`  
  Type: `SystemInt64`  
  An Int64 structure.

**Return Value**

Type: `FIRational`  
A new instance of `FIRational` initialized to `value`.

### See Also

Reference  
FIRational Structure  
Overload  
FreelImageAPI Namespace
FIRational Conversion
(Single to FIRational)

Converts the value of a `Single` structure to a `FIRational` structure.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static explicit operator FIRational (float value)
```

### Parameters

- `value`
  - Type: `System.Single`
  - A `Single` structure.

### Return Value

- Type: `FIRational`
  - A new instance of `FIRational` initialized to `value`.

### See Also

- Reference
  - `FIRational Structure`
  - `Overload`
  - `FreeImageAPI Namespace`
FIRational Conversion (UInt32 to FIRational)

Converts the value of an UInt32 structure to a FIRational structure.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIRational (uint value)
```

### Parameters

**value**

Type: System.UInt32

An UInt32 structure.

### Return Value

Type: FIRational

A new instance of FIRational initialized to value.

### See Also

- Reference
  - FIRational Structure
  - Overload
  - FreeImageAPI Namespace
**FIRational Conversion**
(UInt64 to FIRational)

Converting the value of an **UInt64** structure to a **FIRational** structure.

**Namespace**: FreeImageAPI

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static explicit operator FIRational (ulong value)
```

#### Parameters

**value**  
Type: System.UInt64  
An **UInt64** structure.

#### Return Value

**FIRational**  
A new instance of **FIRational** initialized to **value**.

### See Also

- **FIRational Structure**
- **Overload**
- **FreeImageAPI Namespace**
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FIRational Conversion (FIRational to Boolean)

Converts the value of a FIRational structure to a Boolean structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator bool (FIRational value)
```

### Parameters

**value**
- Type: FreeImageAPIFIRational
- A FIRational structure.

### Return Value
- Type: Boolean
- A new instance of Boolean initialized to value.

### See Also

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
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FIRational Conversion (FIRational to Byte)

Converts the value of a FIRational structure to a Byte structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static explicit operator byte (FIRational value)
```

Parameters

`value`
Type: FreeImageAPI.FIRational
A FIRational structure.

Return Value
Type: Byte
A new instance of Byte initialized to `value`.

See Also

Reference
FIRational Structure
Overload
FreeImageAPI Namespace
**FIRational Conversion (FIRational to Char)**

Converts the value of a `FIRational` structure to a `Char` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static explicit operator char (
    FIRational value
)
```

**Parameters**

`value`  
Type: `FreeImageAPIFIRational`  
A `FIRational` structure.

**Return Value**

Type: `Char`  
A new instance of `Char` initialized to `value`.

**See Also**

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
FIRational Conversion (FIRational to Int16)

Converts the value of a FIRational structure to an Int16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator short (FIRational value)
```

### Parameters

`value`  
Type: FreeImageAPI:FIRational  
A FIRational structure.

### Return Value

Type: Int16  
A new instance of Int16 initialized to `value`.

### See Also

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
FIRational Conversion (FIRational to Int32)

Converts the value of a FIRational structure to an Int32 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static explicit operator int (  
    FIRational value  
)
```

### Parameters

- **value**
  
  Type: FreeImageAPI.FIRational  
  A FIRational structure.

### Return Value

Type: Int32  
A new instance of Int32 initialized to value.

### See Also

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
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FIRational Conversion (FIRational to Int64)

Converts the value of a FIRational structure to an Int64 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static explicit operator long (FIRational value)
```

**Parameters**

`value`

Type: FreeImageAPI::FIRational  
A FIRational structure.

**Return Value**

Type: Int64  
A new instance of Int64 initialized to `value`.

**See Also**

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
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**FIRational Conversion (FIRational to SByte)**

Converts the value of a `FIRational` structure to a `SByte` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator sbyte (  
    FIRational value
)
```

### Parameters

**value**
- Type: `FreeImageAPI.FIRational`
- A `FIRational` structure.

### Return Value

- Type: `SByte`
- A new instance of `SByte` initialized to `value`.

### See Also

**Reference**  
FIRational Structure  
Overload  
FreeImageAPI Namespace
FIRational Conversion (FIRational to UInt16)

Converts the value of a FIRational structure to an UInt16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator ushort (  
    FIRational value  
)
```

#### Parameters

**value**  
Type: FreeImageAPIFIRational  
A FIRational structure.

#### Return Value

Type: UInt16  
A new instance of UInt16 initialized to value.

### See Also

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
FIRational Conversion (FIRational to UInt32)

Converts the value of a FIRational structure to an UInt32 structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static explicit operator uint (FIRational value)
```

Parameters

value
Type: FreeImageAPIFIRational
A FIRational structure.

Return Value
Type: UInt32
A new instance of UInt32 initialized to value.

See Also

Reference
FIRational Structure
Overload
FreeImageAPI Namespace
FIRational Conversion (FIRational to UInt64)

Converts the value of a FIRational structure to an UInt64 structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static explicit operator ulong (FIRational value)
```

Parameters

`value`  
Type: FreeImageAPIFIRational  
A FIRational structure.

Return Value

Type: UInt64  
A new instance of UInt64 initialized to `value`.

See Also

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
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**FIRationalGreaterThanOperator**

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool operator >(
    FIRational r1,
    FIRational r2
)
```

### Parameters

**r1**

Type: `FreeImageAPI.FIRational`  
[Missing <param name="r1"/> documentation for  
"M:FreeImageAPI.FIRational.op_GreaterThan(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

**r2**

Type: `FreeImageAPI.FIRational`  
[Missing <param name="r2"/> documentation for  
"M:FreeImageAPI.FIRational.op_GreaterThan(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

### Return Value

Type: `Boolean`  
[Missing <returns> documentation for  
"M:FreeImageAPI.FIRational.op_GreaterThan(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"
See Also

Reference
FIRational Structure
FreelimageAPI Namespace

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Help improve this Documentation: Join the Project
FIRationalGreaterThanOrEqual Operator

Standard implementation of the operator.

**Namespace**: FreeImageAPI

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator >=(
    FIRational r1,
    FIRational r2
)
```

### Parameters

**r1**

Type: FreeImageAPI.FIRational

[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_GreaterThanOrEqual(FreeImageAPI.FIRational,Firational,Fr"

**r2**

Type: FreeImageAPI.FIRational

[Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_GreaterThanOrEqual(FreeImageAPI.FIRational,Firational,Fr"

### Return Value

Type: Boolean

[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_GreaterThanOrEqual(FreeImageAPI.FIRational,Firational,Fr"
See Also

Reference
FIRational Structure
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
# Class Library Reference

## FIRational Conversion Operators

### Overload List

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<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Byte to FIRational)</td>
<td>Converts the value of a Byte structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Char to FIRational)</td>
<td>Converts the value of a Char structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Int16 to FIRational)</td>
<td>Converts the value of an Int16 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(Int32 to FIRational)</td>
<td>Converts the value of an Int32 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(SByte to FIRational)</td>
<td>Converts the value of a SByte structure to a FIRational structure.</td>
</tr>
<tr>
<td>(UInt16 to FIRational)</td>
<td>Converts the value of an UInt16 structure to a FIRational structure.</td>
</tr>
<tr>
<td>(FIRational to Decimal)</td>
<td>Converts the value of a FIRational structure to a Decimal structure.</td>
</tr>
<tr>
<td>(FIRational to Double)</td>
<td>Converts the value of a FIRational structure to a Double structure.</td>
</tr>
<tr>
<td>(FIRational to Single)</td>
<td>Converts the value of a FIRational structure to a Single structure.</td>
</tr>
</tbody>
</table>
See Also

Reference
FIRational Structure
FreelmageAPI Namespace

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FIRational Conversion (Byte to FIRational)

Converts the value of a `Byte` structure to a `FIRational` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIRational (byte value)
```

### Parameters

- `value`  
  Type: `System.Byte`  
  A `Byte` structure.

### Return Value

- Type: `FIRational`  
  A new instance of `FIRational` initialized to `value`.

### See Also

- Reference  
  FIRational Structure  
  Overload  
  FreeImageAPI Namespace
FIRational Conversion (Char to FIRational)

Converts the value of a Char structure to a FIRational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static implicit operator FIRational (char value)
```

Parameters

value
Type: SystemChar
A Char structure.

Return Value
Type: FIRational
A new instance of FIRational initialized to value.

See Also

Reference
FIRational Structure
Overload
FreeImageAPI Namespace
FIRational Conversion (Int16 to FIRational)

Converts the value of an `Int16` structure to a `FIRational` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIRational (short value)
```

### Parameters

`value`  
Type: `System.Int16`  
An `Int16` structure.

### Return Value

Type: `FIRational`  
A new instance of `FIRational` initialized to `value`.

### See Also

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
**FIRational Conversion (Int32 to FIRational)**

Converts the value of an `Int32` structure to a `FIRational` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIRational (int value)
```

### Parameters

- `value`  
  - Type: `SystemInt32`  
  - An `Int32` structure.

### Return Value

- Type: `FIRational`  
  - A new instance of `FIRational` initialized to `value`.

### See Also

- **Reference**  
  - FIRational Structure  
  - Overload  
  - FreeImageAPI Namespace
FIRational Conversion (SByte to FIRational)

Converts the value of a SByte structure to a FIRational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIRational (sbyte value)
```

### Parameters

- **value**
  - Type: SystemSByte
  - A SByte structure.

### Return Value

- Type: FIRational
- A new instance of FIRational initialized to value.

### See Also

- Reference
  - FIRational Structure
  - Overload
  - FreeImageAPI Namespace
FIRational Conversion (UInt16 to FIRational)

Converts the value of an UInt16 structure to a FIRational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIRational (ushort value)
```

### Parameters

**value**
- Type: System(UInt16)
- An UInt16 structure.

### Return Value

- Type: FIRational
- A new instance of FIRational initialized to value.

### See Also

- Reference
  - FIRational Structure
  - Overload
  - FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FIRational Conversion (FIRational to Decimal)

Converts the value of a FIRational structure to a Decimal structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static implicit operator decimal (FIRational value)
```

**Parameters**

*value*  
Type: FreeImageAPIFIRational  
A FIRational structure.

**Return Value**  
Type: Decimal  
A new instance of Decimal initialized to *value*.

**See Also**

Reference  
FIRational Structure  
Overload  
FreeImageAPI Namespace
FIRational Conversion (FIRational to Double)

Converts the value of a FIRational structure to a Double structure.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator double (FIRational value)
```

### Parameters

**value**

Type: FreeImageAPIFIRational

A FIRational structure.

### Return Value

Type: Double

A new instance of Double initialized to `value`.

### See Also

Reference

FIRational Structure
Overload

FreeImageAPI Namespace
FIRational Conversion (FIRational to Single)

Converts the value of a FIRational structure to a Single structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static implicit operator float (FIRational value)
```

Parameters

value
Type: FreeImageAPIFIRational
A FIRational structure.

Return Value
Type: Single
A new instance of Single initialized to value.

See Also

Reference
FIRational Structure
Overload
FreeImageAPI Namespace
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FIRational Increment Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIRational operator ++(FIRational r1)
```

### Parameters

- **r1**  
  Type: FreeImageAPI.FIRational  
  [Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Increment(FreeImageAPI.FIRational)"]

### Return Value

Type: FIRational  
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Increment(FreeImageAPI.FIRational)"]

### See Also

- Reference  
  FIRational Structure  
  FreeImageAPI Namespace

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FIRationalInequality Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(
    FIRational r1,  
    FIRational r2
)
```

### Parameters

**r1**  
Type: FreeImageAPI.FIRational  
[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Inequality(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

**r2**  
Type: FreeImageAPI.FIRational  
[Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_Inequality(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

### Return Value

Type: Boolean  
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Inequality(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

### See Also
Reference
FRational Structure
FreelImageAPI Namespace

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FIRational LessThan Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool operator <(
    FIRational r1,
    FIRational r2
)
```

### Parameters

**r1**  
Type: FreeImageAPI.FIRational  
[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_LessThan(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRational"

**r2**  
Type: FreeImageAPI.FIRational  
[Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_LessThan(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRational"

### Return Value

Type: Boolean  
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_LessThan(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRational"

## See Also
FIRationalLessThanOrEqual Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator <=(
    FIRational r1,
    FIRational r2
)
```

### Parameters

- **r1**
  - Type: FreeImageAPI.FIRational  
  
- **r2**
  - Type: FreeImageAPI.FIRational  

### Return Value

- **Type:** Boolean  

[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_LessThanOrEqual(FreeImageAPI.FIRational,FreeImageAPI.FIRational)" ]
See Also

Reference
FIRational Structure
FreelimageAPI Namespace

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FreeImage.NET Class Library Reference

FIRationalModulus Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIRational operator %(  
    FIRational r1,  
    FIRational r2
)
```

**Parameters**

- **r1**
  - Type: `FreeImageAPI.FIRational`  
  - [Missing <param name="r1"/> documentation for  
    "M:FreeImageAPI.FIRational.op_Modulus(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRatio

- **r2**
  - Type: `FreeImageAPI.FIRational`  
  - [Missing <param name="r2"/> documentation for  
    "M:FreeImageAPI.FIRational.op_Modulus(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRatio

**Return Value**

- Type: `FIRational`  
  - [Missing <returns> documentation for  
    "M:FreeImageAPI.FIRational.op_Modulus(FreeImageAPI.FIRational,FreeImageAPI.FIRational,FreeImageAPI.FIRati

**See Also**
Reference
FIRational Structure
FreelImageAPI Namespace

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FreeImage.NET Class Library Reference

FIRationalMultiply Operator

Standard implementation of the operator.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```
public static FIRational operator *(FIRational r1, FIRational r2)
```

Parameters

- **r1**
  - Type: FreeImageAPI.FIRational
    
      [Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Multiply(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"
    
- **r2**
  - Type: FreeImageAPI.FIRational
    
      [Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_Multiply(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

Return Value

Type: FIRational

[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Multiply(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

⚠️ See Also
FIRational OnesComplement Operator

Returns the reciprocal value of this instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIRational operator ~(FIRational r1)
```

**Parameters**

- **r1**  
  Type: FreeImageAPI.FIRational  
  [Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_OnesComplement(FreeImageAPI.FIRational)"

**Return Value**

Type: FIRational  
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_OnesComplement(FreeImageAPI.FIRational)"

**See Also**

Reference  
FIRational Structure  
FreeImageAPI Namespace
FIRationalSubtraction Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIRational operator -(  
    FIRational r1,  
    FIRational r2
)
```

**Parameters**

- **r1**
  - Type: FreeImageAPI.FIRational
    - [Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_Subtraction(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

- **r2**
  - Type: FreeImageAPI.FIRational
    - [Missing <param name="r2"/> documentation for "M:FreeImageAPI.FIRational.op_Subtraction(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

**Return Value**

- **Type:** FIRational
  - [Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_Subtraction(FreeImageAPI.FIRational,FreeImageAPI.FIRational)"

See Also

Reference
FIRational Structure
FreelmageAPI Namespace

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FIRationalUnaryNegation Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FIRational operator -(  
    FIRational r1
)
```

### Parameters

- **r1**  
  Type: FreeImageAPI.FIRational  
  [Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_UnaryNegation(FreeImageAPI.FIRational)""]

### Return Value

Type: FIRational  
[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_UnaryNegation(FreeImageAPI.FIRational)""]

### See Also

- Reference  
  FIRational Structure  
  FreeImageAPI Namespace
FIRationalUnaryPlus Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FIRational operator +(  
    FIRational r1
)
```

### Parameters

**r1**  
Type: FreeImageAPI.FIRational

[Missing <param name="r1"/> documentation for "M:FreeImageAPI.FIRational.op_UnaryPlus(FreeImageAPI.FIRational)""]

### Return Value

Type: FIRational

[Missing <returns> documentation for "M:FreeImageAPI.FIRational.op_UnaryPlus(FreeImageAPI.FIRational)""]

### See Also

Reference  
FIRational Structure  
FreeImageAPI Namespace
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The **FIRational** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epsilon</td>
<td>Represents the smallest positive <strong>FIRational</strong> value greater than zero. This field is constant.</td>
</tr>
<tr>
<td>MaxValue</td>
<td>Represents the largest possible value of <strong>FIRational</strong>. This field is constant.</td>
</tr>
<tr>
<td>MinValue</td>
<td>Represents the smallest possible value of <strong>FIRational</strong>. This field is constant.</td>
</tr>
</tbody>
</table>

### See Also

- **Reference**
  - **FIRational Structure**
  - **FreeImageAPI Namespace**

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FIRationalEpsilon Field

Represents the smallest positive FIRational value greater than zero. This field is constant.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIRational Epsilon
```

### Field Value

Type: FIRational

### See Also

Reference  
FIRational Structure  
FreeImageAPI Namespace

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FIRational MaxValue Field

Represents the largest possible value of FIRational. This field is constant.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static readonly FIRational MaxValue
```

Field Value
Type: FIRational

See Also

Reference
FIRational Structure
FreeImageAPI Namespace

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FIRational.MinValue Field

Represents the smallest possible value of FIRational. This field is constant.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIRational MinValue
```

### Field Value

Type: FIRational

### See Also

**Reference**  
FIRational Structure  
FreeImageAPI Namespace

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FIRGB16 Structure

The **FIRGB16** structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 16 bits and so, takes values in the range from 0 to 65535.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FIRGB16 : IComparable, IComparable<FIRGB16>, IEquatable<FIRGB16>
```

The **FIRGB16** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="FIRGB16" /></td>
<td>FIRGB16 Initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Color" /></td>
<td>Color Gets or sets the <strong>Color</strong> of the structure.</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIRGB16)</code></td>
<td>Compares this instance with a specified <code>FIRGB16</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>FIRGB16</code> structure and is equivalent to this <code>FIRGB16</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FIRGB16)</code></td>
<td>Tests whether the specified <code>FIRGB16</code> structure is equivalent to this <code>FIRGB16</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>FIRGB16</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the numeric value of the <code>FIRGB16</code> object to its equivalent...</td>
</tr>
</tbody>
</table>
string representation.
(Overrides
ValueType.ToString.)

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIRGB16 structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FIRGB16)</td>
<td>Converts the value of a Color structure to a FIRGB16 structure.</td>
</tr>
<tr>
<td>(FIRGB16 to Color)</td>
<td>Converts the value of a FIRGB16 structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIRGB16 structures are different.</td>
</tr>
</tbody>
</table>

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

### Remarks

The FIRGB16 structure provides access to an underlying FreeImage
**FIRGB16** structure. To determine the red, green or blue component of a color, use the red, green or blue fields, respectively.

For easy integration of the underlying structure into the .NET framework, the **FIRGB16** structure implements implicit conversion operators to convert the represented color to and from the **Color** type. This makes the **Color** type a real replacement for the **FIRGB16** structure and may be used in all situations which require an **FIRGB16** type.

Each color component red, green or blue of **FIRGB16** is translated into it's corresponding color component R, G or B of **Color** by right shifting 8 bits and shifting left 8 bits for the reverse conversion. When converting from **Color** into **FIRGB16**, the color's alpha value is ignored and assumed to be 255 when converting from **FIRGB16** into **Color**, creating a fully opaque color.

**Conversion from System.Drawing.Color to FIRGB16**

```
FIRGB16.component = Color.component << 8
```

**Conversion from FIRGB16 to System.Drawing.Color**

```
Color.component = FIRGB16.component >> 8
```

The same conversion is also applied when the **Color** property or the **FIRGB16(Color)** constructor is invoked.

### Examples

The following code example demonstrates the various conversions between the **FIRGB16** structure and the **Color** structure.

```csharp
FIRGB16 firgb16;
// Initialize the structure using a native .NET Color
firgb16 = new FIRGBA16(Color.Indigo);
// Initialize the structure using the implicit operator
firgb16 = Color.DarkSeaGreen;
// Convert the FIRGB16 instance into a native .NET Color
// using its implicit operator.
Color color = firgb16;
// Using the structure's Color property for conversion
// into a native .NET Color.
Color another = firgb16.Color;
```
See Also
Reference
FreelmageAPI Namespace

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FIRGB16 Constructor

Initializes a new instance based on the specified Color.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FIRGB16(  
    Color color  
)
```

Parameters

color
Type: System.DrawingColor Color to initialize with.

See Also

Reference
FIRGB16 Structure
FreeImageAPI Namespace
The **FIRGB16** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FIRGB16 Structure
- FreImageAPI Namespace
**FIRGB16Color Property**

Gets or sets the *Color* of the structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Color Color { get; set; }
```

### Property Value

Type: Color

### See Also

Reference  
FIRGB16 Structure  
FreImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
The **FIRGB16** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <strong>FIRGB16</strong> structure. (Overridess <strong>ValueType.GetHashCode</strong>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>Equals(FIRGB16)</td>
<td>Tests whether the specified <strong>FIRGB16</strong> structure is equivalent to this <strong>FIRGB16</strong> structure.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <strong>FIRGB16</strong> structure and is equivalent to this <strong>FIRGB16</strong> structure. (Overridess <strong>ValueType.Equals</strong>.)</td>
</tr>
<tr>
<td>CompareTo(FIRGB16)</td>
<td>Compares this instance with a specified <strong>FIRGB16</strong> object.</td>
</tr>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
</tbody>
</table>
ToString

Converts the numeric value of the FIRGB16 object to its equivalent string representation. (Overrides ValueType.ToString.)

See Also

Reference
FIRGB16 Structure
FreeImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIRGB16CompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIRGB16)</td>
<td>Compares this instance with a specified FIRGB16 object.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGB16 Structure
- FreelImageAPI Namespace

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FIRGB16 CompareTo Method (Object)

Compares this instance with a specified Object.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public int CompareTo(
    Object obj
)
```

Parameters

obj

Type: SystemObject
An object to compare with this instance.

Return Value

Type: Int32
A 32-bit signed integer indicating the lexical relationship between the two comparands.

Implements

IComparable.CompareTo(Object)

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Exception</strong></th>
<th><strong>Condition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ArgumentException

obj is not a FIRGB16.

See Also

Reference
FIRGB16 Structure
CompareTo Overload
FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
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FIRGB16.CompareTo Method (FIRGB16)

Compares this instance with a specified FIRGB16 object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(FIRGB16 other)
```

### Parameters

- **other**  
  Type: FreeImageAPI.FIRGB16  
  A FIRGB16 to compare.

### Return Value

- Type: Int32  
  A signed number indicating the relative values of this instance and `other`.

- **Implements**  
  IComparable.CompareTo(T)

### See Also

- Reference  
  FIRGB16 Structure
FIRGB16Equals Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FIRGB16 structure and is equivalent to this FIRGB16 structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIRGB16)</td>
<td>Tests whether the specified FIRGB16 structure is equivalent to this FIRGB16 structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGB16 Structure
- FreelImageAPI Namespace

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FIRGB16_Equals Method (Object)

Tests whether the specified object is a FIRGB16 structure and is equivalent to this FIRGB16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(  
    Object obj  
)
```

### Parameters

- **obj**  
  Type: SystemObject  
  The object to test.

### Return Value

Type: Boolean  
**true** if *obj* is a FIRGB16 structure equivalent to this FIRGB16 structure; otherwise, **false**.

### See Also

- Reference  
  - FIRGB16 Structure  
  - Equals Overload  
  - FreeImageAPI Namespace
FIRGB16Equals Method (FIRGB16)

Tests whether the specified FIRGB16 structure is equivalent to this FIRGB16 structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool Equals(FIRGB16 other)
```

Parameters

other

Type: FreeImageAPIFIRGB16
A FIRGB16 structure to compare to this instance.

Return Value

Type: Boolean
true if obj is a FIRGB16 structure equivalent to this FIRGB16 structure; otherwise, false.

Implements
IEquatableTEquals(T)

See Also

Reference
FIRGB16 GetHashCode Method

Returns a hash code for this FIRGB16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

### Return Value

**Type:** Int32  
An integer value that specifies the hash code for this FIRGB16.

### See Also

- Reference  
  FIRGB16 Structure  
  FreeImageAPI Namespace

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FIRGB16ToString Method

Converts the numeric value of the FIRGB16 object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

Reference  
FIRGB16 Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIRGB16 Operators and Type Conversions

The FIRGB16 type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIRGB16 structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FIRGB16)</td>
<td>Converts the value of a Color structure to a FIRGB16 structure.</td>
</tr>
<tr>
<td>(FIRGB16 to Color)</td>
<td>Converts the value of a FIRGB16 structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIRGB16 structures are different.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGB16 Structure
- FreelImageAPI Namespace

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FIRGB16Equality Operator

Tests whether two specified FIRGB16 structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(FIRGB16 left, FIRGB16 right)
```

### Parameters

- **left**
  - Type: FreeImageAPIFIRGB16
  - The FIRGB16 that is to the left of the equality operator.

- **right**
  - Type: FreeImageAPIFIRGB16
  - The FIRGB16 that is to the right of the equality operator.

### Return Value

- **Type:** Boolean  
  - **true** if the two FIRGB16 structures are equal; otherwise, **false**.

### See Also

- Reference
  - FIRGB16 Structure
  - FreeImageAPI Namespace
FIRGB16 Conversion Operators

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Color to FIRGB16)</td>
<td>Converts the value of a Color structure to a FIRGB16 structure.</td>
</tr>
<tr>
<td>(FIRGB16 to Color)</td>
<td>Converts the value of a FIRGB16 structure to a Color structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGB16 Structure
- FreelImageAPI Namespace

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FIRGB16 Conversion (Color to FIRGB16)

Converts the value of a Color structure to a FIRGB16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIRGB16 (Color value)
```

### Parameters

`value`
- Type: System.Drawing.Color
  - A Color structure.

### Return Value

Type: FIRGB16  
A new instance of FIRGB16 initialized to `value`.

### See Also

Reference  
FIRGB16 Structure  
Overload  
FreeImageAPI Namespace
FIRGB16 Conversion
(FIRGB16 to Color)

Converts the value of a **FIRGB16** structure to a **Color** structure.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static implicit operator Color (FIRGB16 value)
```

### Parameters

**value**
- Type: FreeImageAPIFIRGB16
- A **FIRGB16** structure.

### Return Value

- Type: **Color**
- A new instance of **Color** initialized to **value**.

## See Also

- Reference
  - FIRGB16 Structure
  - Overload
  - FreeImageAPI Namespace
FIRGB16Inequality Operator

Tests whether two specified FIRGB16 structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(FIRGB16 left, FIRGB16 right)
```

### Parameters

- **left**
  - Type: FreeImageAPI.FIRGB16
  - The FIRGB16 that is to the left of the inequality operator.

- **right**
  - Type: FreeImageAPI.FIRGB16
  - The FIRGB16 that is to the right of the inequality operator.

### Return Value

Type: Boolean  
**true** if the two FIRGB16 structures are different; otherwise, **false**.

### See Also

Reference  
FIRGB16 Structure  
FreeImageAPI Namespace
FIRGB16 Fields

The FIRGB16 type exposes the following members.

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGB16 Structure
- FreelmageAPI Namespace

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FIRGB16blue Field

The blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public ushort blue
```

### Field Value

Type: UInt16

## See Also

Reference
- [FIRGB16 Structure](#)
- [FreeImageAPI Namespace](#)

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FIRGB16 green Field

The green color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public ushort green
```

**Field Value**

Type: **UInt16**

## See Also

**Reference**

- FIRGB16 Structure
- FreeImageAPI Namespace

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FIRGB16red Field

The red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public ushort red
```

### Field Value

Type: UInt16

### See Also

Reference  
FIRGB16 Structure  
FreeImageAPI Namespace
FIRGBA16 Structure

The **FIRGBA16** structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 16 bits and so, takes values in the range from 0 to 65535.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FIRGBA16 : IComparable, IComparable<FIRGBA16>, IEquatable<FIRGBA16>
```

The **FIRGBA16** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRGBA16</td>
<td>Initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the <strong>Color</strong> of the structure.</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td>CompareTo(FIRGBA16)</td>
<td>Compares this instance with a specified <code>FIRGBA16</code> object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <code>FIRGBA16</code> structure and is equivalent to this <code>FIRGBA16</code> structure. (Overriding <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(FIRGBA16)</td>
<td>Tests whether the specified <code>FIRGBA16</code> structure is equivalent to this <code>FIRGBA16</code> structure.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <code>FIRGBA16</code> structure. (Overriding <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the <code>FIRGBA16</code> object to its equivalent</td>
</tr>
</tbody>
</table>
string representation. (Overrides ValueType.ToString.)

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIRGBA16 structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FIRGBA16)</td>
<td>Converts the value of a Color structure to a FIRGBA16 structure.</td>
</tr>
<tr>
<td>(FIRGBA16 to Color)</td>
<td>Converts the value of a FIRGBA16 structure to a Color structure.</td>
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</table>

### Fields

<table>
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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha</td>
<td>The alpha color component.</td>
</tr>
<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>
Remarks

The **FIRGBA16** structure provides access to an underlying FreelImage **FIRGBA16** structure. To determine the alpha, red, green or blue component of a color, use the alpha, red, green or blue fields, respectively.

For easy integration of the underlying structure into the .NET framework, the **FIRGBA16** structure implements implicit conversion operators to convert the represented color to and from the **Color** type. This makes the **Color** type a real replacement for the **FIRGBA16** structure and may be used in all situations which require an **FIRGBA16** type.

Each color component alpha, red, green or blue of **FIRGBA16** is translated into its corresponding color component A, R, G or B of **Color** by an 8 bit right shift and vice versa.

Conversion from **System.Drawing.Color** to **FIRGBA16**

**FIRGBA16.component** = **Color.component** << 8

Conversion from **FIRGBA16** to **System.Drawing.Color**

**Color.component** = **FIRGBA16.component** >> 8

The same conversion is also applied when the **Color** property or the **FIRGBA16(Color)** constructor is invoked.

Examples

The following code example demonstrates the various conversions between the **FIRGBA16** structure and the **Color** structure.

```csharp
FIRGBA16 firgba16;
// Initialize the structure using a native .NET (firgba16 = new FIRGBA16(Color.Indigo);
// Initialize the structure using the implicit of firgba16 = Color.DarkSeaGreen;
// Convert the FIRGBA16 instance into a native .N // using its implicit operator.
Color color = firgba16;
// Using the structure's Color property for conve // into a native .NET Color.
```
See Also

Reference
FreelmageAPI Namespace

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FIRGBA16 Constructor

Initializes a new instance based on the specified Color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FIRGBA16(
    Color color
)
```

Parameters

- `color`  
  Type: System.DrawingColor  
  Color to initialize with.

See Also

Reference  
FIRGBA16 Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIRGBA16 Properties

The **FIRGBA16** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
</tbody>
</table>

See Also

Reference

FIRGBA16 Structure
FreeImageAPI Namespace
FIRGBA16Color Property

Gets or sets the Color of the structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Color Color { get; set; }
```

### Property Value

Type: Color

### See Also

Reference  
FIRGBA16 Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The FIRGBA16 type exposes the following members.

### Methods

<table>
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<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIRGBA16)</code></td>
<td>Compares this instance with a specified <code>FIRGBA16</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>FIRGBA16</code> structure and is equivalent to this <code>FIRGBA16</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FIRGBA16)</code></td>
<td>Tests whether the specified <code>FIRGBA16</code> structure is equivalent to this <code>FIRGBA16</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>FIRGBA16</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>. )</td>
</tr>
</tbody>
</table>
**ToString**

Converts the numeric value of the **FIRGBA16** object to its equivalent string representation. (Overrides **ValueType.ToString**.)

---

### See Also

**Reference**
- FIRGBA16 Structure
- FreeImageAPI Namespace

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FIRGBA16 CompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIRGBA16)</td>
<td>Compares this instance with a specified FIRGBA16 object.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGBA16 Structure
- FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
**FIRGBA16.CompareTo Method (Object)**

Compares this instance with a specified `Object`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
    Object obj
)
```

### Parameters

- **obj**
  
  Type: `System.Object`  
  An object to compare with this instance.

### Return Value

Type: `Int32`  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

**Implements**  
`IComparable.CompareTo(Object)`

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

---

*FreeImage.NET Class Library Reference*
ArgumentException  

$obj$ is not a $FIRGBA16$.

See Also

Reference
- $FIRGBA16$ Structure
- $CompareTo$ Overload
- $FreeImageAPI$ Namespace

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FIRGBA16CompareTo Method (FIRGBA16)

Compares this instance with a specified FIRGBA16 object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(FIRGBA16 other)
```

### Parameters

- **other**  
  Type: `FreeImageAPIFIRGBA16`  
  A `FIRGBA16` to compare.

### Return Value

- **Type:** `Int32`  
  A signed number indicating the relative values of this instance and `other`.

- **Implements**  
  `IComparable<TCompareTo(T)`

### See Also

- **Reference**  
  `FIRGBA16 Structure`
# FIRGBA16Equals Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FIRGBA16 structure and is equivalent to this FIRGBA16 structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIRGBA16)</td>
<td>Tests whether the specified FIRGBA16 structure is equivalent to this FIRGBA16 structure.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FIRGBA16 Structure
- FreelImageAPI Namespace

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FIRGBA16Equals Method (Object)

Tests whether the specified object is a FIRGBA16 structure and is equivalent to this FIRGBA16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override bool Equals(
    Object obj
)
```

**Parameters**

*obj*

Type: `SystemObject`  
The object to test.

**Return Value**

Type: `Boolean`  
`true` if `obj` is a FIRGBA16 structure equivalent to this FIRGBA16 structure; otherwise, `false`.

**See Also**

Reference  
FIRGBA16 Structure  
Equals Overload  
FreeImageAPI Namespace
FIRGBA16 Equals Method (FIRGBA16)

Tests whether the specified FIRGBA16 structure is equivalent to this FIRGBA16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(FIRGBA16 other)
```

### Parameters

**other**  
Type: FreeImageAPIFIRGBA16  
A FIRGBA16 structure to compare to this instance.

### Return Value

Type: Boolean  
**true** if `obj` is a FIRGBA16 structure equivalent to this FIRGBA16 structure; otherwise, **false**.

Implements  
IEquatableTEquals(T)

### See Also

Reference
FIRGBA16 Structure
Equals Overload
FreelmageAPI Namespace

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FIRGBA16GetHashCode Method

Returns a hash code for this FIRGBA16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

### Return Value

- **Type:** Int32  
  An integer value that specifies the hash code for this FIRGBA16.

### See Also

- **Reference**  
  [FIRGBA16 Structure](#)  
  [FreeImageAPI Namespace](#)

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FIRGBA16ToString Method

Converts the numeric value of the FIRGBA16 object to its equivalent string representation.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

**Return Value**
Type: String  
The string representation of the value of this instance.

### See Also

Reference  
FIRGBA16 Structure  
FreeImageAPI Namespace
FIRGBA16 Operators and Type Conversions

The FIRGBA16 type exposes the following members.

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIRGBA16 structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FIRGBA16)</td>
<td>Converts the value of a Color structure to a FIRGBA16 structure.</td>
</tr>
<tr>
<td>(FIRGBA16 to Color)</td>
<td>Converts the value of a FIRGBA16 structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIRGBA16 structures are different.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGBA16 Structure
- FreelImageAPI Namespace

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FIRGBA16Equality Operator

Tests whether two specified FIRGBA16 structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(  
    FIRGBA16 left,  
    FIRGBA16 right
)
```

### Parameters

- **left**  
  Type: FreeImageAPIFIRGBA16  
  The FIRGBA16 that is to the left of the equality operator.

- **right**  
  Type: FreeImageAPIFIRGBA16  
  The FIRGBA16 that is to the right of the equality operator.

### Return Value

Type: Boolean  
**true** if the two FIRGBA16 structures are equal; otherwise, **false**.

### See Also

Reference  
FIRGBA16 Structure  
FreeImageAPI Namespace
FIRGBA16 Conversion Operators

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Color to FIRGBA16)</td>
<td>Converts the value of a Color structure to a FIRGBA16 structure.</td>
</tr>
<tr>
<td>(FIRGBA16 to Color)</td>
<td>Converts the value of a FIRGBA16 structure to a Color structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIRGBA16 Structure
FreeImageAPI Namespace

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**FIRGBA16 Conversion (Color to FIRGBA16)**

Converts the value of a `Color` structure to a `FIRGBA16` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIRGBA16 (Color value)
```

### Parameters

`value`  
Type: `System.DrawingColor`  
A `Color` structure.

### Return Value

Type: `FIRGBA16`  
A new instance of `FIRGBA16` initialized to `value`.

### See Also

Reference  
FIRGBA16 Structure  
Overload  
FreeImageAPI Namespace
**FIRGBA16 Conversion**  
(FIRGBA16 to Color)

Converts the value of a `FIRGBA16` structure to a `Color` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator Color (  
    FIRGBA16 value
)
```

### Parameters

*value*  
Type: `FreeImageAPIFIRGBA16`  
A `FIRGBA16` structure.

### Return Value

Type: `Color`  
A new instance of `Color` initialized to *value*.

### See Also

Reference  
FIRGBA16 Structure  
Overload  
FreeImageAPI Namespace
FIRGBA16 Inequality Operator

Tests whether two specified FIRGBA16 structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool operator !=(FIRGBA16 left, FIRGBA16 right)
```

**Parameters**

- **left**  
  Type: FreeImageAPIFIRGBA16  
  The FIRGBA16 that is to the left of the inequality operator.

- **right**  
  Type: FreeImageAPIFIRGBA16  
  The FIRGBA16 that is to the right of the inequality operator.

**Return Value**

Type: Boolean  
**true** if the two FIRGBA16 structures are different; otherwise, **false**.

**See Also**

Reference  
FIRGBA16 Structure
FIRGBA16 Fields

The FIRGBA16 type exposes the following members.

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha</td>
<td>The alpha color component.</td>
</tr>
<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIRGBA16 Structure
FreeImageAPI Namespace
FIRGBA16alpha Field

The alpha color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4  
(3.17.0)

### Syntax

```c#
public ushort alpha
```

### Field Value

**Type:** UInt16

### See Also

**Reference**  
FIRGBA16 Structure  
FreeImageAPI Namespace

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FIRGBA16blue Field

The blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ushort blue
```

Field Value  
Type: UInt16

### See Also

Reference
- [FIRGBA16 Structure](#)
- [FreeImageAPI Namespace](#)

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FIRGBA16green Field

The green color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public ushort green
```

### Field Value

**Type:** UInt16

## See Also

- Reference  
  - FIRGBA16 Structure  
  - FreeImageAPI Namespace

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FIRGBA16 red Field

The red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ushort red
```

### Field Value

Type: UInt16

### See Also

Reference:  
- FIRGBA16 Structure  
- FreeImageAPI Namespace
FIRGBAF Structure

The **FIRGBAF** structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 32 bits and takes values in the range from 0 to 1.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
[SerializableAttribute]
public struct FIRGBAF : IComparable, IComparable<FIRGBAF>, IEquatable<FIRGBAF>
```

The **FIRGBAF** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![ ]</td>
<td><strong>FIRGBAF</strong> Initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![ ]</td>
<td><strong>Color</strong> Gets or sets the <strong>Color</strong> of the structure.</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIRGBAF)</code></td>
<td>Compares this instance with a specified <code>FIRGBAF</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>FIRGBAF</code> structure and is equivalent to this <code>FIRGBAF</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FIRGBAF)</code></td>
<td>Tests whether the specified <code>FIRGBAF</code> structure is equivalent to this <code>FIRGBAF</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>FIRGBAF</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the numeric value of the <code>FIRGBAF</code> object to its equivalent</td>
</tr>
</tbody>
</table>
string representation.  
(Overrides ValueTypeToString.)

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIRGBAF structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FIRGBAF)</td>
<td>Converts the value of a Color structure to a FIRGBAF structure.</td>
</tr>
<tr>
<td>(FIRGBAF to Color)</td>
<td>Converts the value of a FIRGBAF structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIRGBAF structures are different.</td>
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</table>

### Fields

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<tr>
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<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>
Remarks

The **FIRGBAF** structure provides access to an underlying FreeImage **FIRGBAF** structure. To determine the alpha, red, green or blue component of a color, use the alpha, red, green or blue fields, respectively.

For easy integration of the underlying structure into the .NET framework, the **FIRGBAF** structure implements implicit conversion operators to convert the represented color to and from the **Color** type. This makes the **Color** type a real replacement for the **FIRGBAF** structure and my be used in all situations which require an **FIRGBAF** type.

Each color component alpha, red, green or blue of **FIRGBAF** is translated into it's corresponding color component A, R, G or B of **Color** by linearly mapping the values of one range into the other range and vice versa.

**Conversion from System.Drawing.Color to FIRGBAF**

\[
\text{FIRGBAF.component} = (\text{float})\text{Color.component} / 255f
\]

**Conversion from FIRGBAF to System.Drawing.Color**

\[
\text{Color.component} = (\text{int})(\text{FIRGBAF.component} \times 255f)
\]

The same conversion is also applied when the **Color** property or the **FIRGBAF(Color)** constructor is invoked.

Examples

The following code example demonstrates the various conversions between the **FIRGBAF** structure and the **Color** structure.

```csharp
FIRGBAF firgbaf;
// Initialize the structure using a native .NET (new) FIRGBAF(Color.Indigo);
// Initialize the structure using the implicit operator.
firgbaf = Color.DarkSeaGreen;
// Convert the FIRGBAF instance into a native .NET using its implicit operator.
Color color = firgbaf;
// Using the structure's Color property for conversion.
```
// into a native .NET Color.
Color another = firgbaf.Color;

See Also

Reference
FreelImageAPI Namespace

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FIRGBAF Constructor

Initializes a new instance based on the specified Color.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FIRGBAF(
    Color color
)
```

Parameters

- `color`
  - Type: System.DrawingColor
  - Color to initialize with.

See Also

Reference
- FIRGBAF Structure
- FreeImageAPI Namespace

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The **FIRGBAF** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the <strong>Color</strong> of the structure.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FIRGBAF Structure
- FreelImageAPI Namespace

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FIRGBAF Color Property

Gets or sets the Color of the structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Color Color { get; set; }
```

Property Value
Type: Color

See Also

Reference
FIRGBAF Structure
FreeImageAPI Namespace

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## FIRGBAF Methods

The **FIRGBAF** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a></td>
</tr>
<tr>
<td>CompareTo(FIRGBAF)</td>
<td>Compares this instance with a specified <a href="#">FIRGBAF</a> object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <a href="#">FIRGBAF</a> structure and is equivalent to this <a href="#">FIRGBAF</a> structure. (Overrides <a href="https://docs.microsoft.com/en-us/dotnet/api/system.valueobject.valuetypeequals">ValueTypeEquals(Object)</a></td>
</tr>
<tr>
<td>Equals(FIRGBAF)</td>
<td>Tests whether the specified <a href="#">FIRGBAF</a> structure is equivalent to this <a href="#">FIRGBAF</a> structure.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <a href="#">FIRGBAF</a> structure. (Overrides <a href="https://docs.microsoft.com/en-us/dotnet/api/system.valueobject.valuetypegethashcode">ValueTypeGetHashCode</a></td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <a href="https://docs.microsoft.com/en-us/dotnet/api/system.type">Type</a> of the current instance. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>.)</td>
</tr>
</tbody>
</table>
**ToString**

Converts the numeric value of the `FIRGBAF` object to its equivalent string representation. (Overrides `ValueType.ToString`.)

**See Also**

Reference
- `FIRGBAF Structure`
- `FreeImageAPI Namespace`

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### FIRGBAFCompareTo Method

#### Overload List

<table>
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</thead>
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<tr>
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</tr>
</tbody>
</table>

#### See Also

Reference
- FIRGBAF Structure
- FreelImageAPI Namespace

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FIRGBAF CompareTo Method (Object)

Compares this instance with a specified `Object`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public int CompareTo(
    Object obj
)
```

### Parameters

**obj**
- Type: `SystemObject`
- An object to compare with this instance.

### Return Value

**Type:** `Int32`
- A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

`IComparable.CompareTo(Object)`

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

C#
ArgumentException

obj is not a FIRGBAF.

See Also

Reference
FIRGBAF Structure
CompareTo Overload
FreeImageAPI Namespace

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FIRGBAFCompareTo Method (FIRGBAF)

Compares this instance with a specified FIRGBAF object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(FIRGBAF other)
```

### Parameters

**other**  
Type: FreeImageAPI.FIRGBAF  
A FIRGBAF to compare.

### Return Value

**Type:** Int32  
A signed number indicating the relative values of this instance and other.

Implements  
IComparable{TCompareTo(T)}

### See Also

Reference  
FIRGBAF Structure
CompareTo Overload
FreelmageAPI Namespace

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### Overload List

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FIRGBAF structure and is equivalent to this FIRGBAF structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIRGBAF)</td>
<td>Tests whether the specified FIRGBAF structure is equivalent to this FIRGBAF structure.</td>
</tr>
</tbody>
</table>

**Top**

### See Also

**Reference**
- FIRGBAF Structure
- FreelImageAPI Namespace

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FIRGBAFEquals Method (Object)

Tests whether the specified object is a FIRGBAF structure and is equivalent to this FIRGBAF structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

**obj**

Type: `SystemObject`  
The object to test.

### Return Value

Type: `Boolean`  
**true** if `obj` is a FIRGBAF structure equivalent to this FIRGBAF structure; otherwise, **false**.

### See Also

Reference  
FIRGBAF Structure  
Equals Overload  
FreeImageAPI Namespace
FIRGBAFEureka Method (FIRGBAF)

Tests whether the specified FIRGBAF structure is equivalent to this FIRGBAF structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(FIRGBAF other)
```

### Parameters

- **other**  
  Type: FreeImageAPIFIRGBAF  
  A FIRGBAF structure to compare to this instance.

### Return Value

Type: Boolean  
true if obj is a FIRGBAF structure equivalent to this FIRGBAF structure; otherwise, false.

Implements  
IEquatableTEquals(T)

### See Also

Reference
FIRGBAF GetHashCode Method

Returns a hash code for this FIRGBAF structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
C#
public override int GetHashCode()
```

Return Value
Type: Int32
An integer value that specifies the hash code for this FIRGBAF.

See Also

Reference
FIRGBAF Structure
FreeImageAPI Namespace

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FIRGBAFToString Method

Converts the numeric value of the FIRGBAF object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public override string ToString()
```

**Return Value**

Type: String  
The string representation of the value of this instance.

## See Also

Reference
- FIRGBAF Structure  
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
FIRGBAF Operators and Type Conversions

The **FIRGBAF** type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <strong>FIRGBAF</strong> structures are equivalent.</td>
</tr>
<tr>
<td>(Color to <strong>FIRGBAF</strong>)</td>
<td>Converts the value of a <strong>Color</strong> structure to a <strong>FIRGBAF</strong> structure.</td>
</tr>
<tr>
<td>(<strong>FIRGBAF</strong> to Color)</td>
<td>Converts the value of a <strong>FIRGBAF</strong> structure to a <strong>Color</strong> structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <strong>FIRGBAF</strong> structures are different.</td>
</tr>
</tbody>
</table>

See Also

- Reference
  - **FIRGBAF Structure**
  - **FreImageAPI Namespace**

Contact/Feedback: [FreImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
FIRGBAF Equality Operator

Tests whether two specified FIRGBAF structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(
    FIRGBAF left,
    FIRGBAF right
)
```

### Parameters

- **left**  
  Type: FreeImageAPIFIRGBAF  
  The FIRGBAF that is to the left of the equality operator.

- **right**  
  Type: FreeImageAPIFIRGBAF  
  The FIRGBAF that is to the right of the equality operator.

### Return Value

Type: Boolean  
**true** if the two FIRGBAF structures are equal; otherwise, **false**.

### See Also

- Reference  
  FIRGBAF Structure  
  FreeImageAPI Namespace
FIRGBAF Conversion Operators

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Color to FIRGBAF)</td>
<td>Converts the value of a Color structure to a FIRGBAF structure.</td>
</tr>
<tr>
<td>(FIRGBAF to Color)</td>
<td>Converts the value of a FIRGBAF structure to a Color structure.</td>
</tr>
</tbody>
</table>

See Also

Reference

FIRGBAF Structure
FreImageAPI Namespace

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FIRGBAF Conversion (Color to FIRGBAF)

Converts the value of a Color structure to a FIRGBAF structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static implicit operator FIRGBAF (  
    Color value  
)
```

### Parameters

**value**
- Type: System.DrawingColor  
  A Color structure.

### Return Value
- Type: FIRGBAF  
  A new instance of FIRGBAF initialized to value.

## See Also

- Reference  
  FIRGBAF Structure  
  Overload  
  FreeImageAPI Namespace
FIRGBAF Conversion
(FIRGBAF to Color)

Converts the value of a FIRGBAF structure to a Color structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static implicit operator Color (FIRGBAF value)
```

Parameters

`value`
Type: FreeImageAPIFIRGBAF
A FIRGBAF structure.

Return Value
Type: Color
A new instance of Color initialized to `value`.

See Also

Reference
FIRGBAF Structure
Overload
FreeImageAPI Namespace
FIRGBAFInequality Operator

Tests whether two specified FIRGBAF structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(FIRGBAF left, FIRGBAF right)
```

### Parameters

- **left**  
  Type: FreeImageAPIFIRGBAF  
  The FIRGBAF that is to the left of the inequality operator.

- **right**  
  Type: FreeImageAPIFIRGBAF  
  The FIRGBAF that is to the right of the inequality operator.

### Return Value

Type: Boolean  
true if the two FIRGBAF structures are different; otherwise, false.

### See Also

Reference  
FIRGBAF Structure  
FreeImageAPI Namespace
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Help improve this Documentation: Join the Project
The **FIRGBAF** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha</td>
<td>The alpha color component.</td>
</tr>
<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FIRGBAF Structure
- FreelImageAPI Namespace

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FIRGBAFalpha Field

The alpha color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public float alpha
```

### Field Value

**Type:** Single

### See Also

**Reference**
- FIRGBAF Structure
- FreeImageAPI Namespace

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FIRGBAF blue Field

The blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public float blue
```

### Field Value

**Type:** Single

### See Also

- Reference
  - FIRGBAF Structure
  - FreeImageAPI Namespace

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FIRGBAF green Field

The green color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public float green
```

**Field Value**  
**Type:** Single

### See Also

- Reference  
  - FIRGBAF Structure  
  - FreeImageAPI Namespace

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FIRGBAFRed Field

The red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public float red
```

**Field Value**

**Type:** Single

### See Also

- Reference  
  - FIRGBAF Structure  
  - FreeImageAPI Namespace

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The **FIRGBF** structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 32 bits and takes values in the range from 0 to 1.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
[SerializableAttribute]
public struct FIRGBF : IComparable, IComparable<FIRGBF>, IEquatable<FIRGBF>
```

The **FIRGBF** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRGBF</td>
<td>Initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the <strong>Color</strong> of the structure.</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIRGBF)</code></td>
<td>Compares this instance with a specified <code>FIRGBF</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>FIRGBF</code> structure and is equivalent to this <code>FIRGBF</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FIRGBF)</code></td>
<td>Tests whether the specified <code>FIRGBF</code> structure is equivalent to this <code>FIRGBF</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>FIRGBF</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the numeric value of the <code>FIRGBF</code> object to its equivalent</td>
</tr>
</tbody>
</table>
string representation. (Overrides ValueTypeToString.)

▲ Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIRGBF structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FIRGBF)</td>
<td>Converts the value of a Color structure to a FIRGBF structure.</td>
</tr>
<tr>
<td>(FIRGBF to Color)</td>
<td>Converts the value of a FIRGBF structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIRGBF structures are different.</td>
</tr>
</tbody>
</table>

▲ Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

▲ Remarks

The FIRGBF structure provides access to an underlying FreeImage...
**FIRGBF** structure. To determine the red, green or blue component of a color, use the red, green or blue fields, respectively.

For easy integration of the underlying structure into the .NET framework, the **FIRGBF** structure implements implicit conversion operators to convert the represented color to and from the **Color** type. This makes the **Color** type a real replacement for the **FIRGBF** structure and may be used in all situations which require an **FIRGBF** type.

Each color component alpha, red, green or blue of **FIRGBF** is translated into its corresponding color component A, R, G or B of **Color** by linearly mapping the values of one range into the other range and vice versa. When converting from **Color** into **FIRGBF**, the color's alpha value is ignored and assumed to be 255 when converting from **FIRGBF** into **Color**, creating a fully opaque color.

**Conversion from System.Drawing.Color to FIRGBF**

\[
\text{FIRGBF.component} = (\text{float})\text{Color.component} / 255f
\]

**Conversion from FIRGBF to System.Drawing.Color**

\[
\text{Color.component} = (\text{int})(\text{FIRGBF.component} * 255f)
\]

The same conversion is also applied when the **Color** property or the **FIRGBF(Color)** constructor is invoked.

**Examples**

The following code example demonstrates the various conversions between the **FIRGBF** structure and the **Color** structure.

```csharp
FIRGBF firgbf;
// Initialize the structure using a native .NET (f
firgbf = new FIRGBF(Color.Indigo);
// Initialize the structure using the implicit op
firgbf = Color.DarkSeaGreen;
// Convert the FIRGBF instance into a native .NET
// using its implicit operator.
Color color = firgbf;
// Using the structure's Color property for conv
// into a native .NET Color.
Color another = firgbf.Color;
```
See Also

Reference
FreelImageAPI Namespace

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FIRGBF Constructor

Initializes a new instance based on the specified Color.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public FIRGBF(
    Color color
)
```

Parameters

`color`
Type: System.DrawingColor
Color to initialize with.

See Also

Reference
FIRGBF Structure
FreeImageAPI Namespace

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The **FIRGBF** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- **FIRGBF Structure**
- **FreeImageAPI Namespace**

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Help improve this Documentation: [Join the Project](#)
FIRGBFColor Property

Gets or sets the Color of the structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Color Color { get; set; }
```

### Property Value

**Type:** Color

### See Also

**Reference**
- FIRGBF Structure
- FreeImageAPI Namespace

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The **FIRGBF** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIRGBF)</code></td>
<td>Compares this instance with a specified <code>FIRGBF</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>FIRGBF</code> structure and is equivalent to this <code>FIRGBF</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FIRGBF)</code></td>
<td>Tests whether the specified <code>FIRGBF</code> structure is equivalent to this <code>FIRGBF</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>FIRGBF</code> structure.                           (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance.                                   (Inherited from <code>Object</code>.)</td>
</tr>
</tbody>
</table>
ToString

Converts the numeric value of the FIRGBF object to its equivalent string representation. (Overrides ValueType.ToString.)

See Also

Reference
FIRGBF Structure
FreeImageAPI Namespace

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FIRGBFCompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIRGBF)</td>
<td>Compares this instance with a specified FIRGBF object.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIRGBF Structure
FreeImageAPI Namespace

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FIRGBFCompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int CompareTo(
    Object obj
)
```

**Parameters**

- **obj**
  - Type: SystemObject
  - An object to compare with this instance.

**Return Value**

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

**Implements**

IComparable.CompareTo(Object)

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td></td>
</tr>
</tbody>
</table>
ArgumentException

obj is not a FIRGBF.

See Also

Reference
FIRGBF Structure
CompareTo Overload
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIRGBFCompareTo Method (FIRGBF)

Compares this instance with a specified FIRGBF object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(FIRGBF other)
```

### Parameters

- **other**
  - Type: FreeImageAPI.FIRGBF
  - A FIRGBF to compare.

### Return Value

- **Type:** Int32
- A signed number indicating the relative values of this instance and other.

### Implements

- IComparable.CompareTo(T)

### See Also

- Reference  
  - FIRGBF Structure
CompareTo Overload
FreelmageAPI Namespace

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FIRGBF Equals Method

**Overload List**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FIRGBF structure and is equivalent to this FIRGBF structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIRGBF)</td>
<td>Tests whether the specified FIRGBF structure is equivalent to this FIRGBF structure.</td>
</tr>
</tbody>
</table>

**See Also**

Reference

- FIRGBF Structure
- FreELmageAPI Namespace

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FIRGBFEquals Method (Object)

Tests whether the specified object is a FIRGBF structure and is equivalent to this FIRGBF structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(Object obj)
```

**Parameters**

- `obj`  
  Type: `SystemObject`  
  The object to test.

**Return Value**  
Type: `Boolean`  
`true` if `obj` is a FIRGBF structure equivalent to this FIRGBF structure; otherwise, `false`.

### See Also

Reference  
FIRGBF Structure  
Equals Overload  
FreeImageAPI Namespace
FIRGBFEquals Method (FIRGBF)

Tests whether the specified FIRGBF structure is equivalent to this FIRGBF structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool Equals(FIRGBF other)
```

**Parameters**

*other*

Type: FreeImageAPIFIRGBF  
A FIRGBF structure to compare to this instance.

**Return Value**

Type: Boolean  
**true** if *obj* is a FIRGBF structure equivalent to this FIRGBF structure; otherwise, **false**.

Implements  
IEquatableTEquals(T)

**See Also**

Reference
FIRGBF Structure
Equals Overload
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FIRGBF GetHashCode Method

Returns a hash code for this FIRGBF structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public override int GetHashCode()
```

### Return Value

Type: **Int32**  
An integer value that specifies the hash code for this FIRGBF.

### See Also

Reference  
FIRGBF Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIRGBFToString Method

Converts the numeric value of the FIRGBF object to its equivalent string representation.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public override string ToString()
```

Return Value
Type: String
The string representation of the value of this instance.

See Also

Reference
FIRGBF Structure
FreeImageAPI Namespace

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FIRGBF Operators and Type Conversions

The FIRGBF type exposes the following members.

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FIRGBF structures are equivalent.</td>
</tr>
<tr>
<td>(Color to FIRGBF)</td>
<td>Converts the value of a Color structure to a FIRGBF structure.</td>
</tr>
<tr>
<td>(FIRGBF to Color)</td>
<td>Converts the value of a FIRGBF structure to a Color structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FIRGBF structures are different.</td>
</tr>
</tbody>
</table>

See Also

Reference

FIRGBF Structure
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FIRGBFEquality Operator

Tests whether two specified FIRGBF structures are equivalent.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool operator ==(FIRGBF left, FIRGBF right)
```

Parameters

- **left**
  Type: FreeImageAPI.FIRGBF
  The FIRGBF that is to the left of the equality operator.

- **right**
  Type: FreeImageAPI.FIRGBF
  The FIRGBF that is to the right of the equality operator.

Return Value

Type: Boolean

true if the two FIRGBF structures are equal; otherwise, false.

See Also

- Reference
  FIRGBF Structure
  FreeImageAPI Namespace
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FIRGBF Conversion Operators

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Color to FIRGBF)</td>
<td>Converts the value of a Color structure to a FIRGBF structure.</td>
</tr>
<tr>
<td>(FIRGBF to Color)</td>
<td>Converts the value of a FIRGBF structure to a Color structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGBF Structure
- FreelImageAPI Namespace

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FIRGBF Conversion (Color to FIRGBF)

Converts the value of a Color structure to a FIRGBF structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static implicit operator FIRGBF (Color value)
```

Parameters

value
Type: System.DrawingColor
A Color structure.

Return Value
Type: FIRGBF
A new instance of FIRGBF initialized to value.

See Also

Reference
FIRGBF Structure
Overload
FreeImageAPI Namespace
FIRGBF Conversion (FIRGBF to Color)

Converts the value of a FIRGBF structure to a Color structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static implicit operator Color (FIRGBF value)
```

Parameters

value
Type: FreeImageAPI.FIRGBF
A FIRGBF structure.

Return Value
Type: Color
A new instance of Color initialized to value.

See Also

Reference
FIRGBF Structure
Overload
FreeImageAPI Namespace
FIRGBFInequality Operator

Tests whether two specified FIRGBF structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool operator !=(FIRGBF left, FIRGBF right)
```

### Parameters

- **left**  
  Type: FreeImageAPIFIRGBF  
  The FIRGBF that is to the left of the inequality operator.

- **right**  
  Type: FreeImageAPIFIRGBF  
  The FIRGBF that is to the right of the inequality operator.

### Return Value

Type: Boolean  
**true** if the two FIRGBF structures are different; otherwise, **false**.

## See Also

- Reference
  - FIRGBF Structure
  - FreeImageAPI Namespace
FIRGBF Fields

The FIRGBF type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>blue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>green</td>
<td>The green color component.</td>
</tr>
<tr>
<td>red</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FIRGBF Structure
- FreelimageAPI Namespace
FIRGBFblue Field

The blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public float blue
```

### Field Value

Type: Single

### See Also

Reference  
FIRGBF Structure  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FIRGBFgreen Field

The green color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public float green
```

### Field Value

Type: **Single**

### See Also

Reference

- **FIRGBF Structure**
- **FreeImageAPI Namespace**

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FIRGBF Red Field

The red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public float red
```

### Field Value

**Type:** Single

### See Also

**Reference**
- FIRGBF Structure  
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The **FITAG** structure is a handle to a FreiImage metadata tag.

**Namespace:** FreiImageAPI  
**Assembly:** FreiImageNET (in FreiImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct FITAG : IComparable, IComparable<FITAG>, IEquatable<FITAG>
```

The **FITAG** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td><strong>IsNull</strong></td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td><strong>CompareTo(Object)</strong></td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td><strong>CompareTo(FITAG)</strong></td>
</tr>
</tbody>
</table>
Equals(Object) Determines whether the specified Object is equal to the current Object. (Overrides ValueType.Equals(Object).)

Equals(FITAG) Indicates whether the current object is equal to another object of the same type.

GetHashCode Returns a hash code for this FITAG structure. (Overrides ValueType.GetHashCode.)

GetType Gets the Type of the current instance. (Inherited from Object.)

SetNull Sets the handle to null.

ToString Converts the numeric value of the FITAG object to its equivalent string representation. (Overrides ValueType.ToString.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FITAG structures are equivalent.</td>
</tr>
</tbody>
</table>
**Inequality**  
Tests whether two specified FITAG structures are different.

**Fields**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

**See Also**

Reference  
FreelmageAPI Namespace
The `FITAG` type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>IsNull</code></td>
<td>Gets whether the pointer is a null pointer or not.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - `FITAG Structure`
  - `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimagehq.com)
Help improve this Documentation: [Join the Project](https://github.com/freeimagehq/FreImage.NET)
FITAGIsNull Property

Gets whether the pointer is a null pointer or not.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsNull { get; }
```

**Property Value**
Type: Boolean  
true if this FITAG is a null pointer; otherwise, false.

### See Also

Reference  
FITAG Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FITAG Methods

The **FITAG** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FITAG)</code></td>
<td>Compares this instance with a specified <code>FITAG</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(FITAG)</code></td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>FITAG</code> structure.                           (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance.                                   (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>SetNull</code></td>
<td>Sets the handle to <code>null</code>.</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the numeric value of the <strong>FITAG</strong> object to its equivalent string representation. (Overrides <strong>ValueTo</strong>:String.)</td>
</tr>
</tbody>
</table>

---

**See Also**

Reference
- **FITAG Structure**
- **FreelImageAPI Namespace**

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FITAGCompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FITAG)</td>
<td>Compares this instance with a specified FITAG object.</td>
</tr>
</tbody>
</table>

See Also

Reference
FITAG Structure
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FITAG.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
    Object obj
)
```

### Parameters

- **obj**  
  Type: System.Object  
  An object to compare with this instance.

### Return Value

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

**Implements**

IComparable.CompareTo(Object)

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

ArgumentException

$obj$ is not a FITAG.

See Also

Reference
FITAG Structure
CompareTo Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FITAG.CompareTo Method (FITAG)

Compares this instance with a specified FITAG object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(FITAG other)
```

### Parameters

*other*  
Type: FreeImageAPI!FITAG  
A FITAG to compare.

### Return Value

Type: Int32  
A signed number indicating the relative values of this instance and *other*.

Implements  
IComparable<T>!CompareTo(T)

### See Also

- Reference  
  FITAG Structure
CompareTo Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
## FITAGEquals Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Overrides ValueTypeEquals(Object).)</td>
</tr>
<tr>
<td>Equals(FITAG)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FITAG Structure
  - FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FITAGEquals Method  
(Object)

Determines whether the specified Object is equal to the current Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

**Parameters**

*obj*  
Type: SystemObject  
The Object to compare with the current Object.

**Return Value**

Type: Boolean  
true if the specified Object is equal to the current Object; otherwise, false.

### See Also

Reference  
FITAG Structure  
Equals Overload  
FreeImageAPI Namespace
FITAGEquals Method (FITAG)

Indicates whether the current object is equal to another object of the same type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool Equals(FITAG other)
```

**Parameters**

*other*

Type: FreeImageAPIFITAG  
An object to compare with this object.

**Return Value**

Type: Boolean  
`true` if the current object is equal to the other parameter; otherwise, `false`.

**Implements**

IEquatableTEquals(T)

**See Also**

Reference
FITAG Structure
Equals Overload
FreelImageAPI Namespace

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FITAG.GetHashCode Method

Returns a hash code for this FITAG structure.

**Namespace:** FreImageAPI  
**Assembly:** FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

### Return Value

**Type:** Int32  
An integer value that specifies the hash code for this FITAG.

### See Also

Reference  
FITAG Structure  
FreImageAPI Namespace

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Help improve this Documentation: Join the Project
FITAG SetNull Method

Sets the handle to `null`.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SetNull()
```

### See Also

- **Reference**
  - FITAG Structure
  - FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FITAGToString Method

Converts the numeric value of the FITAG object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

#### Syntax

```csharp
public override string ToString()
```

**Return Value**
- **Type:** String
- The string representation of the value of this instance.

#### See Also

- Reference
  - FITAG Structure
  - FreeImageAPI Namespace

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The FITAG type exposes the following members.

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified FITAG structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified FITAG structures are different.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FITAG Structure
- FreelImageAPI Namespace

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FITAGEEquality Operator

Tests whether two specified FITAG structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool operator ==(
    FITAG left,
    FITAG right
)
```

### Parameters

**left**
- Type: FreeImageAPIFITAG  
  The FITAG that is to the left of the equality operator.

**right**
- Type: FreeImageAPIFITAG  
  The FITAG that is to the right of the equality operator.

### Return Value
- Type: Boolean  
  **true** if the two FITAG structures are equal; otherwise, **false**.

### See Also

- Reference  
  FITAG Structure  
  FreeImageAPI Namespace
Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FITAGInequality Operator

Tests whether two specified FITAG structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(
    FITAG left,
    FITAG right
)
```

### Parameters

- **left**
  - Type: FreeImageAPIFITAG  
    The FITAG that is to the left of the inequality operator.

- **right**
  - Type: FreeImageAPIFITAG  
    The FITAG that is to the right of the inequality operator.

### Return Value

- Type: Boolean  
  - **true** if the two FITAG structures are different; otherwise, **false**.

### See Also

- Reference  
  - FITAG Structure  
  - FreeImageAPI Namespace
FITAG Fields

The FITAG type exposes the following members.

# Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>A read-only field that represents a handle that has been initialized to zero.</td>
</tr>
</tbody>
</table>

See Also

- Reference
  - FITAG Structure
  - FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FITAGZero Field

A read-only field that represents a handle that has been initialized to zero.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static readonly FITAG Zero
```

Field Value  
Type: FITAG

### See Also

Reference  
FITAG Structure  
FreeImageAPI Namespace

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FIURational Structure

The FIURational structure represents a fraction via two UInt32 instances which are interpreted as numerator and denominator.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
[SerializableAttribute]
public struct FIURational : IConvertible, 
    IComparable, IFormattable, IComparable<FIURational>
```

The FIURational type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIURational(Decimal)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td>FIURational(FITAG)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td>FIURational(UInt32, UInt32)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
</tbody>
</table>
## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator</td>
<td>The denominator of the fraction.</td>
</tr>
<tr>
<td>IsInteger</td>
<td>Returns whether the fraction is representing an integer value.</td>
</tr>
<tr>
<td>Numerator</td>
<td>The numerator of the fraction.</td>
</tr>
</tbody>
</table>

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(FIURational)</td>
<td>Compares this instance with a specified FIURational object.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FIURational structure and is equivalent to this FIURational structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIURational)</td>
<td>Tests whether the specified FIURational structure is equivalent to this FIURational structure.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this FIURational structure. (Overrides ValueType.GetHashCode.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the FIURational object to its equivalent string representation. (Overrides ValueType.ToString.)</td>
</tr>
<tr>
<td>ToString(String, IFormatProvider)</td>
<td>Formats the value of the current instance using the specified format.</td>
</tr>
<tr>
<td>Truncate</td>
<td>Returns the truncated value of the fraction.</td>
</tr>
</tbody>
</table>

**Top**

**Operators**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Decrement</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Division</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Equality</td>
<td>Standard implementation</td>
</tr>
<tr>
<td>Conversion</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(Boolean to FIURational)</td>
<td>Converts the value of a Boolean structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Decimal to FIURational)</td>
<td>Converts the value of a Decimal structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Double to FIURational)</td>
<td>Converts the value of a Double structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Int64 to FIURational)</td>
<td>Converts the value of an Int64 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Single to FIURational)</td>
<td>Converts the value of a Single structure to a FIURational structure.</td>
</tr>
<tr>
<td>(UInt32 to FIURational)</td>
<td>Converts the value of an UInt32 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(UInt64 to FIURational)</td>
<td>Converts the value of an UInt64 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(FIURational to Boolean)</td>
<td>Converts the value of a FIURational structure to a Boolean structure.</td>
</tr>
<tr>
<td>(FIURational to Byte)</td>
<td>Converts the value of a FIURational structure to a Byte structure.</td>
</tr>
<tr>
<td>(FIURational to Char)</td>
<td>Converts the value of a FIURational structure to a Char structure.</td>
</tr>
</tbody>
</table>

of the operator.
<table>
<thead>
<tr>
<th>Conversion</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(FIURational to Int16)</td>
<td>Converts the value of a FIURational structure to an Int16 structure.</td>
</tr>
<tr>
<td>(FIURational to Int32)</td>
<td>Converts the value of a FIURational structure to an Int32 structure.</td>
</tr>
<tr>
<td>(FIURational to Int64)</td>
<td>Converts the value of a FIURational structure to an Int64 structure.</td>
</tr>
<tr>
<td>(FIURational to SByte)</td>
<td>Converts the value of a FIURational structure to a SByte structure.</td>
</tr>
<tr>
<td>(FIURational to UInt16)</td>
<td>Converts the value of a FIURational structure to a UInt16 structure.</td>
</tr>
<tr>
<td>(FIURational to UInt32)</td>
<td>Converts the value of a FIURational structure to a UInt32 structure.</td>
</tr>
<tr>
<td>(FIURational to UInt64)</td>
<td>Converts the value of a FIURational structure to a UInt64 structure.</td>
</tr>
<tr>
<td>GreaterThan</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>GreaterThanOrEqual</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>(Byte to FIURational)</td>
<td>Converts the value of a Byte structure to a FIURational structure.</td>
</tr>
<tr>
<td>Conversion</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>(Char to FIURational)</td>
<td>Converts the value of a Char structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Int16 to FIURational)</td>
<td>Converts the value of an Int16 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Int32 to FIURational)</td>
<td>Converts the value of an Int32 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(SByte to FIURational)</td>
<td>Converts the value of a SByte structure to a FIURational structure.</td>
</tr>
<tr>
<td>(UInt16 to FIURational)</td>
<td>Converts the value of a UInt16 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(FIURational to Decimal)</td>
<td>Converts the value of a FIURational structure to a Decimal structure.</td>
</tr>
<tr>
<td>(FIURational to Double)</td>
<td>Converts the value of a FIURational structure to a Double structure.</td>
</tr>
<tr>
<td>(FIURational to Single)</td>
<td>Converts the value of a FIURational structure to a Single structure.</td>
</tr>
<tr>
<td>Increment</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Epsilon</td>
<td>Represents the smallest positive FIURational value greater than zero. This field is constant.</td>
</tr>
<tr>
<td>MaxValue</td>
<td>Represents the largest possible value of FIURational. This field is constant.</td>
</tr>
<tr>
<td>MinValue</td>
<td>Represents the smallest possible value of FIURational. This field is constant.</td>
</tr>
</tbody>
</table>
Remarks

The structure tries to approximate the value of `FIURational(Decimal)` when creating a new instance by using a better algorithm than FreeImage does.
The structure implements the following operators: +, ++, --, ==, !=, >, >=, <, <= and ~ (which switches nominator and denominator).
The structure can be converted into all .NET standard types either implicit or explicit.

See Also

Reference
FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
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FIURational Constructor

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIURational(Decimal)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td>FIURational(FITAG)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
<tr>
<td>FIURational(UInt32, UInt32)</td>
<td>Initializes a new instance based on the specified parameters.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIURational Structure
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIURational Constructor
(Decimal)

Initializes a new instance based on the specified parameters.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FIURational(
    decimal value
)
```

**Parameters**

`value`

Type: System.Decimal

The value to convert into a fraction.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>OverflowException</td>
<td><code>value</code> cannot be converted into a fraction represented by two unsigned integer values.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FIURational Constructor
(FITAG)

Initializes a new instance based on the specified parameters.

**Namespace:** FreelImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public FIURational(
    FITAG tag
)
```

**Parameters**

*tag*

Type: FreelImageAPIFITAG  
The tag to read the data from.

### See Also

**Reference**
- FIURational Structure
- FIURational Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
FIURational Constructor
(UInt32, UInt32)

Initializes a new instance based on the specified parameters.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public FIURational(
    uint n,
    uint d
)
```

### Parameters

- **n**
  - Type: System.UInt32
  - The numerator.

- **d**
  - Type: System.UInt32
  - The denominator.

### See Also

- Reference:
  - FIURational Structure
  - FIURational Overload
  - FreeImageAPI Namespace
FIURational Properties

The FIURational type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator</td>
<td>The denominator of the fraction.</td>
</tr>
<tr>
<td>IsInteger</td>
<td>Returns whether the fraction is representing an integer value.</td>
</tr>
<tr>
<td>Numerator</td>
<td>The numerator of the fraction.</td>
</tr>
</tbody>
</table>

See Also

Reference
FIURational Structure
FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FIURationalDenominator Property

The denominator of the fraction.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public uint Denominator { get; }
```

**Property Value**

Type: UInt32

**See Also**

Reference  
FIURational Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIURational.IsInteger Property

Returns whether the fraction is representing an integer value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsInteger { get; }
```

**Property Value**  
Type: Boolean

### See Also

- Reference
  - FIURational Structure
  - FreeImageAPI Namespace

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FIURationalNumerator Property

The numerator of the fraction.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public uint Numerator { get; }
```

**Property Value**

Type: UInt32

**See Also**

Reference
- FIURational Structure
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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The **FIURational** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <a href="#">Object</a>.</td>
</tr>
<tr>
<td><code>CompareTo(FIURational)</code></td>
<td>Compares this instance with a specified <a href="#">FIURational</a> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <a href="#">FIURational</a> structure and is equivalent to this <a href="#">FIURational</a> structure. (Overrides <a href="#">ValueTypeEquals(Object)</a>.)</td>
</tr>
<tr>
<td><code>Equals(FIURational)</code></td>
<td>Tests whether the specified <a href="#">FIURational</a> structure is equivalent to this <a href="#">FIURational</a> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <a href="#">FIURational</a> structure. (Overrides <a href="#">ValueTypeGetHashCode</a>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <a href="#">Type</a> of the current instance. (Inherited from <a href="#">Object</a>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the numeric value of the FIURational object to its equivalent string representation. (Overrides ValueType.ToString.)</td>
</tr>
<tr>
<td><strong>ToString(String, IFormatProvider)</strong></td>
<td>Formats the value of the current instance using the specified format.</td>
</tr>
<tr>
<td><strong>Truncate</strong></td>
<td>Returns the truncated value of the fraction.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FIURational Structure
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
# FIURational.CompareTo Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(FIURational)</code></td>
<td>Compares this instance with a specified <code>FIURational</code> object.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FIURational Structure
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
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FIURational.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(Object obj)
```

### Parameters

- **obj**  
  Type: System.Object  
  An object to compare with this instance.

### Return Value

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

IComparable.CompareTo(Object)

### Exceptions
ArgumentException

obj is not a FIURational.

See Also

Reference
FIURational Structure
CompareTo Overload
FreeImageAPI Namespace

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FIURational.CompareTo Method (FIURational)

Compares this instance with a specified FIURational object.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public int CompareTo(FIURational other)
```

Parameters

other
Type: FreeImageAPIFIURational
A FIURational to compare.

Return Value
Type: Int32
A signed number indicating the relative values of this instance and other.

Implements
IEnumerable.CompareTo(T)

See Also

Reference
FIURational Structure
CompareTo Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
## FIURational.Equals Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a FIURational structure and is equivalent to this FIURational structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(FIURational)</td>
<td>Tests whether the specified FIURational structure is equivalent to this FIURational structure.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FIURational Structure
  - FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIURational.Equals Method (Object)

Tests whether the specified object is a FIURational structure and is equivalent to this FIURational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public override bool Equals(Object obj)
```

Parameters

- **obj**
  - Type: `System.Object`
  - The object to test.

Return Value

Type: `Boolean`
- `true` if `obj` is a FIURational structure equivalent to this FIURational structure; otherwise, `false`.

See Also

Reference
- FIURational Structure
- Equals Overload
- FreeImageAPI Namespace
Tests whether the specified FIURational structure is equivalent to this FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(FIU Rational other)
```

### Parameters

- `other`
  - Type: FreeImageAPIFIURational
    - A FIURational structure to compare to this instance.

### Return Value

- Type: Boolean
  - `true` if `obj` is a FIURational structure equivalent to this FIURational structure; otherwise, `false`.

### Implements

- IEquatableTEquals(T)

### See Also

- Reference
FIURational Structure
Equals Overload
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FIURational.GetHashCode Method

Returns a hash code for this FIURational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public override int GetHashCode()
```

Return Value

Type: Int32
An integer value that specifies the hash code for this FIURational.

See Also

Reference
- FIURational Structure
- FreeImageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
## FIURationalToString Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the numeric value of the <code>FIURational</code> object to its equivalent string representation. (Overrides <code>ValueType.ToString</code>.)</td>
</tr>
<tr>
<td><strong>ToString(String, IFormatProvider)</strong></td>
<td>Formats the value of the current instance using the specified format.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - `FIURational Structure`
  - `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](https://freewareware.com)
Help improve this Documentation: [Join the Project](https://github.com/jointheproject)
FIURationalToString Method

Converts the numeric value of the FIURational object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

**Return Value**

Type: String  
The string representation of the value of this instance.

### See Also

Reference  
FIURational Structure  
ToString Overload  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIURationalToString Method (String, IFormatProvider)

Formats the value of the current instance using the specified format.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ToString(
    string format,
    IFormatProvider formatProvider
)
```

### Parameters

- **format**  
  Type: SystemString  
  The String specifying the format to use.

- **formatProvider**  
  Type: SystemIFormatProvider  
  The IFormatProvider to use to format the value.

### Return Value

Type: String  
A String containing the value of the current instance in the specified format.

**Implements**  
IFormattableToString(String, IFormatProvider)
See Also

Reference
FIURational Structure
ToString Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FIURational Truncate Method

Returns the truncated value of the fraction.

Namespace: FreImageAPI
Assembly: FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public int Truncate()
```

Return Value

Type: Int32

[Missing <returns> documentation for "M:FreImageAPI.FIURational.Truncate"]

See Also

Reference

FIURational Structure
FreImageAPI Namespace

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The `FIURational` type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
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<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Decrement</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Division</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>Equality</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>(Boolean to FIURational)</td>
<td>Converts the value of a <code>Boolean</code> structure to a <code>FIURational</code> structure.</td>
</tr>
<tr>
<td>(Decimal to FIURational)</td>
<td>Converts the value of a <code>Decimal</code> structure to a <code>FIURational</code> structure.</td>
</tr>
<tr>
<td>(Double to FIURational)</td>
<td>Converts the value of a <code>Double</code> structure to a <code>FIURational</code> structure.</td>
</tr>
<tr>
<td>(Int64 to FIURational)</td>
<td>Converts the value of an <code>Int64</code> structure to a</td>
</tr>
<tr>
<td>Conversion Type</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(Single to FIURational)</td>
<td>Converts the value of a Single structure to a FIURational structure.</td>
</tr>
<tr>
<td>(UInt32 to FIURational)</td>
<td>Converts the value of an UInt32 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(UInt64 to FIURational)</td>
<td>Converts the value of an UInt64 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(FIURational to Boolean)</td>
<td>Converts the value of a FIURational structure to a Boolean structure.</td>
</tr>
<tr>
<td>(FIURational to Byte)</td>
<td>Converts the value of a FIURational structure to a Byte structure.</td>
</tr>
<tr>
<td>(FIURational to Char)</td>
<td>Converts the value of a FIURational structure to a Char structure.</td>
</tr>
<tr>
<td>(FIURational to Int16)</td>
<td>Converts the value of a FIURational structure to an Int16 structure.</td>
</tr>
<tr>
<td>(FIURational to Int32)</td>
<td>Converts the value of a FIURational structure to an Int32 structure.</td>
</tr>
<tr>
<td>(FIURational to Int64)</td>
<td>Converts the value of a FIURational structure to an Int64 structure.</td>
</tr>
<tr>
<td>(FIURational to SByte)</td>
<td>Converts the value of a FIURational structure to a SByte.</td>
</tr>
<tr>
<td>Conversion</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>(FIURational to UInt16)</td>
<td>Converts the value of a FIURational structure to an UInt16 structure.</td>
</tr>
<tr>
<td>(FIURational to UInt32)</td>
<td>Converts the value of a FIURational structure to an UInt32 structure.</td>
</tr>
<tr>
<td>(FIURational to UInt64)</td>
<td>Converts the value of a FIURational structure to an UInt32 structure.</td>
</tr>
<tr>
<td>GreaterThan</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>GreaterThanOrEqual</td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td>(Byte to FIURational)</td>
<td>Converts the value of a Byte structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Char to FIURational)</td>
<td>Converts the value of a Char structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Int16 to FIURational)</td>
<td>Converts the value of an Int16 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(Int32 to FIURational)</td>
<td>Converts the value of an Int32 structure to a FIURational structure.</td>
</tr>
<tr>
<td>(SByte to FIURational)</td>
<td>Converts the value of a SByte structure to a FIURational structure.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>(UInt16 to FIURational)</strong></td>
<td>Converts the value of an UInt16 structure to a FIURational structure.</td>
</tr>
<tr>
<td><strong>(FIURational to Decimal)</strong></td>
<td>Converts the value of a FIURational structure to a Decimal structure.</td>
</tr>
<tr>
<td><strong>(FIURational to Double)</strong></td>
<td>Converts the value of a FIURational structure to a Double structure.</td>
</tr>
<tr>
<td><strong>(FIURational to Single)</strong></td>
<td>Converts the value of a FIURational structure to a Single structure.</td>
</tr>
<tr>
<td><strong>Increment</strong></td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td><strong>Inequality</strong></td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td><strong>LessThan</strong></td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td><strong>LessThanOrEqual</strong></td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td><strong>Modulus</strong></td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td><strong>Multiply</strong></td>
<td>Standard implementation of the operator.</td>
</tr>
<tr>
<td><strong>OnesComplement</strong></td>
<td>Returns the reciprocal value of this instance.</td>
</tr>
<tr>
<td><strong>Subtraction</strong></td>
<td>Standard implementation of the operator.</td>
</tr>
</tbody>
</table>
UnaryPlus

Standard implementation of the operator.

See Also

Reference
FIURational Structure
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIURationalAddition Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIURational operator +(  
    FIURational left,  
    FIURational right
)
```

### Parameters

**left**
- Type: FreeImageAPI.FIURational
  
  [Missing <param name="left"/> documentation for "M:FreeImageAPI.FIURational.op_Addition(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

**right**
- Type: FreeImageAPI.FIURational
  
  [Missing <param name="right"/> documentation for "M:FreeImageAPI.FIURational.op_Addition(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

### Return Value

- Type: FIURational
  
  [Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_Addition(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

## See Also
FIURationalDecrement Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FIURational operator --(FIURational value)
```

### Parameters

- **value**
  - Type: FreeImageAPI.FIURational
  - [Missing <param name="value="/> documentation for "M:FreeImageAPI.FIURational.op_Decrement(FreeImageAPI.FIURational)" ]

### Return Value

- Type: FIURational  
  - [Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_Decrement(FreeImageAPI.FIURational)""]

### See Also

- Reference  
  - FIURational Structure  
  - FreeImageAPI Namespace
FIURationalDivision Operator

Standard implementation of the operator.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C# public static FIURational operator / (FIURational left, FIURational right)

Parameters

left
Type: FreeImageAPIFIURational

right
Type: FreeImageAPIFIURational

Return Value
Type: FIURational

See Also
FIURationalEquality Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4  
(3.17.0)

## Syntax

```csharp
public static bool operator ==(  
    FIURational left,  
    FIURational right  
)
```

### Parameters

*left*

Type: `FreeImageAPI.FIURational`  
[Missing <param name="left"/> documentation for  
"M:FreeImageAPI.FIURational.op_Equality(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

*right*

Type: `FreeImageAPI.FIURational`  
[Missing <param name="right"/> documentation for  
"M:FreeImageAPI.FIURational.op_Equality(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

### Return Value

Type: `Boolean`  
[Missing <returns> documentation for  
"M:FreeImageAPI.FIURational.op_Equality(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

## See Also
FIURational Conversion Operators

Overload List

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See Also

Reference
- `FIURational` Structure
- FreelImageAPI Namespace

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FIURational Conversion
(Boolean to FIURational)

Converts the value of a Boolean structure to a FIURational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static explicit operator FIURational (bool value)
```

Parameters

value
Type: SystemBoolean
A Boolean structure.

Return Value
Type: FIURational
A new instance of FIURational initialized to value.

See Also

Reference
FIURational Structure
Overload
FreeImageAPI Namespace
FIURational Conversion
(Decimal to FIURational)

Converts the value of a Decimal structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIURational (decimal value)
```

### Parameters

- **value**
  - Type: System.Decimal
  - A Decimal structure.

### Return Value

- Type: FIURational
- A new instance of FIURational initialized to value.

### See Also

- Reference  
  FIURational Structure  
  Overload  
  FreelImageAPI Namespace
FIURational Conversion
(Double to FIURational)

Converts the value of a `Double` structure to a `FIURational` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIURational (double value)
```

### Parameters

**value**  
Type: `SystemDouble`  
A `Double` structure.

### Return Value

Type: `FIURational`  
A new instance of `FIURational` initialized to `value`.

### See Also

- Reference
- `FIURational Structure`
- `Overload`
- `FreeImageAPI Namespace`
FIURational Conversion (Int64 to FIURational)

Converts the value of an Int64 structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static explicit operator FIURational (long value )
```

Parameters

- **value**  
  Type: System.Int64  
  An Int64 structure.

Return Value

Type: FIURational  
A new instance of FIURational initialized to value.

See Also

Reference  
FIURational Structure  
Overload  
FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FIURational Conversion (Single to FIURational)

Converts the value of a Single structure to a FIURational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static explicit operator FIURational (float value)
```

Parameters

`value`
Type: System.Single
A Single structure.

Return Value
Type: FIURational
A new instance of FIURational initialized to value.

See Also

Reference
FIURational Structure
Overload
FreeImageAPI Namespace
FIURational Conversion (UInt32 to FIURational)

Converts the value of an UInt32 structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIURational (uint value)
```

### Parameters

- `value`  
  Type: System.UInt32  
  An UInt32 structure.

### Return Value

Type: FIURational  
A new instance of FIURational initialized to `value`.

### See Also

- Reference
  - FIURational Structure  
- Overload
  - FreeImageAPI Namespace
FIURational Conversion (UInt64 to FIURational)

Converts the value of an UInt64 structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FIURational (ulong value)
```

**Parameters**

*value*  
Type: System.UInt64  
An UInt64 structure.

**Return Value**

Type: FIURational  
A new instance of FIURational initialized to value.

### See Also

Reference  
FIURational Structure  
Overload  
FreeImageAPI Namespace
FIURational Conversion (FIURational to Boolean)

Converts the value of a FIURational structure to a Boolean structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static explicit operator bool (FIURational value)
```

Parameters

value
Type: FreeImageAPIFIURational
A FIURational structure.

Return Value
Type: Boolean
A new instance of Boolean initialized to value.

See Also
Reference
FIURational Structure
Overload
FreeImageAPI Namespace
FIURational Conversion (FIURational to Byte)

Converts the value of a FIURational structure to a Byte structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static explicit operator byte (FIURational value)
```

Parameters

`value`
Type: FreeImageAPIFIURational
A FIURational structure.

Return Value
Type: Byte
A new instance of Byte initialized to `value`.

See Also

Reference
FIURational Structure
Overload
FreeImageAPI Namespace
FIURational Conversion (FIURational to Char)

Converts the value of a FIURational structure to a Char structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator char (FIURational value)
```

### Parameters

**value**
Type: FreeImageAPIFIURational
A FIURational structure.

### Return Value
Type: Char
A new instance of Char initialized to value.

### See Also

Reference  
FIURational Structure  
Overload  
FreeImageAPI Namespace
FIURational Conversion (FIURational to Int16)

Converts the value of a FIURational structure to an Int16 structure.

Namespace: FreImageAPI
Assembly: FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static explicit operator short (FIURational value)
```

Parameters

- `value` Type: FreImageAPIFIURational
  A FIURational structure.

Return Value

Type: Int16
A new instance of Int16 initialized to value.

See Also

- Reference
- FIURational Structure
- Overload
- FreImageAPI Namespace
FIURational Conversion (FIURational to Int32)

Converts the value of a FIURational structure to an Int32 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static explicit operator int (  
    FIURational value
)
```

### Parameters

- **value**
  
  Type: FreeImageAPIFIURational  
  A FIURational structure.

### Return Value

- **Type:** Int32  
  A new instance of Int32 initialized to value.

### See Also

- Reference  
  FIURational Structure  
  Overload  
  FreeImageAPI Namespace
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FIURational Conversion (FIURational to Int64)

Converts the value of a FIURational structure to an Int64 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator long (  
    FIURational value  
)
```

### Parameters

`value`  
Type: FreeImageAPIFIURational  
A FIURational structure.

### Return Value

Type: Int64  
A new instance of Int64 initialized to `value`.

### See Also

Reference  
FIURational Structure  
Overload  
FreeImageAPI Namespace
**FIURational Conversion (FIURational to SByte)**

Converts the value of a `FIURational` structure to a `SByte` structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static explicit operator sbyte (FIURational value)
```

### Parameters

- **value**
  - Type: `FreeImageAPIFIURational`
  - A `FIURational` structure.

### Return Value

- Type: `SByte`
- A new instance of `SByte` initialized to `value`.

### See Also

- Reference
  - `FIURational Structure`
  - `Overload`
  - `FreeImageAPI Namespace`
FIURational Conversion (FIURational to UInt16)

Converts the value of a FIURational structure to an UInt16 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static explicit operator ushort (       
    FIURational value
)
```

### Parameters

**value**
- Type: FreeImageAPIFIURational
  - A FIURational structure.

### Return Value

**Type:** UInt16  
- A new instance of UInt16 initialized to `value`.

### See Also

- Reference: FIURational Structure  
- Overload  
- FreeImageAPI Namespace
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FIURational Conversion (FIURational to UInt32)

Converts the value of a FIURational structure to an UInt32 structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static explicit operator uint (FIURational value)
```

Parameters

`value`
Type: FreeImageAPIFIURational
A FIURational structure.

Return Value
Type: UInt32
A new instance of UInt32 initialized to value.

See Also

Reference
FIURational Structure
Overload
FreeImageAPI Namespace
FIURational Conversion (FIURational to UInt64)

Converts the value of a **FIURational** structure to an **UInt32** structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static explicit operator ulong (  
    FIURational value
)
```

### Parameters

**value**  
Type: FreeImageAPIFIURational  
A **FIURational** structure.

### Return Value

Type: **UInt64**  
A new instance of **UInt32** initialized to **value**.

### See Also

Reference  
**FIURational Structure**  
**Overload**  
**FreeImageAPI Namespace**
FIURationalGreaterThan Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool operator >(FIURational left, FIURational right)
```

**Parameters**

*left*

Type: FreeImageAPI.FIURational  
[Missing <param name="left"/> documentation for "M:FreeImageAPI.FIURational.op_GreaterThan(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

*right*

Type: FreeImageAPI.FIURational  
[Missing <param name="right"/> documentation for "M:FreeImageAPI.FIURational.op_GreaterThan(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

**Return Value**

Type: Boolean  
[Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_GreaterThan(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"


See Also

Reference
FIURational Structure
FreelmageAPI Namespace

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FIURationalGreaterThanOrEqual

Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator >=(
    FIURational left,
    FIURational right
)
```

### Parameters

**left**

Type: FreeImageAPI.FIURational  
[Missing <param name="left"/> documentation for "M:FreeImageAPI.FIURational.op_GreaterThanOrEqual(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

**right**

Type: FreeImageAPI.FIURational  
[Missing <param name="right"/> documentation for "M:FreeImageAPI.FIURational.op_GreaterThanOrEqual(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

### Return Value

Type: Boolean  
[Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_GreaterThanOrEqual(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

See Also

Reference
FIURational Structure
FreelmageAPI Namespace

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## FIURational Conversion Operators

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FIURational Structure
FreeImageAPI Namespace

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FIURational Conversion (Byte to FIURational)

Converts the value of a Byte structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static implicit operator FIURational (byte value)
```

## Parameters

*value*  
Type: SystemByte  
A Byte structure.

## Return Value

Type: FIURational  
A new instance of FIURational initialized to value.

## See Also

Reference  
FIURational Structure  
Overload  
FreImageAPI Namespace
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FIURational Conversion (Char to FIURational)

Converts the value of a Char structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIURational (char value)
```

### Parameters

- **value**
  - Type: SystemChar  
  - A Char structure.

### Return Value

- **Type:** FIURational  
- A new instance of FIURational initialized to value.

### See Also

- Reference  
  - FIURational Structure  
  - Overload  
  - FreeImageAPI Namespace
FIURational Conversion
(Int16 to FIURational)

Converts the value of an Int16 structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIURational (short value)
```

### Parameters

`value`
- Type: SystemInt16
- An Int16 structure.

### Return Value

- Type: FIURational
- A new instance of FIURational initialized to `value`.

### See Also

- Reference
  - FIURational Structure
  - Overload
  - FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FIURational Conversion (Int32 to FIURational)

Converts the value of an Int32 structure to a FIURational structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static implicit operator FIURational (int value)
```

Parameters

value
Type: SystemInt32
An Int32 structure.

Return Value
Type: FIURational
A new instance of FIURational initialized to value.

See Also

Reference
FIURational Structure
Overload
FreeImageAPI Namespace
FIURational Conversion (SByte to FIURational)

Converts the value of a SByte structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FIURational (sbyte value)
```

### Parameters

**value**  
Type: SystemSByte  
A SByte structure.

### Return Value

Type: FIURational  
A new instance of FIURational initialized to value.

### See Also

Reference  
FIURational Structure  
Overload  
FreedImageAPI Namespace
FIURational Conversion (UInt16 to FIURational)

Converts the value of an UInt16 structure to a FIURational structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static implicit operator FIURational ( 
    ushort value
)
```

### Parameters

*value*  
Type: SystemUInt16  
An UInt16 structure.

### Return Value

Type: FIURational  
A new instance of FIURational initialized to *value*.

### See Also

Reference  
FIURational Structure  
Overload  
FreeImageAPI Namespace
FIURational Conversion (FIURational to Decimal)

Converts the value of a FIURational structure to a Decimal structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator decimal (FIURational value)
```

### Parameters

*value*
*Type:* FreeImageAPI/FIURational  
A FIURational structure.

### Return Value

*Type:* Decimal  
A new instance of Decimal initialized to value.

### See Also

Reference  
FIURational Structure  
Overload  
FreeImageAPI Namespace
FIURational Conversion (FIURational to Double)

Converts the value of a FIURational structure to a Double structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static implicit operator double (  
    FIURational value
)
```

### Parameters

**value**
Type: FreeImageAPIFIURational  
A FIURational structure.

### Return Value

Type: Double  
A new instance of Double initialized to `value`.

### See Also

Reference  
FIURational Structure  
Overload  
FreeImageAPI Namespace
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FIURational Conversion
(FIURational to Single)

Converts the value of a FIURational structure to a Single structure.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static implicit operator float (FIURational value)
```

### Parameters

- **value**
  - Type: FreeImageAPIFIURational
  - A FIURational structure.

### Return Value

- **Type:** Single
- A new instance of Single initialized to value.

### See Also

- Reference
- FIURational Structure
- Overload
- FreeImageAPI Namespace
FIURationalIncrement Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIURational operator ++(FIURational value)
```

### Parameters

- **value**
  
  Type: FreeImageAPI.FIURational  
  [Missing <param name="value"/> documentation for "M:FreeImageAPI.FIURational.op_Increment(FreeImageAPI.FIURational)"

### Return Value

Type: FIURational  
[Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_Increment(FreeImageAPI.FIURational)"

### See Also

- Reference  
  FIURational Structure  
  FreeImageAPI Namespace
FIURationalInequality Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool operator !=(FIURational left, FIURational right)
```

**Parameters**

*left*

Type: FreeImageAPI.FIURational  
[Missing <param name="left"/> documentation for  
"M:FreeImageAPI.FIURational.op_Inequality(FreeImageAPI.FIURational,Frei..."

*right*

Type: FreeImageAPI.FIURational  
[Missing <param name="right"/> documentation for  
"M:FreeImageAPI.FIURational.op_Inequality(FreeImageAPI.FIURational,Frei..."

**Return Value**

Type: Boolean  
[Missing <returns> documentation for  
"M:FreeImageAPI.FIURational.op_Inequality(FreeImageAPI.FIURational,Frei..."
See Also

Reference
FIURational Structure
FreelmageAPI Namespace

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FIURationalLessThan Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator <(
    FIURational left,
    FIURational right
)
```

### Parameters

**left**
- Type: `FreeImageAPI.FIURational`
  - [Missing `<param name="left"/>` documentation for "M:FreeImageAPI.FIURational.op_LessThan(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

**right**
- Type: `FreeImageAPI.FIURational`
  - [Missing `<param name="right"/>` documentation for "M:FreeImageAPI.FIURational.op_LessThan(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

### Return Value

**Type:** Boolean  
-[Missing `<returns>` documentation for "M:FreeImageAPI.FIURational.op_LessThan(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

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**FreeImage.NET Class Library Reference**
See Also

Reference
FIURational Structure
FreelmageAPI Namespace

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FIURationalLessThanOrEqual Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator <=(
    FIURational left,
    FIURational right
)
```

### Parameters

**left**
- Type: FreeImageAPI.FIURational
  - [Missing <param name="left"/> documentation for "M:FreeImageAPI.FIURational.op_LessThanOrEqual(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

**right**
- Type: FreeImageAPI.FIURational
  - [Missing <param name="right"/> documentation for "M:FreeImageAPI.FIURational.op_LessThanOrEqual(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

### Return Value

Type: Boolean
- [Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_LessThanOrEqual(FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

See Also

Reference
- FIURational Structure
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FIURationalModulus Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static FIURational operator %(FIURational left, FIURational right)
```

#### Parameters

**left**

Type: FreeImageAPIFIURational  
[Missing <param name="left"/> documentation for "M:FreeImageAPI.FIURational.op_Modulus(FreeImageAPI.FIURational,FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

**right**

Type: FreeImageAPIFIURational  
[Missing <param name="right"/> documentation for "M:FreeImageAPI.FIURational.op_Modulus(FreeImageAPI.FIURational,FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

#### Return Value

Type: FIURational  
[Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_Modulus(FreeImageAPI.FIURational,FreeImageAPI.FIURational,FreeImageAPI.FIURational)"
See Also

Reference
FIURational Structure
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FIURationalMultiply Operator

Standard implementation of the operator.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIURational operator *(FIURational left, FIURational r2)
```

Parameters

left

Type: FreeImageAPI.FIURational

r2

Type: FreeImageAPI.FIURational

Return Value

Type: FIURational

See Also
Reference
FIURational Structure
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FIURationalOnesComplement Operator

Returns the reciprocal value of this instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FIURational operator ~(FIURational value)
```

### Parameters

*value*  
Type: FreeImageAPIFIURational  
[Missing <param name="value"/> documentation for "M:FreeImageAPI.FIURational.op_OnesComplement(FreeImageAPI.FIURational)"

### Return Value

Type: FIURational  
[Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_OnesComplement(FreeImageAPI.FIURational)"

### See Also

Reference  
FIURational Structure  
FreeImageAPI Namespace
FIURationalSubtraction Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FIURational operator -(  
    FIURational left,  
    FIURational right
)
```

### Parameters

- **left**
  - Type: FreeImageAPI.FIURational  
    [Missing <param name="left"/> documentation for  
    "M:FreeImageAPI.FIURational.op_Subtraction(FreeImageAPI.FIURational,FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

- **right**
  - Type: FreeImageAPI.FIURational  
    [Missing <param name="right"/> documentation for  
    "M:FreeImageAPI.FIURational.op_Subtraction(FreeImageAPI.FIURational,FreeImageAPI.FIURational,FreeImageAPI.FIURational)"

### Return Value

- **Type:** FIURational  
  [Missing <returns> documentation for  
  "M:FreeImageAPI.FIURational.op_Subtraction(FreeImageAPI.FIURational,FreeImageAPI.FIURational,FreeImageAPI.FIURational)"]
See Also

Reference
FIURational Structure
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FIURationalUnaryPlus Operator

Standard implementation of the operator.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIURational operator +(FIURational value)
```

### Parameters

- **value**
  - Type: FreeImageAPI.FIURational  
  [Missing <param name="value"/> documentation for "M:FreeImageAPI.FIURational.op_UnaryPlus(FreeImageAPI.FIURational)"

### Return Value

Type: FIURational  
[Missing <returns> documentation for "M:FreeImageAPI.FIURational.op_UnaryPlus(FreeImageAPI.FIURational)"

### See Also

- Reference  
  FIURational Structure  
  FreeImageAPI Namespace
Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
The **FIURational** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![s] Epsilon</td>
<td>Represents the smallest positive <strong>FIURational</strong> value greater than zero. This field is constant.</td>
</tr>
<tr>
<td>![s] MaxValue</td>
<td>Represents the largest possible value of <strong>FIURational</strong>. This field is constant.</td>
</tr>
<tr>
<td>![s] MinValue</td>
<td>Represents the smallest possible value of <strong>FIURational</strong>. This field is constant.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
**FIURational Structure**
**FreelmageAPI Namespace**

Contact/Feedback:  [Freelmage.NET Homepage](http://www.freelmage.net)
Help improve this Documentation:  [Join the Project](http://www.freelmage.net)
FIURationalEpsilon Field

Represents the smallest positive FIURational value greater than zero. This field is constant.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIURational Epsilon
```

### Field Value

Type: FIURational

### See Also

Reference  
FIURational Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIURationalMaxValue Field

Represents the largest possible value of FIURational. This field is constant.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIURational MaxValue
```

### Field Value

Type: FIURational

### See Also

Reference  
FIURational Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FIURational MinValue Field

Represents the smallest possible value of FIURational. This field is constant.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FIURational MinValue
```

### Field Value

**Type:** FIURational

### See Also

Reference  
FIURational Structure  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FREE_IMAGE_COLOR_CHANNEL Enumeration

Color channels. Constants used in color manipulation routines.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public enum FREE_IMAGE_COLOR_CHANNEL
```

**Members**

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FICC_RGB</td>
<td>0</td>
<td>Use red, green and blue channels</td>
</tr>
<tr>
<td>FICC_RED</td>
<td>1</td>
<td>Use red channel</td>
</tr>
<tr>
<td>FICC_GREEN</td>
<td>2</td>
<td>Use green channel</td>
</tr>
<tr>
<td>FICC_BLUE</td>
<td>3</td>
<td>Use blue channel</td>
</tr>
<tr>
<td>FICC_ALPHA</td>
<td>4</td>
<td>Use alpha channel</td>
</tr>
<tr>
<td>FICC_BLACK</td>
<td>5</td>
<td>Use black channel</td>
</tr>
<tr>
<td>FICC_REAL</td>
<td>6</td>
<td>Complex images: use real part</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_COLOR_DEPTH

Enumeration used for color conversions. FREE_IMAGE_COLOR_DEPTH contains several colors to convert to. The default value 'FICD_AUTO'.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
[FlagsAttribute]
public enum FREE_IMAGE_COLOR_DEPTH
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FICD_UNKNOWN</td>
<td>0</td>
<td>Unknown.</td>
</tr>
<tr>
<td>FICD_AUTO</td>
<td>0</td>
<td>Auto selected by the used algorithm.</td>
</tr>
<tr>
<td>FICD_01_BPP</td>
<td>1</td>
<td>1-bit.</td>
</tr>
<tr>
<td>FICD_01_BPP_DITHER</td>
<td>1</td>
<td>1-bit using dithering.</td>
</tr>
<tr>
<td>FICD_01_BPP_THRESHOLD</td>
<td>3</td>
<td>1-bit using</td>
</tr>
<tr>
<td>FICD_04_BPP</td>
<td>4</td>
<td>4-bit.</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------</td>
<td>----------------------</td>
</tr>
<tr>
<td>FICD_08_BPP</td>
<td>8</td>
<td>8-bit.</td>
</tr>
<tr>
<td>FICD_16_BPP_555</td>
<td>18</td>
<td>16-bit 555 (1 bit remains unused).</td>
</tr>
<tr>
<td>FICD_16_BPP</td>
<td>16</td>
<td>16-bit 565 (all bits are used).</td>
</tr>
<tr>
<td>FICD_24_BPP</td>
<td>24</td>
<td>24-bit.</td>
</tr>
<tr>
<td>FICD_32_BPP</td>
<td>32</td>
<td>32-bit.</td>
</tr>
<tr>
<td>FICD_REORDER_PALETTE</td>
<td>1024</td>
<td>Reorder palette (make it linear). Only affects 1-, 4- and 8-bit images. The palette is only reordered in case the image is greyscale (all palette entries have the same red, green and blue value).</td>
</tr>
<tr>
<td>FICD_FORCE_GREYSCALE</td>
<td>2048</td>
<td>Converts the image to greyscale.</td>
</tr>
</tbody>
</table>
FICD_COLOR_MASK	61	Flag to mask out all non color depth flags.

See Also

Reference
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_COLOR_OPTIONS Enumeration

Constants used in color filling routines.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum FREE_IMAGE_COLOR_OPTIONS
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>0</td>
<td>Default value.</td>
</tr>
<tr>
<td>IS_RGB_COLOR</td>
<td>0</td>
<td>RGBQUAD color is RGB color (contains no valid alpha channel).</td>
</tr>
<tr>
<td>IS_RGBA_COLOR</td>
<td>1</td>
<td>RGBQUAD color is RGBA color (contains a valid alpha channel).</td>
</tr>
<tr>
<td>Symbol</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FIND_EQUAL_COLOR</td>
<td>2</td>
<td>Lookup equal RGB color from palette.</td>
</tr>
<tr>
<td>ALPHA_IS_INDEX</td>
<td>4</td>
<td>rgbReserved contains the palette index to be used.</td>
</tr>
<tr>
<td>PALETTE_SEARCH_MASK</td>
<td>6</td>
<td>No color lookup is performed.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreelmageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_COLOR_TYPE
Enumeration

Image color types used in FreeImage.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public enum FREE_IMAGE_COLOR_TYPE
```

Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIC_MINISWHITE</td>
<td>0</td>
<td>min value is white</td>
</tr>
<tr>
<td>FIC_MINISBLACK</td>
<td>1</td>
<td>min value is black</td>
</tr>
<tr>
<td>FIC_RGB</td>
<td>2</td>
<td>RGB color model</td>
</tr>
<tr>
<td>FIC_PALETTE</td>
<td>3</td>
<td>color map indexed</td>
</tr>
<tr>
<td>FIC_RGBALPHA</td>
<td>4</td>
<td>RGB color model with alpha channel</td>
</tr>
<tr>
<td>FIC_CMYK</td>
<td>5</td>
<td>CMYK color model</td>
</tr>
</tbody>
</table>

See Also
FREE_IMAGE_COMPARE_FLAGS Enumeration

List of combinable compare modes.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
[FlagsAttribute]
public enum FREE_IMAGE_COMPARE_FLAGS
```

Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEADER</td>
<td>1</td>
<td>Compare headers.</td>
</tr>
<tr>
<td>PALETTE</td>
<td>2</td>
<td>Compare palettes.</td>
</tr>
<tr>
<td>DATA</td>
<td>4</td>
<td>Compare pixel data.</td>
</tr>
<tr>
<td>METADATA</td>
<td>8</td>
<td>Compare meta data.</td>
</tr>
<tr>
<td>COMPLETE</td>
<td>15</td>
<td>Compare everything.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImageAPI Namespace
FREE_IMAGE_DITHER Enumeration

Dithering algorithms. Constants used in FreeImage_Dither.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum FREE_IMAGE_DITHER
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FID_FS</td>
<td>0</td>
<td>Floyd and Steinberg error diffusion</td>
</tr>
<tr>
<td>FID_BAYER4x4</td>
<td>1</td>
<td>Bayer ordered dispersed dot dithering (order 2 dithering matrix)</td>
</tr>
<tr>
<td>FID_BAYER8x8</td>
<td>2</td>
<td>Bayer ordered dispersed dot dithering (order 3 dithering matrix)</td>
</tr>
<tr>
<td>FID_CLUSTER6x6</td>
<td>3</td>
<td>Ordered clustered dot dithering (order 3 - 6x6 matrix)</td>
</tr>
<tr>
<td>------------------</td>
<td>----</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>FID_CLUSTER8x8</td>
<td>4</td>
<td>Ordered clustered dot dithering (order 4 - 8x8 matrix)</td>
</tr>
<tr>
<td>FID_CLUSTER16x16</td>
<td>5</td>
<td>Ordered clustered dot dithering (order 8 - 16x16 matrix)</td>
</tr>
<tr>
<td>FID_BAYER16x16</td>
<td>6</td>
<td>Bayer ordered dispersed dot dithering (order 4 dithering matrix)</td>
</tr>
</tbody>
</table>

**See Also**

Reference  
FreelmageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage  
Help improve this Documentation: Join the Project
FREE_IMAGE_FILTER Enumeration

Upsampling / downsampling filters. Constants used in FreeImage_Rescale.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public enum FREE_IMAGE_FILTER
```

## Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILTER_BOX</td>
<td>0</td>
<td>Box, pulse, Fourier window, 1st order (constant) b-spline</td>
</tr>
<tr>
<td>FILTER_BICUBIC</td>
<td>1</td>
<td>Mitchell and Netravali's two-param cubic filter</td>
</tr>
<tr>
<td>FILTER_BILINEAR</td>
<td>2</td>
<td>Bilinear filter</td>
</tr>
<tr>
<td>FILTER_BSPLINE</td>
<td>3</td>
<td>4th order</td>
</tr>
<tr>
<td>Symbol</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>FILTER_CATMULLROM</td>
<td>4</td>
<td>Catmull-Rom spline, Overhauser spline</td>
</tr>
<tr>
<td>FILTER_LANCZOS3</td>
<td>5</td>
<td>Lanczos3 filter</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
# FREE_IMAGE_FORMAT Enumeration

I/O image format identifiers.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public enum FREE_IMAGE_FORMAT
```

## Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIF_UNKNOWN</td>
<td>-1</td>
<td>Unknown format (returned value only, never use it as input value)</td>
</tr>
<tr>
<td>FIF_BMP</td>
<td>0</td>
<td>Windows or OS/2 Bitmap File (*.BMP)</td>
</tr>
<tr>
<td>FIF_ICO</td>
<td>1</td>
<td>Windows Icon (*.ICO)</td>
</tr>
<tr>
<td>FIF_JPEG</td>
<td>2</td>
<td>Independent JPEG Group (*.JPG, *.JIF, *.JPEG, *.JPE)</td>
</tr>
<tr>
<td>FIF_JNG</td>
<td>3</td>
<td>JPEG Network Graphics (*.JNG)</td>
</tr>
<tr>
<td>FIF</td>
<td>Number</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>KOALA</td>
<td>4</td>
<td>Commodore 64 Koala format (*.KOA)</td>
</tr>
<tr>
<td>LBM</td>
<td>5</td>
<td>Amiga IFF (*.IFF, *.LBM)</td>
</tr>
<tr>
<td>IFF</td>
<td>5</td>
<td>Amiga IFF (*.IFF, *.LBM)</td>
</tr>
<tr>
<td>MNG</td>
<td>6</td>
<td>Multiple Network Graphics (*.MNG)</td>
</tr>
<tr>
<td>PBM</td>
<td>7</td>
<td>Portable Bitmap (ASCII) (*.PBM)</td>
</tr>
<tr>
<td>PBMRAW</td>
<td>8</td>
<td>Portable Bitmap (BINARY) (*.PBM)</td>
</tr>
<tr>
<td>PCD</td>
<td>9</td>
<td>Kodak PhotoCD (*.PCD)</td>
</tr>
<tr>
<td>PCX</td>
<td>10</td>
<td>Zsoft Paintbrush PCX bitmap format (*.PCX)</td>
</tr>
<tr>
<td>PGM</td>
<td>11</td>
<td>Portable Graymap (ASCII) (*.PGM)</td>
</tr>
<tr>
<td>PGMRAW</td>
<td>12</td>
<td>Portable Graymap (BINARY) (*.PGM)</td>
</tr>
<tr>
<td>PNG</td>
<td>13</td>
<td>Portable Network Graphics (*.PNG)</td>
</tr>
<tr>
<td>PPM</td>
<td>14</td>
<td>Portable Pixelmap (ASCII) (*.PPM)</td>
</tr>
<tr>
<td>PPMRAW</td>
<td>15</td>
<td>Portable Pixelmap (BINARY) (*.PPM)</td>
</tr>
<tr>
<td>Code</td>
<td>Number</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>FIF_RAS</td>
<td>16</td>
<td>Sun Rasterfile (*.RAS)</td>
</tr>
<tr>
<td>FIF_TARGA</td>
<td>17</td>
<td>truevision Targa files (*.TGA, *.TARGA)</td>
</tr>
<tr>
<td>FIF_TIFF</td>
<td>18</td>
<td>Tagged Image File Format (*.TIF, *.TIFF)</td>
</tr>
<tr>
<td>FIF_WBMP</td>
<td>19</td>
<td>Wireless Bitmap (*.WBMP)</td>
</tr>
<tr>
<td>FIF_PSD</td>
<td>20</td>
<td>Adobe Photoshop (*.PSD)</td>
</tr>
<tr>
<td>FIF_CUT</td>
<td>21</td>
<td>Dr. Halo (*.CUT)</td>
</tr>
<tr>
<td>FIF_XBM</td>
<td>22</td>
<td>X11 Bitmap Format (*.XBM)</td>
</tr>
<tr>
<td>FIF_XPM</td>
<td>23</td>
<td>X11 Pixmap Format (*.XPM)</td>
</tr>
<tr>
<td>FIF_DDS</td>
<td>24</td>
<td>DirectDraw Surface (*.DDS)</td>
</tr>
<tr>
<td>FIF_GIF</td>
<td>25</td>
<td>Graphics Interchange Format (*.GIF)</td>
</tr>
<tr>
<td>FIF_HDR</td>
<td>26</td>
<td>High Dynamic Range (*.HDR)</td>
</tr>
<tr>
<td>FIF_FAXG3</td>
<td>27</td>
<td>Raw Fax format CCITT G3 (*.G3)</td>
</tr>
<tr>
<td>FIF_SGI</td>
<td>28</td>
<td>Silicon Graphics SGI image format (*.SGI)</td>
</tr>
<tr>
<td>FIF_EXR</td>
<td>29</td>
<td>OpenEXR format</td>
</tr>
<tr>
<td>Code</td>
<td>ID</td>
<td>Format Description</td>
</tr>
<tr>
<td>---------</td>
<td>----</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>FIF_J2K</td>
<td>30</td>
<td>JPEG-2000 format (*J2K, *.J2C)</td>
</tr>
<tr>
<td>FIF_JP2</td>
<td>31</td>
<td>JPEG-2000 format (*JP2)</td>
</tr>
<tr>
<td>FIF_PFM</td>
<td>32</td>
<td>Portable FloatMap (*PFM)</td>
</tr>
<tr>
<td>FIF_PICT</td>
<td>33</td>
<td>Macintosh PICT (*PICT)</td>
</tr>
<tr>
<td>FIF_RAW</td>
<td>34</td>
<td>RAW camera image (<em>.</em>)</td>
</tr>
<tr>
<td>FIF_WEBP</td>
<td>35</td>
<td>Google WebP image format (*webp)</td>
</tr>
<tr>
<td>FIF_JXR</td>
<td>36</td>
<td>JPEG XR image format (*jxr)</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
**FREE_IMAGE_JPEG_OPERATION Enumeration**

Lossless JPEG transformations constants used in FreeImage_JPEGTransform.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum FREE_IMAGE_JPEG_OPERATION
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIJPEG_OP_NONE</td>
<td>0</td>
<td>no transformation</td>
</tr>
<tr>
<td>FIJPEG_OP_FLIP_H</td>
<td>1</td>
<td>horizontal flip</td>
</tr>
<tr>
<td>FIJPEG_OP_FLIP_V</td>
<td>2</td>
<td>vertical flip</td>
</tr>
<tr>
<td>FIJPEG_OP_TRANSPOSE</td>
<td>3</td>
<td>transpose across UL-to-LR axis</td>
</tr>
<tr>
<td>FIJPEG_OP_TRANSVERSE</td>
<td>4</td>
<td>transpose across UR-to-LL axis</td>
</tr>
<tr>
<td>Operation</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>FIJPEG_OP_ROTATE_90</td>
<td>5</td>
<td>90-degree clockwise rotation</td>
</tr>
<tr>
<td>FIJPEG_OP_ROTATE_180</td>
<td>6</td>
<td>180-degree rotation</td>
</tr>
<tr>
<td>FIJPEG_OP_ROTATE_270</td>
<td>7</td>
<td>270-degree clockwise (or 90 ccw)</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreelmageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_LOAD_FLAGS

Enumeration

Flags used in load functions.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
[FlagsAttribute]
public enum FREE_IMAGE_LOAD_FLAGS
```

Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>0</td>
<td>Default option for all types.</td>
</tr>
<tr>
<td>GIF_LOAD256</td>
<td>1</td>
<td>Load the image as a 256 color image with unused palette entries, if it's 16 or 2 color.</td>
</tr>
<tr>
<td>GIF_PLAYBACK</td>
<td>2</td>
<td>'Play' the GIF to generate</td>
</tr>
</tbody>
</table>
each frame (as 32bpp) instead of returning raw frame data when loading.

<table>
<thead>
<tr>
<th>Flag</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICO_MAKEALPHA</td>
<td>1</td>
<td>Convert to 32bpp and create an alpha channel from the AND-mask when loading.</td>
</tr>
<tr>
<td>JPEG_FAST</td>
<td>1</td>
<td>Load the file as fast as possible, sacrificing some quality.</td>
</tr>
<tr>
<td>JPEG_ACCURATE</td>
<td>2</td>
<td>Load the file with the best quality, sacrificing some speed.</td>
</tr>
<tr>
<td>JPEG_CMYK</td>
<td>4</td>
<td>Load separated CMYK &quot;as is&quot; (use</td>
</tr>
<tr>
<td>JPEG_EXIFROTATE</td>
<td>8</td>
<td>Load and</td>
</tr>
<tr>
<td>Variable</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PCD_BASE</td>
<td>1</td>
<td>Load the bitmap sized 768 x 512.</td>
</tr>
<tr>
<td>PCD_BASEDIV4</td>
<td>2</td>
<td>Load the bitmap sized 384 x 256.</td>
</tr>
<tr>
<td>PCD_BASEDIV16</td>
<td>3</td>
<td>Load the bitmap sized 192 x 128.</td>
</tr>
<tr>
<td>PNG_IGNOREGAMMA</td>
<td>1</td>
<td>Avoid gamma correction.</td>
</tr>
<tr>
<td>TARGA_LOAD_RGB888</td>
<td>1</td>
<td>If set the loader converts RGB555 and ARGB8888 -&gt; RGB888.</td>
</tr>
<tr>
<td>TIFF_CMYK</td>
<td>1</td>
<td>Reads tags for separated CMYK.</td>
</tr>
<tr>
<td>RAW_PREVIEW</td>
<td>1</td>
<td>Tries to load the JPEG preview image, embedded in</td>
</tr>
</tbody>
</table>
Exif Metadata or load the image as RGB 24-bit if no preview image is available.

<table>
<thead>
<tr>
<th>Enum</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAW_DISPLAY</td>
<td>2</td>
<td>Loads the image as RGB 24-bit.</td>
</tr>
<tr>
<td>RAW_HALFSIZE</td>
<td>4</td>
<td>Load as half-size color image.</td>
</tr>
<tr>
<td>RAW_UNPROCESSED</td>
<td>8</td>
<td>Load as FIT_UINT16 raw Bayer image.</td>
</tr>
<tr>
<td>FIF_LOAD_NOPIXELS</td>
<td>32768</td>
<td>Load the image header only (not supported by all plugins, default to full loading).</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_MDMODEL

Enumeration

Metadata models supported by FreiImage.

**Namespace:** FreiImageAPI

**Assembly:** FreiImageNET (in FreiImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public enum FREE_IMAGE_MDMODEL
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIMD_NODATA</td>
<td>-1</td>
<td>No data</td>
</tr>
<tr>
<td>FIMD_COMMENTS</td>
<td>0</td>
<td>single comment or keywords</td>
</tr>
<tr>
<td>FIMD_EXIF_MAIN</td>
<td>1</td>
<td>Exif-TIFF metadata</td>
</tr>
<tr>
<td>FIMD_EXIF_EXIF</td>
<td>2</td>
<td>Exif-specific metadata</td>
</tr>
<tr>
<td>FIMD_EXIF_GPS</td>
<td>3</td>
<td>Exif GPS metadata</td>
</tr>
<tr>
<td>FIMD_EXIF_MAKERNOTE</td>
<td>4</td>
<td>Exif maker</td>
</tr>
<tr>
<td>Metadata Type</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>FIMD_EXIF_INTEROP</td>
<td>5</td>
<td>Exif interoperability metadata</td>
</tr>
<tr>
<td>FIMD_IPTC</td>
<td>6</td>
<td>IPTC/NAA metadata</td>
</tr>
<tr>
<td>FIMD_XMP</td>
<td>7</td>
<td>Abobe XMP metadata</td>
</tr>
<tr>
<td>FIMD_GEOTIFF</td>
<td>8</td>
<td>GeoTIFF metadata</td>
</tr>
<tr>
<td>FIMD_ANIMATION</td>
<td>9</td>
<td>Animation metadata</td>
</tr>
<tr>
<td>FIMD_CUSTOM</td>
<td>10</td>
<td>Used to attach other metadata types to a dib</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreelmageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_MDTYPE

Enumeration

Tag data type information (based on TIFF specifications) Note: RATIONALs are the ratio of two 32-bit integer values.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public enum FREE_IMAGE_MDTYPE
```

Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIDT_NOTYPE</td>
<td>0</td>
<td>placeholder</td>
</tr>
<tr>
<td>FIDT_BYTE</td>
<td>1</td>
<td>8-bit unsigned integer</td>
</tr>
<tr>
<td>FIDT_ASCII</td>
<td>2</td>
<td>8-bit bytes w/ last byte null</td>
</tr>
<tr>
<td>FIDT_SHORT</td>
<td>3</td>
<td>16-bit unsigned integer</td>
</tr>
<tr>
<td>FIDT_LONG</td>
<td>4</td>
<td>32-bit unsigned integer</td>
</tr>
<tr>
<td>FIDT_RATIONAL</td>
<td>5</td>
<td>64-bit unsigned integer</td>
</tr>
<tr>
<td>ID</td>
<td>Number</td>
<td>Data Type</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>FIDT_SBYTE</td>
<td>6</td>
<td>8-bit signed integer</td>
</tr>
<tr>
<td>FIDT_UNDEFINED</td>
<td>7</td>
<td>8-bit untyped data</td>
</tr>
<tr>
<td>FIDT_SSHORT</td>
<td>8</td>
<td>16-bit signed integer</td>
</tr>
<tr>
<td>FIDT_SLONG</td>
<td>9</td>
<td>32-bit signed integer</td>
</tr>
<tr>
<td>FIDT_SRATIONAL</td>
<td>10</td>
<td>64-bit signed fraction</td>
</tr>
<tr>
<td>FIDT_FLOAT</td>
<td>11</td>
<td>32-bit IEEE floating point</td>
</tr>
<tr>
<td>FIDT_DOUBLE</td>
<td>12</td>
<td>64-bit IEEE floating point</td>
</tr>
<tr>
<td>FIDT_IFD</td>
<td>13</td>
<td>32-bit unsigned integer (offset)</td>
</tr>
<tr>
<td>FIDT_PALETTE</td>
<td>14</td>
<td>32-bit RGBQUAD</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreelimageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_METADATA_COPY Enumeration

Flags for copying data from a bitmap to another.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum FREE_IMAGE_METADATA_COPY
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEEP_EXISTING</td>
<td>0</td>
<td>Existing metadata will remain unchanged.</td>
</tr>
<tr>
<td>CLEAR_EXISTING</td>
<td>1</td>
<td>Existing metadata will be cleared.</td>
</tr>
<tr>
<td>REPLACE_EXISTING</td>
<td>2</td>
<td>Existing metadata will be overwritten.</td>
</tr>
</tbody>
</table>

### See Also
FREE_IMAGE_QUANTIZE Enumeration

Color quantization algorithms. Constants used in FreeImage_ColorQuantize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public enum FREE_IMAGE_QUANTIZE
```

Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIQ_WUQUANT</td>
<td>0</td>
<td>Xiaolin Wu color quantization algorithm</td>
</tr>
<tr>
<td>FIQ_NNQUANT</td>
<td>1</td>
<td>NeuQuant neural-net quantization algorithm by Anthony Dekker</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImageAPI Namespace
Contact/Feedback: FreiImage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_RESCALE_FLAGS Enumeration

[Missing <summary> documentation for "T:FreeImageAPI.FREE_IMAGE_RESCALE_FLAGS"]

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
[FlagsAttribute]
public enum FREE_IMAGE_RESCALE_FLAGS
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI_RESCALE_DEFAULT</td>
<td>0</td>
<td>default options; none of the following other options apply</td>
</tr>
<tr>
<td>FI_RESCALE_TRUE_COLOR</td>
<td>1</td>
<td>do not copy metadata to the rescaled</td>
</tr>
<tr>
<td>FI_RESCALE_OMIT_METADATA</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
See Also

Reference
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
## FREE_IMAGE_SAVE_FLAGS Enumeration

Flags used in save functions.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
[FlagsAttribute]
public enum FREE_IMAGE_SAVE_FLAGS
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>0</td>
<td>Default option</td>
</tr>
<tr>
<td>BMP_SAVE_RLE</td>
<td>1</td>
<td>Save with run length encoding</td>
</tr>
<tr>
<td>EXR_FLOAT</td>
<td>1</td>
<td>Save data as float instead of half (not recommended)</td>
</tr>
<tr>
<td>EXR_NONE</td>
<td>2</td>
<td>Save with no compression</td>
</tr>
<tr>
<td>EXR_ZIP</td>
<td>4</td>
<td>Save with zlib compression, in blocks of 16 scan lines</td>
</tr>
<tr>
<td>EXR_PIZ</td>
<td>8</td>
<td>Save with piz-based wavelet compression</td>
</tr>
<tr>
<td>Flag</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>EXR_PXR24</td>
<td>16</td>
<td>Save with lossy 24-bit float compression.</td>
</tr>
<tr>
<td>EXR_B44</td>
<td>32</td>
<td>Save with lossy 44% float compression - goes to 22% when combined with EXR_LC.</td>
</tr>
<tr>
<td>EXR_LC</td>
<td>64</td>
<td>Save images with one luminance and two chroma channels, rather than RGB (lossy compression).</td>
</tr>
<tr>
<td>JPEG_QUALITYSUPERB</td>
<td>128</td>
<td>Save with superb quality (100:1).</td>
</tr>
<tr>
<td>JPEG_QUALITYGOOD</td>
<td>256</td>
<td>Save with good quality (75:1).</td>
</tr>
<tr>
<td>JPEG_QUALITYNORMAL</td>
<td>512</td>
<td>Save with normal quality (50:1).</td>
</tr>
<tr>
<td>JPEG_QUALITYAVERAGE</td>
<td>1024</td>
<td>Save with average quality (25:1).</td>
</tr>
<tr>
<td>JPEG_QUALITYBAD</td>
<td>2048</td>
<td>Save with bad quality (10:1).</td>
</tr>
<tr>
<td>JPEG_PROGRESSIVE</td>
<td>8192</td>
<td>Save as a progressive-JPEG (use</td>
</tr>
<tr>
<td>JPEG_SUBSAMPLING_411</td>
<td>4096</td>
<td>Save with high 4x1 chroma subsampling (4:1:1).</td>
</tr>
<tr>
<td>JPEG_SUBSAMPLING_420</td>
<td>16384</td>
<td>Save with medium 2x2 medium chroma (4:2:0).</td>
</tr>
<tr>
<td>JPEG_SUBSAMPLING_422</td>
<td>32768</td>
<td>Save with low 2x1 chroma subsampling (4:2:2).</td>
</tr>
<tr>
<td>JPEG_SUBSAMPLING_444</td>
<td>65536</td>
<td>Save with no chroma subsampling (4:4:4).</td>
</tr>
<tr>
<td>JPEG_OPTIMIZE</td>
<td>131072</td>
<td>On saving, compute optimal Huffman coding tables (can reduce a few percent of file size).</td>
</tr>
<tr>
<td>Constant</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>JPEG_BASELINE</td>
<td>262144</td>
<td>save basic JPEG, without metadata or any markers.</td>
</tr>
<tr>
<td>PNG_Z_BEST_SPEED</td>
<td>1</td>
<td>Save using ZLib level 1 compression flag (default value is PNG_Z_DEFAULT_COMPRESSION).</td>
</tr>
<tr>
<td>PNG_Z_DEFAULT_COMPRESSION</td>
<td>6</td>
<td>Save using ZLib level 6 compression flag (default recommended value).</td>
</tr>
<tr>
<td>PNG_Z_BEST_COMPRESSION</td>
<td>9</td>
<td>save using ZLib level 9 compression flag (default value is PNG_Z_DEFAULT_COMPRESSION).</td>
</tr>
<tr>
<td>PNG_Z_NO_COMPRESSION</td>
<td>256</td>
<td>Save without ZLib compression.</td>
</tr>
<tr>
<td>PNG_INTERLACED</td>
<td>512</td>
<td>Save using Adam7 interlacing (use</td>
</tr>
<tr>
<td>PNM_SAVE_ASCII</td>
<td>1</td>
<td>If set the writer saves in ASCII format (i.e. P1, P2 or P3).</td>
</tr>
<tr>
<td>TIFF_CMYK</td>
<td>1</td>
<td>Stores tags for separated CMYK (use</td>
</tr>
<tr>
<td>TIFF_PACKBITS</td>
<td>256</td>
<td>Save using PACKBITS compression.</td>
</tr>
<tr>
<td>TIFF_DEFLATE</td>
<td>512</td>
<td>Save using DEFLATE compression (a.k.a. ZLIB compression).</td>
</tr>
<tr>
<td>TIFF_ADOBE_DEFLATE</td>
<td>1024</td>
<td>Save using ADOBE DEFLATE compression.</td>
</tr>
<tr>
<td>TIFF_NONE</td>
<td>2048</td>
<td>Save without any compression.</td>
</tr>
<tr>
<td>TIFF_CCITTFAX3</td>
<td>4096</td>
<td>Save using CCITT Group 3 fax encoding.</td>
</tr>
<tr>
<td>TIFF_CCITTFAX4</td>
<td>8192</td>
<td>Save using CCITT Group 4 fax encoding.</td>
</tr>
<tr>
<td>Format</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>TIFF_LZW</td>
<td>16384</td>
<td>Save using LZW compression.</td>
</tr>
<tr>
<td>TIFF_JPEG</td>
<td>32768</td>
<td>Save using JPEG compression.</td>
</tr>
<tr>
<td>WEBP_DEFAULT</td>
<td>0</td>
<td>Save with good quality (75:1).</td>
</tr>
<tr>
<td>WEBP_LOSSLESS</td>
<td>256</td>
<td>Save in lossless mode.</td>
</tr>
<tr>
<td>JXR_DEFAULT</td>
<td>0</td>
<td>Save with quality 80 and no chroma subsampling.</td>
</tr>
<tr>
<td>JXR_LOSSLESS</td>
<td>100</td>
<td>Save lossless.</td>
</tr>
<tr>
<td>JXR_PROGRESSIVE</td>
<td>8192</td>
<td>Save as a progressive-JXR. Use</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FREE_IMAGE_TMO
Enumeration

Tone mapping operators. Constants used in FreeImage_ToneMapping.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public enum FREE_IMAGE_TMO
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITMO_DRAGO03</td>
<td>0</td>
<td>Adaptive logarithmic mapping (F. Drago, 2003)</td>
</tr>
<tr>
<td>FITMO_REINHARD05</td>
<td>1</td>
<td>Dynamic range reduction inspired by photoreceptor physiology (E. Reinhard, 2005)</td>
</tr>
<tr>
<td>FITMO_FATTAL02</td>
<td>2</td>
<td>Gradient domain high dynamic range</td>
</tr>
</tbody>
</table>
See Also

Reference
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
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FREE_IMAGE_TYPE Enumeration

Image types used in FreImage.

**Namespace:** FreImageAPI

**Assembly:** FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public enum FREE_IMAGE_TYPE
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIT_UNKNOWN</td>
<td>0</td>
<td>unknown type</td>
</tr>
<tr>
<td>FIT_BITMAP</td>
<td>1</td>
<td>standard image: 1-, 4-, 8-, 16-, 24-, 32-bit</td>
</tr>
<tr>
<td>FIT_UINT16</td>
<td>2</td>
<td>array of unsigned short: unsigned 16-bit</td>
</tr>
<tr>
<td>FIT_INT16</td>
<td>3</td>
<td>array of short: signed 16-bit</td>
</tr>
<tr>
<td>FIT_UINT32</td>
<td>4</td>
<td>array of unsigned long: unsigned 32-bit</td>
</tr>
<tr>
<td>FIT_INT32</td>
<td>5</td>
<td>array of long: signed</td>
</tr>
<tr>
<td>Type</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>FIT_FLOAT</td>
<td>6</td>
<td>array of float : 32-bit IEEE floating point</td>
</tr>
<tr>
<td>FIT_DOUBLE</td>
<td>7</td>
<td>array of double : 64-bit IEEE floating point</td>
</tr>
<tr>
<td>FIT_COMPLEX</td>
<td>8</td>
<td>array of FICOMPLEX : 2 x 64-bit IEEE floating point</td>
</tr>
<tr>
<td>FIT_RGB16</td>
<td>9</td>
<td>48-bit RGB image : 3 x 16-bit</td>
</tr>
<tr>
<td>FIT_RGBA16</td>
<td>10</td>
<td>64-bit RGBA image : 4 x 16-bit</td>
</tr>
<tr>
<td>FIT_RGBF</td>
<td>11</td>
<td>96-bit RGB float image : 3 x 32-bit IEEE floating point</td>
</tr>
<tr>
<td>FIT_RGBAF</td>
<td>12</td>
<td>128-bit RGBA float image : 4 x 32-bit IEEE floating point</td>
</tr>
</tbody>
</table>
FreeImage Class

Provides access to call the native functions
Static class importing functions from the FreeImage library and
providing additional functions.

Inheritance Hierarchy

System Object FreeImageAPI FreeImage

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4
(3.17.0)

Syntax

C#

```
public static class FreeImage
```

The FreeImage type exposes the following members.

Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>☢️ S AcquireMemory</td>
<td>Provide memory</td>
</tr>
<tr>
<td>☢️ S AdjustBrightness</td>
<td>Adjusts 32-bit in</td>
</tr>
<tr>
<td>☢️ S AdjustColors</td>
<td>Adjusts contrast may opt within a</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><code>AdjustContrast</code></td>
<td>Adjusts the contrast of an 8-, 24- or 32-bit image by a certain amount.</td>
</tr>
<tr>
<td><code>AdjustCurve</code></td>
<td>Performs a histogram transformation on an 8-, 24- or 32-bit image.</td>
</tr>
<tr>
<td><code>AdjustGamma</code></td>
<td>Performs gamma correction on an 8-, 24- or 32-bit image.</td>
</tr>
<tr>
<td><code>Allocate(Int32, Int32, Int32)</code></td>
<td>Creates a new bitmap in memory.</td>
</tr>
<tr>
<td><code>AllocateEx(Int32, Int32, Int32, Nullable RGBQUAD, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)</code></td>
<td>Allocates a new image of the specified width, height and bit depth and optionally specified color. See remarks for further details.</td>
</tr>
<tr>
<td><code>AllocateEx(Int32, Int32, Int32, Nullable RGBQUAD, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)</code></td>
<td>Allocates a new image of the specified width, height and bit depth and optionally specified color. See remarks for further details.</td>
</tr>
<tr>
<td><code>AllocateExT(T, FREE_IMAGE_TYPE, Int32, Int32, Int32, Nullable T, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)</code></td>
<td>Allocates a new image of the specified type, width, height and bit depth and optionally specified color. See remarks for further details.</td>
</tr>
<tr>
<td><code>AllocateExT(T, FREE_IMAGE_TYPE, Int32, Int32, Int32, Nullable T, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)</code></td>
<td>Allocates a new image of the specified type, width, height and bit depth and optionally specified color. See remarks for further details.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>AppendPage</code></td>
<td>Appends a new page to the end of the bitmap.</td>
</tr>
<tr>
<td><code>ApplyColorMapping</code></td>
<td>Applies color mapping for one or several colors on a 1-, 4- or 8-bit palletized or a 16-, 24- or 32-bit high color image.</td>
</tr>
<tr>
<td><code>ApplyPaletteIndexMapping</code></td>
<td>Applies palette index mapping for one or several indices on an 8-bit palletized image.</td>
</tr>
<tr>
<td><code>Clone</code></td>
<td>Makes an exact reproduction of an existing bitmap, including metadata and attached profile if any.</td>
</tr>
<tr>
<td><code>CloneMetadata</code></td>
<td>Copies the metadata of a FreeImage bitmap to another.</td>
</tr>
<tr>
<td><code>CloneMetadataEx</code></td>
<td>Copies metadata from one FreeImage bitmap to another.</td>
</tr>
<tr>
<td><code>CloneTag</code></td>
<td>Creates and returns a copy of a FITAG object.</td>
</tr>
<tr>
<td><code>CloseMemory</code></td>
<td>Closes and frees a memory stream.</td>
</tr>
<tr>
<td><code>CloseMultiBitmap</code></td>
<td>Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it.</td>
</tr>
<tr>
<td><code>CloseMultiBitmapEx</code> (<code>FIMULTIBITMAP</code>)</td>
<td>Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it.</td>
</tr>
</tbody>
</table>
any changes made to it. The handle will be reset to null.

**CloseMultiBitmapEx**

Closes a previously opened multi-page bitmap, and when the bitmap was not opened read-only, any changes made to it.

```
CloseMultiBitmapEx(FIMULTIBITMAP, FREE_IMAGE_SAVE_FLAGS)
```

**ColorQuantize**

Quantizes a high-color 24-bit bitmap to an 8-bit palette color bitmap.

```
ColorQuantize
```

**ColorQuantizeEx**

ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) function that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a provided palette.

```
ColorQuantizeEx(FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, RGBQUAD, Boolean)
```

**ColorQuantizeEx**

ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) function that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a partial or full provided palette.

```
ColorQuantizeEx(FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, RGBQUAD, Int32)
```

**ColorQuantizeEx**

ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) function that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a partial or full provided palette.

```
ColorQuantizeEx(FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)
```
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare</td>
<td>Compares two FreeImage bitmaps.</td>
</tr>
<tr>
<td>CompareMemory(IntPtr, IntPtr, Int64)</td>
<td>Compares blocks of memory.</td>
</tr>
<tr>
<td>CompareMemory(IntPtr, IntPtr, UInt32)</td>
<td>Compares blocks of memory.</td>
</tr>
<tr>
<td>CompareMemory(Void*, Void*, Int64)</td>
<td>Compares blocks of memory.</td>
</tr>
<tr>
<td>CompareMemory(Void*, Void*, UInt32)</td>
<td>Compares blocks of memory.</td>
</tr>
<tr>
<td>Composite(FIBITMAP, Boolean, RGBQUAD, FIBITMAP)</td>
<td>This function composite a transparent foreground image against a single background color or against a background image.</td>
</tr>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH)</td>
<td>Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.</td>
</tr>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_DITHER)</td>
<td>Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.</td>
</tr>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_QUANTIZE)</td>
<td>Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.</td>
</tr>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Boolean)</td>
<td>Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.</td>
</tr>
</tbody>
</table>
ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Byte)  Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_DITHER, Boolean)  Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_QUANTIZE, Boolean)  Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Byte, Boolean)  Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.

ConvertFromRawBits(Byte, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)  Converts a raw bitmap to a FreeImage bitmap.

ConvertFromRawBits(IntPtr, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)  Converts a raw bitmap to a FreeImage bitmap.

ConvertFromRawBits(Byte, FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)  Converts a raw bitmap to a FreeImage bitmap.

ConvertFromRawBits(IntPtr, FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)  Converts a raw bitmap to a FreeImage bitmap.

ConvertTo16Bits555  Converts a bitmap to 16 bits, where each pixel has a color pattern of bits red, 5 bits green, and 5 bits blue. One bit in each pixel is unused.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ConvertTo16Bits565</td>
<td>Converts a bitmap to 16 bits, where each pixel has a color pattern of 6 bits red, 5 bits green and 5 bits blue.</td>
</tr>
<tr>
<td>ConvertTo24Bits</td>
<td>Converts a bitmap to 24 bits. A clone of the input bitmap is returned for 24-bit bitmaps.</td>
</tr>
<tr>
<td>ConvertTo32Bits</td>
<td>Converts a bitmap to 32 bits. A clone of the input bitmap is returned for 32-bit bitmaps.</td>
</tr>
<tr>
<td>ConvertTo4Bits</td>
<td>Converts a bitmap to 4 bits. A high-color bitmap (16, 24 or 32-bit) or a monochrome or greyscale bitmap (1 or 8-bit) will result in a greyscale or palletised bitmap.</td>
</tr>
<tr>
<td>ConvertTo8Bits</td>
<td>Converts a bitmap to 8 bits. A high-color bitmap (16, 24 or 32-bit) or a monochrome or greyscale bitmap (1 or 4-bit) will result in a greyscale or palletised bitmap.</td>
</tr>
<tr>
<td>ConvertToGreyscale</td>
<td>Converts a bitmap to an 8-bit greyscale image with a linear ramp.</td>
</tr>
<tr>
<td>ConvertToRawBits(Byte, FIBITMAP, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.</td>
</tr>
<tr>
<td>ConvertToRawBits(IntPtr, FIBITMAP, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.</td>
</tr>
</tbody>
</table>
memory.

- **ConvertToRGBF**
  - Converts a 24- or 32-bit RGB(A) standard image or a 48-bit RGB image to a FIT_RGBF type image.

- **ConvertToStandardType**
  - Converts a non-standard image whose color type is FIC_MINISBLACK 8-bit greyscale image.

- **ConvertToType**
  - Converts an image of any type to type dst_type.

- **Copy**
  - Copies a sub part of the current dib image.

- **CopyMemory(Array, Array, Int32)**
  - Copies the content of one array into another.

- **CopyMemory(Array, Array, Int64)**
  - Copies the content of one array into another.

- **CopyMemory(Array, IntPtr, Int32)**
  - Copies a block of memory into an array.

- **CopyMemory(Array, IntPtr, Int64)**
  - Copies a block of memory into an array.

- **CopyMemory(Byte*, Byte*, Int32)**
  - Copies a block of memory from one location to another.

- **CopyMemory(Byte*, Byte*, Int64)**
  - Copies a block of memory from one location to another.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CopyMemory(IntPtr, Array, Int32)</td>
<td>Copies the content of an array to a memory location</td>
</tr>
<tr>
<td>CopyMemory(IntPtr, Array, Int64)</td>
<td>Copies the content of an array to a memory location</td>
</tr>
<tr>
<td>CopyMemory(IntPtr, IntPtr, Int32)</td>
<td>Copies a block of memory from one location to another</td>
</tr>
<tr>
<td>CopyMemory(IntPtr, IntPtr, Int64)</td>
<td>Copies a block of memory from one location to another</td>
</tr>
<tr>
<td>CopyMemory(Void*, Array, Int32)</td>
<td>Copies the content of an array to a memory location</td>
</tr>
<tr>
<td>CopyMemory(Void*, Array, Int64)</td>
<td>Copies the content of an array to a memory location</td>
</tr>
<tr>
<td>CopyMemory(Void*, IntPtr, Int32)</td>
<td>Copies a block of memory from one location to another</td>
</tr>
<tr>
<td>CopyMemory(Void*, IntPtr, Int64)</td>
<td>Copies a block of memory from one location to another</td>
</tr>
<tr>
<td>CreateFromBitmap</td>
<td>Converts an .NET FreeImage bitmap</td>
</tr>
<tr>
<td>CreateFromHbitmap</td>
<td>Creates a FreeImage DIB from a Device Context/Compatible Bitmap</td>
</tr>
<tr>
<td>CreateICCProfile</td>
<td>Creates a new ICC profile from ICC profile data previously read from a file</td>
</tr>
<tr>
<td>CreateICCProfileEx(FIBITMAP, Byte)</td>
<td>Creates an ICC profile for a FreeImage bitmap from a device context bitmap</td>
</tr>
</tbody>
</table>
CreateICCProfileEx(FIBITMAP, Byte, Int32)  Creates a new ICC-Profile for a FreeImage bitmap.

CreateTag  Allocates a new object, which must be destroyed with a call to DeleteTag(FITAG) in use.

CreateView  Creates a dynamic read/write view into a FreeImage bitmap.

DeletePage  Deletes the page on the given position.

DeleteTag  Delete a previously allocated object.

DestroyICCProfile  This function destroys an FIICCPI by CreateICCProfile(FIBITMAP, Byte, Int32) will contain no profile information. This function should be called to ensure that a stored bitmap will not contain any profile information.

Dither  Converts a bitmap to 1-bit monochrome bitmap using a dithering algorithm. Bitmaps, the function clones the input bitmap and builds a monochrome palette.

EnlargeCanvasT  Enlarges or shrinks the FreeImage bitmap selectively per side and fills newly added areas with the background color. See remarks for further details.
FIFSupportsExportBPP
Checks if a plugin can save bitmaps in the desired bit depth.

FIFSupportsExportType
Checks if a plugin can save a bitmap in the desired data type.

FIFSupportsICCProfiles
Checks if a plugin can load or save an ICC profile.

FIFSupportsNoPixels
Checks if a plugin can load only the image header.

FIFSupportsReading
Checks if a plugin can load bitmaps.

FIFSupportsWriting
Checks if a plugin can save bitmaps.

FillBackgroundT
Sets all pixels of the specified image to the color provided through the color parameter. See remarks for further details.

FindCloseMetadata
Closes the specified metadata search handle and releases associated resources.

FindFirstMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, FITAG)
Provides information about the first instance of a tag that matches the metadata model.

FindFirstMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, MetadataTag)
Provides information about the first instance of a tag that matches the metadata model.

FindNextMetadata(FIMETADATA, FITAG)
Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata, and then alters the tag object contents accordingly.

FindNextMetadata(FIMETADATA, MetadataTag)
Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>FlipHorizontal</code></td>
<td>Flip the input dib horizontally along the vertical axis.</td>
</tr>
<tr>
<td><code>FlipVertical</code></td>
<td>Flip the input dib vertically along the horizontal axis.</td>
</tr>
<tr>
<td><code>FreeHbitmap</code></td>
<td>Frees a bitmap handle.</td>
</tr>
<tr>
<td><code>GetAdjustColorsLookupTable</code></td>
<td>Creates a lookup table to be used with <code>AdjustCurve(FIBITMAP, FREE_IMAGE_COLOR_CHANNEL)</code> which may adjust brightness and contrast, correct gamma and invert the image with a single call to <code>AdjustCurve(FIBITMAP, FREE_IMAGE_COLOR_CHANNEL)</code>.</td>
</tr>
<tr>
<td><code>GetBackgroundColor</code></td>
<td>Returns the file background color of an image. An index in the palette is returned in the <code>rgbReserved</code> member of the <code>bkcolor</code> parameter.</td>
</tr>
<tr>
<td><code>GetBitmap</code></td>
<td>Converts a FreeImage bitmap to a .NET <code>Bitmap</code>.</td>
</tr>
<tr>
<td><code>GetBitmapForDevice</code></td>
<td>Returns an HBITMAP created by the <code>CreateDIBitmap()</code> in turn has always the same color depth as the reference DC, which may be provided desktop <code>IntPtr.Zero</code>.</td>
</tr>
<tr>
<td><code>matches</code></td>
<td>Matches the <code>FindFirstMetadata</code> argument in a previous call. Then alters the tag object contents accordingly.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetBits</td>
<td>Returns a pointer to the data-bits of the bitmap.</td>
</tr>
<tr>
<td>GetBlueMask</td>
<td>Returns a bit pattern describing the blue color component of a pixel in a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetBPP</td>
<td>Returns the size of one pixel in the bitmap in bits.</td>
</tr>
<tr>
<td>GetChannel</td>
<td>Retrieves the red, green, blue or alpha channel of a 24- or 32-bit image.</td>
</tr>
<tr>
<td>GetColorsUsed</td>
<td>Returns the number of colors used in a bitmap.</td>
</tr>
<tr>
<td>GetColorType</td>
<td>Investigates the color type of the bitmap by reading the bitmap's pixel bits and analysing them.</td>
</tr>
<tr>
<td>GetComplexChannel</td>
<td>Retrieves the real part, imaginary part, magnitude or phase of a complex image.</td>
</tr>
<tr>
<td>GetCopyrightMessage</td>
<td>Returns a string containing a standard copyright message.</td>
</tr>
<tr>
<td>GetDIBSize</td>
<td>Returns the size of the DIB-element of a FIBitmap in memory.</td>
</tr>
<tr>
<td>GetDotsPerMeterX</td>
<td>Returns the horizontal resolution, in pixels-per-meter, for the bitmap.</td>
</tr>
<tr>
<td>GetDotsPerMeterY</td>
<td>Returns the vertical resolution, in pixels-per-meter, for the bitmap.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>GetFIFCount</code></td>
<td>Retrieves the number of FREE_IMAGE_FORMAT identifiers being currently registered.</td>
</tr>
<tr>
<td><code>GetFIFDescription</code></td>
<td>Returns a descriptive string that describes the bitmap formats the given plugin can read and/or write.</td>
</tr>
<tr>
<td><code>GetFIFExtensionList</code></td>
<td>Returns a comma-delimited file extension list describing the bitmap formats the given plugin can read and/or write.</td>
</tr>
<tr>
<td><code>GetFIFFromFilename</code></td>
<td>This function takes a filename or a file extension and returns the plugin that can handle this file extension in the form of a FREE_IMAGE_FORMAT.</td>
</tr>
<tr>
<td><code>GetFIFFromFormat</code></td>
<td>Returns an identifier from the format string that was used to register the FIF.</td>
</tr>
<tr>
<td><code>GetFIFFromMime</code></td>
<td>Returns an identifier from a MIME content type string (MIME stands for Multipurpose Internet Mail Extension).</td>
</tr>
<tr>
<td><code>GetFIMimeType</code></td>
<td>Given an identifier, returns a MIME content type string (MIME stands for Multipurpose Internet Mail Extension).</td>
</tr>
<tr>
<td><code>GetFIFRegExpr</code></td>
<td>Returns a regular expression string that can be used by a regular expression engine to identify the bitmap.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>GetFileType</td>
<td>Orders FreeImage to analyze the bitmap signature.</td>
</tr>
<tr>
<td>GetFileTypeFromHandle</td>
<td>Uses the described in the topic bitmap management functions bitmap type.</td>
</tr>
<tr>
<td>GetFileTypeFromMemory</td>
<td>Uses a memory handle to identify a bitmap type.</td>
</tr>
<tr>
<td>GetFileTypeFromStream</td>
<td>Orders FreeImage to analyze the bitmap signature. If the bitmap stream is not seekable, the stream will have been used loading.</td>
</tr>
<tr>
<td>GetFormat</td>
<td>Returns the <code>FREE_IMAGE_FORMAT</code> specified.</td>
</tr>
<tr>
<td>GetFormatFromFIF</td>
<td>Returns the string that was used to register a plugin from the system assigned.</td>
</tr>
<tr>
<td>GetFormatParameters</td>
<td>Retrieves all parameters needed to create a new FreeImage bitmap from the format of a .NET bitmap.</td>
</tr>
<tr>
<td>GetGreenMask</td>
<td>Returns a bit pattern describing the green color component of a pixel in a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetHbitmap</td>
<td>Retrieves an HBitmap for a FreeImage bitmap.</td>
</tr>
<tr>
<td>FreeHbitmap(IntPtr)</td>
<td>FreeHbitmap handle.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetHeight</td>
<td>Returns the height of the bitmap in pixel units.</td>
</tr>
<tr>
<td>GetHistogram</td>
<td>Computes the image histogram.</td>
</tr>
<tr>
<td>GetICCProfile</td>
<td>Retrieves a pointer to the FIICCPROFILE.</td>
</tr>
<tr>
<td>GetICCProfileEx</td>
<td>Retrieves the bitmap.</td>
</tr>
<tr>
<td>GetImageComment</td>
<td>Returns the comment of a JPEG, PNG or GIF image.</td>
</tr>
<tr>
<td>GetImageType</td>
<td>Retrieves the type of the bitmap.</td>
</tr>
<tr>
<td>GetInfo</td>
<td>Alias for FreeImage_GetInfoHeader that returns a pointer to a BITMAPINFO.</td>
</tr>
<tr>
<td>GetInfoEx</td>
<td>Returns the structure of a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetInfoHeader</td>
<td>Returns a pointer to the BITMAPINFOHEADER element in a FIBITMAP.</td>
</tr>
<tr>
<td>GetInfoHeaderEx</td>
<td>Returns the structure of a FreeImage bitmap.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetLine</td>
<td>Returns the width of the bitmap in bytes.</td>
</tr>
<tr>
<td>GetLockedPageCount</td>
<td>Retrieves the number of pages that are locked in a multi-paged bitmap.</td>
</tr>
<tr>
<td>GetLockedPageNumbers</td>
<td>Returns an array of page numbers that are currently locked in memory.</td>
</tr>
<tr>
<td>GetLockedPages</td>
<td>Retrieves a list of locked pages of a multi-paged bitmap.</td>
</tr>
<tr>
<td>GetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, FITAG)</td>
<td>Retrieve metadata attached to a dib.</td>
</tr>
<tr>
<td>GetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, MetadataTag)</td>
<td>Retrieve metadata attached to a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetMetadataCount</td>
<td>Returns the number of tags contained in the model metadata attached to the input dib.</td>
</tr>
<tr>
<td>GetNativeVersion</td>
<td>Returns the version of the native FreeImage library.</td>
</tr>
<tr>
<td>GetPageCount</td>
<td>Returns the number of pages currently available in the multi-paged bitmap.</td>
</tr>
<tr>
<td>GetPalette</td>
<td>Returns a pointer to the bitmap's palette.</td>
</tr>
<tr>
<td>GetPaletteEx</td>
<td>Returns a structure that represents the palette of a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetPitch</td>
<td>Returns the width of the bitmap in bytes, rounded to the next 32-bit.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetPixelColor</td>
<td>Get the pixel color of a 16-, 24- or 32-bit image at position (x, y), including range check (slow access).</td>
</tr>
<tr>
<td>GetPixelFormat</td>
<td>Returns the pixel format of the bitmap.</td>
</tr>
<tr>
<td>GetPixelIndex</td>
<td>Get the pixel index of a palettized image at position (x, y), including range check (slow access).</td>
</tr>
<tr>
<td>GetPrimaryExtensionFromFIF</td>
<td>This function returns the primary (main or most commonly used?) extension of a certain (fif). This is done by returning the first of all possible extensions GetFIFExtensionList().</td>
</tr>
<tr>
<td>GetRedMask</td>
<td>Returns a bit pattern describing the red color component of a pixel in a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetResolutionX</td>
<td>Retrieves a DIB's resolution in X-direction measured in 'dots per inch' (DPI) and not in (DPI) and not in</td>
</tr>
<tr>
<td>GetResolutionY</td>
<td>Retrieves a DIB's resolution in Y-direction measured in 'dots per inch' (DPI) and not in (DPI) and not in</td>
</tr>
<tr>
<td>GetScanLine</td>
<td>Returns a pointer to the start of the given scanline in the bitmap's data-bits.</td>
</tr>
<tr>
<td>boundary, stride or scan width.</td>
<td>Get the 32-bit image, including range check (slow access).</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTagCount</td>
<td>Returns the number of components in the tag (in tag type units).</td>
</tr>
<tr>
<td>GetTagDescription</td>
<td>Returns the tag description.</td>
</tr>
<tr>
<td>GetTagID</td>
<td>Returns the tag ID.</td>
</tr>
<tr>
<td>GetTagKey</td>
<td>Returns the tag field name (unique inside a metadata model).</td>
</tr>
<tr>
<td>GetTagLength</td>
<td>Returns the length of the tag value in bytes.</td>
</tr>
<tr>
<td>GetTagType</td>
<td>Returns the tag data type.</td>
</tr>
<tr>
<td>GetTagValue</td>
<td>Returns the tag value. Programmers must interpret the returned pointer</td>
</tr>
<tr>
<td></td>
<td>correctly, based on the results of GetTagType and GetTagCount.</td>
</tr>
<tr>
<td>GetTransparencyCount</td>
<td>Returns the number of transparent colors in a palletised bitmap.</td>
</tr>
<tr>
<td>GetTransparencyTable</td>
<td>Returns a pointer to the bitmap's transparency table.</td>
</tr>
<tr>
<td>GetTransparencyTableEx</td>
<td>Returns the FreeImage bitmap's transparency table.</td>
</tr>
<tr>
<td></td>
<td>In case the bitmap has no transparency table, returns empty.</td>
</tr>
<tr>
<td>GetTransparentIndex</td>
<td>Returns the palette entry used as transparent color for the specified</td>
</tr>
<tr>
<td></td>
<td>image. If the image is a high color image or if the image has no color</td>
</tr>
<tr>
<td></td>
<td>set to be transparent, returns -1.</td>
</tr>
<tr>
<td>GetTypeParameters</td>
<td>Retrieves all parameters needed to.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>GetUniqueColors</td>
<td>This function returns the number of unique colors actually used by the specified 1-, 4-, 8-, 16-, 24- or 32-bit image. This might be different from what function FreeImage_GetColorsUsed() returns, which actually returns the palette size for palletised images. Works for only.</td>
</tr>
<tr>
<td>GetVersion</td>
<td>Returns a string containing the current version of the library.</td>
</tr>
<tr>
<td>GetWidth</td>
<td>Returns the width of the bitmap in pixel units.</td>
</tr>
<tr>
<td>GetWrapperVersion</td>
<td>Returns the internal version of this FreeImage.NET wrapper.</td>
</tr>
<tr>
<td>HasBackgroundColor</td>
<td>Returns whether the bitmap has a file background color.</td>
</tr>
<tr>
<td>InsertPage</td>
<td>Inserts a new page before the given position in the bitmap.</td>
</tr>
<tr>
<td>Invert</td>
<td>Inverts each pixel data.</td>
</tr>
<tr>
<td>IsAvailable</td>
<td>Returns a value indicating if the FreeImage library is available or not. See remarks for further details.</td>
</tr>
<tr>
<td>IsExtensionValidForFIF(FREE_IMAGE_FORMAT, String)</td>
<td>Checks if an extension is valid for a certain format.</td>
</tr>
<tr>
<td>IsExtensionValidForFIF(FREE_IMAGE_FORMAT, String, StringComparison)</td>
<td>Checks if an extension is valid for a certain format.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>IsFilenameValidForFIF(FREE_IMAGE_FORMAT, String)</td>
<td>Checks if a filename is valid for a certain format.</td>
</tr>
<tr>
<td>IsFilenameValidForFIF(FREE_IMAGE_FORMAT, String, StringComparison)</td>
<td>Checks if a filename is valid for a certain format.</td>
</tr>
<tr>
<td>IsGreyscaleImage</td>
<td>Returns whether the image is a greyscale image or not. Scans all colors in the bitmaps palette for entries where red and blue are not all the same (not a grey color).</td>
</tr>
<tr>
<td>IsLittleEndian</td>
<td>Returns whether the platform is using Little Endian.</td>
</tr>
<tr>
<td>IsPluginEnabled</td>
<td>Retrieves the state of a plugin.</td>
</tr>
<tr>
<td>IsRGB555</td>
<td>Verifies whether the FreeImage bitmap is 16bit 555.</td>
</tr>
<tr>
<td>IsRGB565</td>
<td>Verifies whether the FreeImage bitmap is 16bit 565.</td>
</tr>
<tr>
<td>IsTransparent</td>
<td>Returns whether the transparency table is enabled.</td>
</tr>
<tr>
<td>JPEGCrop</td>
<td>Performs a lossless crop on a JPEG file.</td>
</tr>
<tr>
<td>JPEGTransform</td>
<td>Performs a lossless rotation or flipping on a JPEG file.</td>
</tr>
<tr>
<td>Load</td>
<td>Decodes a bitmap, allocates memory for it and returns it as a FIBITMAP.</td>
</tr>
<tr>
<td>LoadBitmap</td>
<td>Loads a .NET bitmap.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>LoadEx(String)</td>
<td>Loads a FreeImage bitmap. Will be loaded with default loading flags.</td>
</tr>
<tr>
<td>LoadEx(String, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreeImage bitmap. The loading format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN. The file will be loaded with default loading flags.</td>
</tr>
<tr>
<td>LoadEx(String, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Loads a FreeImage bitmap. Flags can be provided by the flags parameter.</td>
</tr>
<tr>
<td>LoadEx(String, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreeImage bitmap. The loading format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN. Load flags can be provided by the flags parameter.</td>
</tr>
<tr>
<td>LoadFromHandle</td>
<td>Loads a bitmap from an arbitrary source.</td>
</tr>
<tr>
<td>LoadFromMemory</td>
<td>Decodes a bitmap from a stream, allocates memory for it and returns it as a FIBITMAP.</td>
</tr>
<tr>
<td>LoadFromStream(Stream)</td>
<td>Loads a FreeImage bitmap. Stream must be set to the correct position before calling LoadFromStream.</td>
</tr>
<tr>
<td>LoadFromStream(Stream,</td>
<td>Loads a</td>
</tr>
</tbody>
</table>
### FREE_IMAGE_FORMAT

The loading format is `FIF_UNKNOWN` when the format is being analysed.

#### LoadFromStream

- **Function:** `LoadFromStream(Stream, FREE_IMAGE_LOAD_FLAGS)`
  - Loads a FreeImage bitmap. The stream must be set to the correct position before calling `LoadFromStream`.

- **Function:** `LoadFromStream(Stream, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_FORMAT)`
  - Loads a FreeImage bitmap. The loading format is being analysed. The format must be set to the correct position before calling `LoadFromStream`.

#### LoadMultiBitmapFromMemory

- **Function:** `LoadMultiBitmapFromMemory`
  - Open a multi-page bitmap from a memory stream.

#### LoadMultiBitmapFromStream

- **Function:** `LoadMultiBitmapFromStream`
  - Loads a FreeImage multi-paged bitmap from a stream and returns the FreeImage memory stream used as temporary buffer.

- **Function:** `AppendPage(FIMULTIBITMAP, FIBITMAP)`
  - InsertPage(FIMULTIBITMAP, Int32, FIBITMAP)`
  - MovePage(FIMULTIBITMAP, Int32, Int32)`
  - `DeletePage(FIMULTIBITMAP, Int32)`

#### LockPage

- **Function:** `LockPage`
  - Locks a page in memory for editing.

#### LookupSVGColor

- **Function:** `LookupSVGColor`
  - Converts an SVG color name into a corresponding RGB value.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LookupX11Color</td>
<td>Converts an X11 color name into a corresponding RGB value.</td>
</tr>
<tr>
<td>MakeThumbnail</td>
<td>Creates a thumbnail from a greyscale or RGB(A) image, keeping aspect ratio.</td>
</tr>
<tr>
<td>MoveMemory(IntPtr, IntPtr, Int64)</td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td>MoveMemory(IntPtr, IntPtr, UInt32)</td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td>MoveMemory(Void*, Void*, Int64)</td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td>MoveMemory(Void*, Void*, UInt32)</td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td>MovePage</td>
<td>Moves the source page to the position of the target page.</td>
</tr>
<tr>
<td>MultigridPoissonSolver</td>
<td>Solves a Poisson equation, remap result pixels to [0..1] and returns the solution.</td>
</tr>
<tr>
<td>OpenMemory</td>
<td>Opens a memory stream.</td>
</tr>
<tr>
<td>OpenMultiBitmap</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td>OpenMultiBitmapEx(String)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td>OpenMultiBitmapEx(String, Boolean)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td>OpenMultiBitmapEx(String, Boolean, Boolean)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>OpenMultiBitmapEx(String, Boolean, Boolean, Boolean)</td>
<td>Loads a bitmap.</td>
</tr>
<tr>
<td>OpenMultiBitmapEx(String, FREE_IMAGE_FORMAT, Boolean, Boolean, Boolean)</td>
<td>Loads a bitmap. FIF_UNKNOWN is being read.</td>
</tr>
<tr>
<td>OpenMultiBitmapEx(String, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, Boolean, Boolean, Boolean)</td>
<td>Loads a bitmap. FIF_UNKNOWN is being read.</td>
</tr>
<tr>
<td>OpenMultiBitmapFromHandle</td>
<td>Loads a bitmap using flags parameter.</td>
</tr>
<tr>
<td>OpenMultiBitmapFromStream(Stream)</td>
<td>Loads a bitmap.</td>
</tr>
<tr>
<td>OpenMultiBitmapFromStream(Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Loads a bitmap. FIF_UNKNOWN is being read.</td>
</tr>
<tr>
<td>OutputMessageProc</td>
<td>Calls the set error message function.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Paste</td>
<td>Alpha blend or combine a subpart image with the current dib image. The bit depth of the dst bitmap must be greater than or equal to the bit depth of the src.</td>
</tr>
<tr>
<td>PreMultiplyWithAlpha</td>
<td>Applies the alpha value to its color components.</td>
</tr>
<tr>
<td>ReadMemory</td>
<td>Reads data from a memory stream.</td>
</tr>
<tr>
<td>RegisterExternalPlugin</td>
<td>Registers a new plugin to be used in FreeImage. The plugin is residing in a DLL. The Init function must be called “Init” and must use the stdcall calling convention.</td>
</tr>
<tr>
<td>RegisterLocalPlugin</td>
<td>Registers a new plugin to be used in FreeImage.</td>
</tr>
<tr>
<td>Rescale</td>
<td>Performs resampling (or scaling, zooming) of a greyscale or RGB(A) image to the desired destination width and height.</td>
</tr>
<tr>
<td>RescaleRect</td>
<td>This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. Rotation is limited to integer multiple of 90°. null values.</td>
</tr>
<tr>
<td>Rotate(FIBITMAP, Double)</td>
<td>This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. Rotation is limited to integer multiple of 90°. null values.</td>
</tr>
<tr>
<td>RotateT(FIBITMAP, Double, NullableT)</td>
<td>This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. Rotation is limited to integer multiple of 90°. null values.</td>
</tr>
</tbody>
</table>
Rotate4bit

Rotates a 4-bit color FreeImage bitmap by means of 3 shears. Rotation is limited to integer multiple of 90°. A null clone is returned for other values or in case the rotation fails.

RotateClassic

Obsolete. This function rotates a greyscale or 24- or 32-bit color image by means of 3 shears. Rotation is limited to integer multiple of 90°. A null value is returned.

RotateEx

This function performs a rotation and/or translation of an 8-bit greyscale, 24- or 32-bit image, using a 3rd order (cubic) B-Spline.

Save

Saves a previously loaded FIBITMAP to a file.

SaveBitmap(Bitmap, String)

Saves a .NET bitmap to a file.

SaveBitmap(Bitmap, String, FREE_IMAGE_SAVE_FLAGS)

Saves a .NET bitmap to a file with specified flags.

SaveBitmap(Bitmap, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves a .NET bitmap to a file with specified format and flags.

SaveEx(FIBITMAP, String)

Saves an previously loaded FIBITMAP to a file.
SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT)

Saves an previously loaded FreeImage bitmap to a file. The loading format is taken off the filename. If suitable format was found false will be returned.

SaveEx(FIBITMAP, String, FREE_IMAGE_SAVE_FLAGS)

Saves a previously loaded FreeImage bitmap to a file. The loading format is taken off the filename. If suitable format was found false will be returned. Save flags can be provided by the flags parameter.

SaveEx(FIBITMAP, String, Boolean)

Saves a previously loaded FreeImage bitmap to a file. The loading format is taken off the filename. If suitable format was found false will be returned.

SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves a previously loaded FreeImage bitmap to a file. The loading format is taken off the filename. If suitable format was found false will be returned. Save flags provided by the flags parameter.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SaveEx(FIBITMAP, String,</td>
<td>Saves a previously loaded FreeImage bitmap to a file. The suitable format</td>
</tr>
<tr>
<td>FREE_IMAGE_SAVE_FLAGS, Boolean)</td>
<td>is taken off the filename. If no suitable format was found, false will be</td>
</tr>
<tr>
<td></td>
<td>returned. Save flags can be provided by the flags parameter. The depth can</td>
</tr>
<tr>
<td></td>
<td>be set by 'colorDepth'. If it's set to FICD_AUTO, the depth will be taken</td>
</tr>
<tr>
<td></td>
<td>if available.</td>
</tr>
<tr>
<td>SaveEx(FIBITMAP, String,</td>
<td>Saves a previously loaded FreeImage bitmap to a file. The loading format is</td>
</tr>
<tr>
<td>FREE_IMAGE_FORMAT,</td>
<td>taken off the filename. If no suitable format was found, false will be</td>
</tr>
<tr>
<td>FREE_IMAGE_SAVE_FLAGS,</td>
<td>returned. Save flags can be provided by the flags parameter. The depth can</td>
</tr>
<tr>
<td>FREE_IMAGE_COLOR_DEPTH, Boolean)</td>
<td>be set by 'colorDepth'. If it's set to FIF_UNKNOWN, the depth will be taken</td>
</tr>
<tr>
<td></td>
<td>if available.</td>
</tr>
<tr>
<td>SaveToHandle</td>
<td>Saves a bitmap to an arbitrary source.</td>
</tr>
<tr>
<td>SaveToMemory</td>
<td>Saves a previously loaded FIBITMAP to a stream.</td>
</tr>
<tr>
<td>SaveToStream(FIBITMAP, Stream,</td>
<td>Saves a previously loaded FreeImage bitmap to a stream. The stream must</td>
</tr>
<tr>
<td>FREE_IMAGE_FORMAT)</td>
<td>be set to the correct position before calling SaveToStream.</td>
</tr>
<tr>
<td>SaveToStream(FIBITMAP, Stream,</td>
<td>Saves a previously loaded FreeImage bitmap to a stream. The stream must</td>
</tr>
<tr>
<td>FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)</td>
<td>be set to the correct position before calling SaveToStream.</td>
</tr>
</tbody>
</table>
SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT, Boolean) Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling SaveToStream.

SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, FREE_IMAGE_COLOR_DEPTH) Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling SaveToStream.

SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, Boolean) Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling SaveToStream.

SeekMemory Moves the memory handle to a specified location.

SetBackgroundColor(FIBITMAP, RGBQUAD) Set the file background color of an image. When saving an image to PNG, this background color is transparently saved to the PNG file. When the bkcolor parameter is null, the background color is removed from the image.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SetChannel</td>
<td>Insert a 8-bit dib into a 24- or 32-bit image. Both images must have the same width and height.</td>
</tr>
<tr>
<td>SetComplexChannel</td>
<td>Set the real or imaginary part of a complex image. Both images must have the same width and height.</td>
</tr>
<tr>
<td>SetDotsPerMeterX</td>
<td>Set the horizontal resolution, in pixels-per-meter, for the target device for the bitmap.</td>
</tr>
<tr>
<td>SetDotsPerMeterY</td>
<td>Set the vertical resolution, in pixels-per-meter, for the target device for the bitmap.</td>
</tr>
<tr>
<td>SetImageComment</td>
<td>Sets the comment of a JPEG, PNG or GIF image.</td>
</tr>
<tr>
<td>SetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, FITAG)</td>
<td>Attach a new FreeImage tag to a dib.</td>
</tr>
<tr>
<td>SetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, MetadataTag)</td>
<td>Attach a new metadata tag to a FreeImage bitmap.</td>
</tr>
<tr>
<td>SetPixelColor</td>
<td>Set the pixel color of a 16-, 24- or 32-bit image at position (x, y), including range check (slow access).</td>
</tr>
<tr>
<td>SetPixelIndex</td>
<td>Set the pixel index of a palettized image at position (x, y), including range check (slow access).</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
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<tr>
<td>SetPluginEnabled</td>
<td>Enables or disables a plugin.</td>
</tr>
<tr>
<td>SetResolutionX</td>
<td>Sets a DIB's resolution in X-direction measured in 'dots per inch' (DPI) and not in 'dots per meter'.</td>
</tr>
<tr>
<td>SetResolutionY</td>
<td>Sets a DIB's resolution in Y-direction measured in 'dots per inch' (DPI) and not in 'dots per meter'.</td>
</tr>
<tr>
<td>SetTagCount</td>
<td>Sets the number of data in the tag.</td>
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<tr>
<td>SetTagDescription</td>
<td>Sets the tag description.</td>
</tr>
<tr>
<td>SetTagID</td>
<td>Sets the tag ID.</td>
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<tr>
<td>SetTagKey</td>
<td>Sets the tag field name.</td>
</tr>
<tr>
<td>SetTagLength</td>
<td>Sets the length of the tag value in bytes.</td>
</tr>
<tr>
<td>SetTagType</td>
<td>Sets the tag data type.</td>
</tr>
<tr>
<td>SetTagValue</td>
<td>Sets the tag value.</td>
</tr>
<tr>
<td>SetTransparencyTable</td>
<td>Sets the FreeImage bitmap's transparency table. Only affects palletised bitmaps.</td>
</tr>
<tr>
<td>SetTransparent</td>
<td>Tells FreeImage if it should make use of the transparency table (alpha channel) that may accompany a bitmap.</td>
</tr>
<tr>
<td>SetTransparentIndex</td>
<td>Sets the index of the palette entry to be used as transparent color.</td>
</tr>
<tr>
<td></td>
<td>Does nothing on high color images.</td>
</tr>
<tr>
<td>Function</td>
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<td>SwapColors</td>
<td>Swaps 1, 4- or 8-bit colors to 32-bit high color image.</td>
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<td>Swaps two specified palette indices on a 1-, 4- or 8-bit palletized image.</td>
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<td>TagToString</td>
<td>Converts a FreeImage tag structure to a string that represents the interpreted tag value.</td>
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<tr>
<td>TellMemory</td>
<td>Gets the current position of a memory handle.</td>
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<tr>
<td>Threshold</td>
<td>Converts a monochrome bitmap to a 1-bit monochrome bitmap using a threshold.</td>
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<tr>
<td>TmoDrago03</td>
<td>Converts a High Dynamic Range image to a 24-bit RGB image using a global operator based on logarithmic compression of luminance values, imitating the human response to light.</td>
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<tr>
<td>TmoFattal02</td>
<td>Apply the Gradient Domain High Dynamic Range Compression to an RGBF image and convert to 24-bit RGB.</td>
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<tr>
<td>TmoReinhard05</td>
<td>Converts a High Dynamic Range image to a 24-bit RGB image using a global operator based on logarithmic compression of luminance values, imitating the human response to light.</td>
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<td><strong>ToneMapping</strong></td>
<td>Converts a High Dynamic Range image (48-bit RGB or 96-bit RGBF) to a 24-bit RGB image, suitable for display.</td>
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<tr>
<td><strong>Unload</strong></td>
<td>Deletes a previously loaded FIBITMAP from memory.</td>
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<td>Deletes a previously loaded FreeImage bitmap from memory and resets the handle to 0.</td>
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<tr>
<td><strong>UnlockPage</strong></td>
<td>Unlocks a previously locked page and gives it back to the multi-page engine.</td>
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<tr>
<td><strong>WriteMemory</strong></td>
<td>Writes data to a memory stream.</td>
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<tr>
<td><strong>ZLibCompress</strong></td>
<td>Compresses a source buffer into a target buffer, using the ZLib library.</td>
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<td><strong>ZLibCRC32</strong></td>
<td>Generates a CRC32 checksum.</td>
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<tr>
<td><strong>ZLibGUnzip</strong></td>
<td>Decompresses a source buffer into a target buffer, using the ZLib library.</td>
</tr>
<tr>
<td><strong>ZLibGZip</strong></td>
<td>Compresses a source buffer into a target buffer, using the ZLib library.</td>
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<tr>
<td><strong>ZLibUncompress</strong></td>
<td>Decompresses a source buffer into a target buffer, using the ZLib library.</td>
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## Fields

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<tr>
<td><strong>s</strong> BI_BITFIELDS</td>
<td>Specifies that the bitmap is not compressed and that the color table consists of three DWORD color masks that specify the red, green, and blue components, respectively, of each pixel. This is valid when used with 16- and 32-bpp bitmaps.</td>
</tr>
<tr>
<td><strong>s</strong> BI_JPEG</td>
<td>Windows 98/Me, Windows 2000/XP: Indicates that the image is a JPEG image.</td>
</tr>
<tr>
<td><strong>s</strong> BI_PNG</td>
<td>Windows 98/Me, Windows 2000/XP: Indicates that the image is a PNG image.</td>
</tr>
<tr>
<td><strong>s</strong> BI_RGB</td>
<td>An uncompressed format.</td>
</tr>
<tr>
<td><strong>s</strong> BI_RLE4</td>
<td>An RLE format for bitmaps with 4 bpp. The compression format is a 2-byte format consisting of a count byte followed by two word-length color indexes.</td>
</tr>
<tr>
<td><strong>s</strong> BI_RLE8</td>
<td>A run-length encoded (RLE) format for bitmaps with 8 bpp. The compression format is a 2-byte format consisting of a count byte followed by a byte containing a color index.</td>
</tr>
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<td>Symbol</td>
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<tr>
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<td>FI16_565_RED_MASK</td>
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<td></td>
<td>FREE_IMAGE_MDMODELS</td>
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See Also

Reference
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
The `Freimage` type exposes the following members.

## Methods

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<td><code>AcquireMemory</code></td>
<td>Provides direct buffer access to a memory stream.</td>
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<tr>
<td><code>AdjustBrightness</code></td>
<td>Adjusts the brightness of a 8-, 24- or 32-bit image by a certain amount.</td>
</tr>
<tr>
<td><code>AdjustColors</code></td>
<td>Adjusts an image's brightness, contrast and gamma as well as it may optionally invert the image within a single operation.</td>
</tr>
<tr>
<td><code>AdjustContrast</code></td>
<td>Adjusts the contrast of a 8-, 24- or 32-bit image by a certain amount.</td>
</tr>
<tr>
<td><code>AdjustCurve</code></td>
<td>Performs a histogram transformation on a 8-, 24- or 32-bit image.</td>
</tr>
<tr>
<td><code>AdjustGamma</code></td>
<td>Performs gamma correction on a 8-, 24- or 32-bit image.</td>
</tr>
<tr>
<td><code>Allocate(Int32, Int32, Int32)</code></td>
<td>Creates a new bitmap in memory.</td>
</tr>
<tr>
<td><code>Allocate(Int32, Int32, Int32, UInt32, UInt32, UInt32)</code></td>
<td>Creates a new image of the specified width, height and bit depth and optionally...</td>
</tr>
<tr>
<td><code>AllocateEx(Int32, Int32, Int32, NullableRGBQUAD, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)</code></td>
<td>Allocates a new image of the specified width, height and options...</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------------------------------------------------------------</td>
</tr>
<tr>
<td>AllocateEx(Int32, Int32, Int32, NullableRGBQUAD, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)</td>
<td>Allocates a new image of the specified width, height and bit depth and optionally specified color. See remarks for further details.</td>
</tr>
<tr>
<td>AllocateExTT(FREE_IMAGE_TYPE, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)</td>
<td>Allocates a new image of the specified type, width, height and bit depth and optionally specified color. See remarks for further details.</td>
</tr>
<tr>
<td>AllocateExTT(FREE_IMAGE_TYPE, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)</td>
<td>Allocates a new image of the specified type, width, height and bit depth and optionally specified color. See remarks for further details.</td>
</tr>
<tr>
<td>AppendPage</td>
<td>Appends a new page to the end of the bitmap.</td>
</tr>
<tr>
<td>ApplyColorMapping</td>
<td>Applies color mapping for one or several colors on a 1-, 4- or 8-bit palletized or a 16-, 24- or 32-bit high color image.</td>
</tr>
<tr>
<td>ApplyPaletteIndexMapping</td>
<td>Applies palette index mapping for one or several indices 8-bit palletized image.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Clone</td>
<td>Makes an exact reproduction of an existing bitmap, including metadata and attached profile if any.</td>
</tr>
<tr>
<td>CloneMetadata</td>
<td>Copies the metadata of a FreeImage bitmap to another.</td>
</tr>
<tr>
<td>CloneMetadataEx</td>
<td>Copies metadata from one FreeImage bitmap to another.</td>
</tr>
<tr>
<td>CloneTag</td>
<td>Creates and returns a copy of a FITAG object.</td>
</tr>
<tr>
<td>CloseMemory</td>
<td>Closes and frees a memory stream.</td>
</tr>
<tr>
<td>CloseMultiBitmap</td>
<td>Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it.</td>
</tr>
<tr>
<td>CloseMultiBitmapEx(FIMULTIBITMAP)</td>
<td>Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it.</td>
</tr>
<tr>
<td>CloseMultiBitmapEx(FIMULTIBITMAP, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it. The handle will be reset to null.</td>
</tr>
<tr>
<td>ColorQuantize</td>
<td>Quantizes a high-color 24-bit bitmap to an 8-bit palette color bitmap.</td>
</tr>
<tr>
<td>ColorQuantizeEx(FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, RGBQUAD, Boolean)</td>
<td>ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) function that provides additional options used.</td>
</tr>
</tbody>
</table>
to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a provided palette.

ColorQuantizeEx(FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, RGBQUAD, Int32)  
ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using partial or full provided palette.

Compare

CompareMemory(IntPtr, IntPtr, Int64)  
CompareMemory(IntPtr, IntPtr, UInt32)  
CompareMemory(Void*, Void*, Int64)  
CompareMemory(Void*, Void*, UInt32)  
Composite(FIBITMAP, Boolean, RGBQUAD, FIBITMAP)  
This function composite a transparent foreground image against a single background color or against a background image.
FIBITMAP)

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH)

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_DITHER)

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_QUANTIZE)

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Boolean)

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Byte)

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_DITHER, Boolean)

ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_QUANTIZE, Boolean)
ConvertColorDepth(FIBITMAP,
FREE_IMAGE_COLOR_DEPTH, Byte, Boolean)

Converts a FreeImage bitmap from one color depth to another. If the conversion fails, the original FreeImage bitmap is returned.

ConvertFromRawBits(Byte, Int32, Int32, Int32,
UInt32, UInt32, UInt32, UInt32, Boolean)

ConvertFromRawBits(IntPtr,
FREE_IMAGE_TYPE, Int32, Int32, Int32,
UInt32, UInt32, UInt32, UInt32, Boolean)

ConvertFromRawBits(Byte, Int32, Int32, Int32,
UInt32, UInt32, UInt32, UInt32, Boolean)

ConvertFromRawBits(IntPtr, Int32, Int32, Int32,
UInt32, UInt32, UInt32, UInt32, Boolean)

ConvertTo16Bits555

Converts a bitmap to 16 bits, where each pixel has a color pattern of bits red, 5 bits green and 5 bits blue. One bit in each pixel is unused.

ConvertTo16Bits565

Converts a bitmap to 16 bits, where each pixel has a color pattern of bits red, 6 bits green and 5 bits blue.

ConvertTo24Bits

Converts a bitmap to 24 bits. A clone of the input bitmap is returned for 24-bit bitmaps.

ConvertTo32Bits

Converts a bitmap to 32 bits. A clone of the input bitmap is returned for 32-bit bitmaps.

ConvertTo4Bits

Converts a bitmap with 24 or 32 bits to 4 bits.
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<tr>
<th>Function</th>
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<tbody>
<tr>
<td>ConvertTo8Bits</td>
<td>Converts a bitmap to 8 bits. If the bitmap was a high-color bitmap (16, 24 or 32-bit) monochrome or greyscale bitmap (1 or 4-bit), the end result will be a greyscale bitmap, otherwise (1 or 4-bit palletised bitmaps) it will be a palletised bitmap.</td>
</tr>
<tr>
<td>ConvertToGreyscale</td>
<td>Converts a bitmap to a 8-bit greyscale image with a linear ramp.</td>
</tr>
<tr>
<td>ConvertToRawBits(Byte, FIBITMAP, Int32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.</td>
</tr>
<tr>
<td>ConvertToRawBits(IntPtr, FIBITMAP, Int32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.</td>
</tr>
<tr>
<td>ConvertToRGBF</td>
<td>Converts a 24- or 32-bit RGB(A) standard image or a 48-bit RGB image to a FIT_RGBF type image.</td>
</tr>
<tr>
<td>ConvertToStandardType</td>
<td>Converts a non-standard image whose color type is FIC_MINISBLACK bit greyscale image.</td>
</tr>
<tr>
<td>ConvertToType</td>
<td>Converts an image of any type to type dst_type.</td>
</tr>
<tr>
<td>Copy</td>
<td>Copy a sub part of the current dib.</td>
</tr>
</tbody>
</table>
CopyMemory(Array, Array, Int32)  Copies the content of one array into another.

CopyMemory(Array, Array, Int64)  Copies the content of one array into another.

CopyMemory(Array, IntPtr, Int32)  Copies a block of memory into an array.

CopyMemory(Array, IntPtr, Int64)  Copies a block of memory into an array.

CopyMemory(Array, Void*, Int32)  Copies a block of memory into an array.

CopyMemory(Array, Void*, Int64)  Copies a block of memory into an array.

CopyMemory(Byte*, Byte*, Int32)  Copies a block of memory from one location to another.

CopyMemory(Byte*, Byte*, Int64)  Copies a block of memory from one location to another.

CopyMemory(IntPtr, Array, Int32)  Copies the content of an array to a memory location.

CopyMemory(IntPtr, Array, Int64)  Copies the content of an array to a memory location.

CopyMemory(IntPtr, IntPtr, Int32)  Copies a block of memory from one location to another.

CopyMemory(IntPtr, IntPtr, Int64)  Copies a block of memory from one location to another.

CopyMemory(Void*, Array, Int32)  Copies the content of an array to a memory location.
<table>
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<tr>
<th>Function</th>
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<tr>
<td>CopyMemory(Void*, Array, Int64)</td>
<td>Copies the content of an array to a memory location.</td>
</tr>
<tr>
<td>CopyMemory(Void*, Void*, Int32)</td>
<td>Copies a block of memory from one location to another.</td>
</tr>
<tr>
<td>CopyMemory(Void*, Void*, Int64)</td>
<td>Copies a block of memory from one location to another.</td>
</tr>
<tr>
<td>CreateFromBitmap</td>
<td>Converts a .NET Bitmap.</td>
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<td>CreateFromHbitmap</td>
<td>Creates a FreeImage DIB from a Device Context/Compatible Bitmap.</td>
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<tr>
<td>CreateICCProfile</td>
<td>Creates a new ICC profile from ICC profile data previously read from a file management system. The profile data is attached to the bitmap.</td>
</tr>
<tr>
<td>CreateICCProfileEx(FIBITMAP, Byte)</td>
<td>Creates a new ICC Profile for a FreeImage bitmap.</td>
</tr>
<tr>
<td>CreateICCProfileEx(FIBITMAP, Byte, Int32)</td>
<td>Creates a new ICC Profile for a FreeImage bitmap.</td>
</tr>
<tr>
<td>CreateTag</td>
<td>Allocates an object which must be destroyed with a call to DeleteTag(FITAG) in use.</td>
</tr>
<tr>
<td>CreateView</td>
<td>Creates a dynamic read/write view into a FreeImage bitmap.</td>
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<tr>
<td>DeletePage</td>
<td>Deletes the page on the given position.</td>
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<tr>
<td>DeleteTag</td>
<td>Deletes a previously allocated tag.</td>
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<tr>
<td>Function</td>
<td>Description</td>
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</tr>
<tr>
<td>DestroyICCProfile</td>
<td>This function destroys an FIICCProfile by CreateICCProfile(FIBITMAP, Byte, Int32) will contain no profile information. This function should be called to ensure that a stored bitmap will not contain any profile information.</td>
</tr>
<tr>
<td>Dither</td>
<td>Converts a bitmap to 1-bit monochrome bitmap using a dithering algorithm. Bitmaps, the function clones the input bitmap and builds a monochrome palette.</td>
</tr>
<tr>
<td>EnlargeCanvasT</td>
<td>Enlarges or shrinks the FreeImage bitmap selectively per side and fills newly added areas with the background color. See remarks for further details.</td>
</tr>
<tr>
<td>FIFSupportsExportBPP</td>
<td>Checks if a plugin can save bitmaps in the desired bit depth.</td>
</tr>
<tr>
<td>FIFSupportsExportType</td>
<td>Checks if a plugin can save a bitmap in the desired data type.</td>
</tr>
<tr>
<td>FIFSupportsICCProfiles</td>
<td>Checks if a plugin can load or save an ICC profile.</td>
</tr>
<tr>
<td>FIFSupportsNoPixels</td>
<td>Checks if a plugin can load only the image header.</td>
</tr>
<tr>
<td>FIFSupportsReading</td>
<td>Checks if a plugin can load bitmaps.</td>
</tr>
<tr>
<td>FIFSupportsWriting</td>
<td>Checks if a plugin can save bitmaps.</td>
</tr>
</tbody>
</table>
FillBackgroundColorT

Sets all the pixels of the specified image to the color provided through the color parameter. See remarks for further details.

FindCloseMetadata

Closes the specified metadata search handle and releases associated resources.

FindFirstMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, FITAG)

Provides information about the first instance of a tag that matches the metadata model.

FindFirstMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, MetadataTag)

Provides information about the first instance of a tag that matches the metadata model.

FindNextMetadata(FIMETADATA, FITAG)

Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata and then alters the tag object contents accordingly.

FindNextMetadata(FIMETADATA, MetadataTag)

Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata and then alters the tag object contents accordingly.

FlipHorizontal

Flip the input dib horizontally along the vertical axis.

FlipVertical

Flip the input dib vertically along the horizontal axis.

FreeHbitmap

Frees a bitmap handle.

GetAdjustColorsLookupTable

Creates a lookup table to be used with AdjustCurve(FIBITMAP,
<table>
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<tbody>
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<td>Returns the file background color of an image.</td>
</tr>
<tr>
<td>GetBitmap</td>
<td>Converts a FreeImage bitmap to a .NET Bitmap.</td>
</tr>
<tr>
<td>GetBitmapForDevice</td>
<td>Returns an HBITMAP created by the CreateDIBitmap() function.</td>
</tr>
<tr>
<td>GetBits</td>
<td>Returns a pointer to the data-bits of the bitmap.</td>
</tr>
<tr>
<td>GetBlueMask</td>
<td>Returns a bit pattern describing the blue color component of a pixel in a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetBPP</td>
<td>Returns the size of one pixel in the bitmap in bits.</td>
</tr>
<tr>
<td>GetChannel</td>
<td>Retrieves the red, green, blue or alpha channel of a 24- or 32-bit image.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetColorsUsed</td>
<td>Returns the number of colors used in a bitmap.</td>
</tr>
<tr>
<td>GetColorType</td>
<td>Investigates the color type of the bitmap by reading its pixel bits and analyzing them.</td>
</tr>
<tr>
<td>GetComplexChannel</td>
<td>Retrieves the real part, imaginary part, magnitude, or phase of a complex image.</td>
</tr>
<tr>
<td>GetCopyrightMessage</td>
<td>Returns a string containing a standard copyright message.</td>
</tr>
<tr>
<td>GetDIBSize</td>
<td>Returns the size of the DIB-element of a FIBITMAP in memory.</td>
</tr>
<tr>
<td>GetDotsPerMeterX</td>
<td>Returns the horizontal resolution, in pixels-per-meter, of the target device for the bitmap.</td>
</tr>
<tr>
<td>GetDotsPerMeterY</td>
<td>Returns the vertical resolution, in pixels-per-meter, of the target device for the bitmap.</td>
</tr>
<tr>
<td>GetFIFCount</td>
<td>Retrieves the number of FREE_IMAGE_FORMAT identifiers being currently registered.</td>
</tr>
<tr>
<td>GetFIFDescription</td>
<td>Returns a descriptive string that describes the bitmap formats the given plugin can read and/or write.</td>
</tr>
<tr>
<td>GetFIFExtensionList</td>
<td>Returns a comma-delimited file extension list describing the bitmap formats the given plugin can read and/or write.</td>
</tr>
<tr>
<td>GetFIFFromFilename</td>
<td>This function takes a filename or a</td>
</tr>
</tbody>
</table>

...
GetFFFromFormat

Returns a FreeImage extension that can open an extension in the form of a FREE_IMAGE_FORMAT file-extension.

GetFFFromMime

Returns an identifier from a MIME content type string (MIME stands for Multipurpose Internet Mail Extension).

GetFIFMimeType

Given an identifier, returns a MIME content type string (MIME stands for Multipurpose Internet Mail Extension).

GetFIFRegExpr

Returns a regular expression string that can be used by a regular expression engine to identify the bitmap. This function is not yet implemented.

GetFileType

Orders FreeImage to analyze the bitmap signature.

GetFileTypeFromHandle

Uses the described bitmap management functions to identify the bitmap type.

GetFileTypeFromMemory

Uses a memory handle to identify the bitmap type.

GetFileTypeFromStream

Orders FreeImage to analyze the bitmap signature.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetFormat</td>
<td>Returns FREE_IMAGE_FORMAT specified when loading.</td>
</tr>
<tr>
<td>GetFormatFromFIF</td>
<td>Returns the string that was used to register a plugin from the system.</td>
</tr>
<tr>
<td>GetFormatParameters</td>
<td>Retrieves all parameters needed to create a new FreeImage bitmap from the format of a .NET bitmap.</td>
</tr>
<tr>
<td>GetGreenMask</td>
<td>Returns a bit pattern describing the green color component of a pixel in a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetHbitmap</td>
<td>Retrieves an hBitmap for a FreeImage bitmap. FreeHbitmap must be called to free the handle.</td>
</tr>
<tr>
<td>GetHeight</td>
<td>Returns the height of the bitmap in pixel units.</td>
</tr>
<tr>
<td>GetHistogram</td>
<td>Computes the image histogram.</td>
</tr>
<tr>
<td>GetICCProfile</td>
<td>Retrieves a pointer to the FIICCPROFILE. This function can also be called safely, when the original format does not support profiles.</td>
</tr>
<tr>
<td>GetICCProfileEx</td>
<td>Retrieves the bitmap.</td>
</tr>
<tr>
<td>GetICCProfileEx</td>
<td>Retrieves the bitmap.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetImageComment</td>
<td>Returns the comment of a JPEG, PNG or GIF image.</td>
</tr>
<tr>
<td>GetImageType</td>
<td>Retrieves the type of the bitmap.</td>
</tr>
<tr>
<td>GetInfo</td>
<td>Alias for FreeImage_GetInfoHeader that returns a pointer to a BITMAPINFOHEADER.</td>
</tr>
<tr>
<td>GetInfoEx</td>
<td>Returns the structure of a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetInfoHeader</td>
<td>Returns a BITMAPINFOHEADER element in a FBITMAP.</td>
</tr>
<tr>
<td>GetInfoHeaderEx</td>
<td>Returns a structure of a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetLine</td>
<td>Returns the width of the bitmap in bytes.</td>
</tr>
<tr>
<td>GetLockedPageCount</td>
<td>Retrieves the number of pages that are locked in a multi-paged bitmap.</td>
</tr>
<tr>
<td>GetLockedPageNumbers</td>
<td>Returns an array of page-numbers that are currently locked in memory.</td>
</tr>
<tr>
<td>GetLockedPages</td>
<td>Retrieves a list locked pages of a multi-paged bitmap.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, FITAG)</td>
<td>Retrieve metadata attached to a dib.</td>
</tr>
<tr>
<td>GetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, MetadataTag)</td>
<td>Retrieve metadata attached to a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetMetadataCount</td>
<td>Returns the number of tags contained in the model metadata attached to the input dib.</td>
</tr>
<tr>
<td>GetNativeVersion</td>
<td>Returns the version of the native FreeImage library.</td>
</tr>
<tr>
<td>GetPageCount</td>
<td>Returns the number of pages currently available in the multi-paged bitmap.</td>
</tr>
<tr>
<td>GetPalette</td>
<td>Returns a pointer to the bitmap's palette.</td>
</tr>
<tr>
<td>GetPaletteEx</td>
<td>Returns a structure that represents the palette of a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetPitch</td>
<td>Returns the width of the bitmap in bytes, rounded to the next 32-bit boundary, stride or scan width.</td>
</tr>
<tr>
<td>GetPixelColor</td>
<td>Get the pixel color of a 16-, 24- or 32-bit image at position (x, y), including range check (slow access).</td>
</tr>
<tr>
<td>GetPixelFormat</td>
<td>Returns the pixelformat of the bitmap.</td>
</tr>
<tr>
<td>GetPixelIndex</td>
<td>Get the pixel index of a palettized image at position (x, y), including range check (slow access).</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>GetPrimaryExtensionFromFIF</td>
<td>This function returns the primary (main or most commonly used?) extension of a certain fif. This is done by returning the first of all possible extensions GetFIFExtensionList(). It is assumed that the plugin returns the extensions in ordered form.</td>
</tr>
<tr>
<td>GetRedMask</td>
<td>Returns a bit pattern describing the red color component of a pixel in a FreeImage bitmap.</td>
</tr>
<tr>
<td>GetResolutionX</td>
<td>Retrieves a DIB's resolution in X-direction measured in 'dots per inch' (DPI) and not in</td>
</tr>
<tr>
<td>GetResolutionY</td>
<td>Retrieves a DIB's resolution in Y-direction measured in 'dots per inch' (DPI) and not in</td>
</tr>
<tr>
<td>GetScanLine</td>
<td>Returns a pointer to the start of the given scanline in the bitmap's data-bits.</td>
</tr>
<tr>
<td>GetTagCount</td>
<td>Returns the number of components in the tag (in tag type units).</td>
</tr>
<tr>
<td>GetTagDescription</td>
<td>Returns the tag description.</td>
</tr>
<tr>
<td>GetTagID</td>
<td>Returns the tag ID.</td>
</tr>
<tr>
<td>GetTagKey</td>
<td>Returns the tag field name (unique inside a metadata model).</td>
</tr>
<tr>
<td>GetTagLength</td>
<td>Returns the length of the tag value in bytes.</td>
</tr>
<tr>
<td>GetTagType</td>
<td>Returns the tag data type.</td>
</tr>
<tr>
<td></td>
<td>Function</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td>GetTagValue</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td>GetTransparencyCount</td>
</tr>
<tr>
<td></td>
<td>GetTransparencyTable</td>
</tr>
<tr>
<td></td>
<td>GetTransparencyTableEx</td>
</tr>
<tr>
<td></td>
<td>GetTransparentIndex</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GetTypeParameters</td>
</tr>
</tbody>
</table>
|   | GetUniqueColors          | This function returns the number of unique colors actually used by the specified 1-, 4-, 8-, 16-, 24- or 32-bit image. This might be different from what function FreeImage_GetColorsUsed() returns, which actually returns the palette size for palletised images. This function works for only.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetVersion</td>
<td>Returns a string containing the current version of the library.</td>
</tr>
<tr>
<td>GetWidth</td>
<td>Returns the width of the bitmap in pixel units.</td>
</tr>
<tr>
<td>GetWrapperVersion</td>
<td>Returns the internal version of this FreeImage.NET wrapper.</td>
</tr>
<tr>
<td>HasBackgroundColor</td>
<td>Returns whether the bitmap has a file background color.</td>
</tr>
<tr>
<td>InsertPage</td>
<td>Inserts a new page before the given position in the bitmap.</td>
</tr>
<tr>
<td>Invert</td>
<td>Inverts each pixel data.</td>
</tr>
<tr>
<td>IsAvailable</td>
<td>Returns a value indicating if the FreeImage library is available or not.</td>
</tr>
<tr>
<td>See remarks for further details.</td>
<td></td>
</tr>
<tr>
<td>IsExtensionValidForFIF(FREE_IMAGE_FORMAT, String)</td>
<td>Checks if an extension is valid for a certain format.</td>
</tr>
<tr>
<td>IsExtensionValidForFIF(FREE_IMAGE_FORMAT, String, StringComparison)</td>
<td>Checks if an extension is valid for a certain format.</td>
</tr>
<tr>
<td>IsFilenameValidForFIF(FREE_IMAGE_FORMAT, String)</td>
<td>Checks if a filename is valid for a certain format.</td>
</tr>
<tr>
<td>IsFilenameValidForFIF(FREE_IMAGE_FORMAT, String, StringComparison)</td>
<td>Checks if a filename is valid for a certain format.</td>
</tr>
<tr>
<td>IsGreyscaleImage</td>
<td>Returns whether the image is a greyscale image or not.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>IsLittleEndian</td>
<td>Returns whether the platform is using Little Endian.</td>
</tr>
<tr>
<td>IsPluginEnabled</td>
<td>Retrieves the state of a plugin.</td>
</tr>
<tr>
<td>IsRGB555</td>
<td>Verifies whether the FreeImage bitmap is 16bit 555.</td>
</tr>
<tr>
<td>IsRGB565</td>
<td>Verifies whether the FreeImage bitmap is 16bit 565.</td>
</tr>
<tr>
<td>IsTransparent</td>
<td>Returns whether the transparency table is enabled.</td>
</tr>
<tr>
<td>JPEGCrop</td>
<td>Performs a lossless crop on a JPEG file.</td>
</tr>
<tr>
<td>JPEGTransform</td>
<td>Performs a lossless rotation or flipping on a JPEG file.</td>
</tr>
<tr>
<td>Load</td>
<td>Decodes a bitmap, allocates memory for it and returns it as a FIBITMAP.</td>
</tr>
<tr>
<td>LoadBitmap</td>
<td>Loads a .NET bitmap.</td>
</tr>
<tr>
<td>LoadEx(String)</td>
<td>Loads a FreeImage bitmap. Will be loaded with default loading flags.</td>
</tr>
<tr>
<td>LoadEx(String, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreeImage bitmap. The file format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN. The file will be loaded with default loading flags.</td>
</tr>
<tr>
<td>LoadEx(String, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Loads a FreeImage bitmap.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>LoadEx(String, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreeImage bitmap. The loading format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN. Load flags can be provided by the flags parameter.</td>
</tr>
<tr>
<td>LoadFromHandle</td>
<td>Loads a bitmap from an arbitrary source.</td>
</tr>
<tr>
<td>LoadFromMemory</td>
<td>Decodes a bitmap from a stream, allocates memory for it and returns it as a FIBITMAP.</td>
</tr>
<tr>
<td>LoadFromStream(Stream)</td>
<td>Loads a FreeImage bitmap. Stream must be set to the correct position before calling LoadFromStream.</td>
</tr>
<tr>
<td>LoadFromStream(Stream, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreeImage bitmap. The loading format is FIF_UNKNOWN. Stream must be set to the correct position before calling LoadFromStream.</td>
</tr>
<tr>
<td>LoadFromStream(Stream, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Loads a FreeImage bitmap. Stream must be set to the correct position before calling LoadFromStream.</td>
</tr>
<tr>
<td>LoadFromStream(Stream, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreeImage bitmap. The loading format is FIF_UNKNOWN. Stream must be set to the correct position before calling LoadFromStream.</td>
</tr>
</tbody>
</table>
format is being analysed. The format must be set to the correct position before calling LoadFromStream.

- **LoadMultiBitmapFromMemory**
  - Open a multi-page bitmap from a memory stream.

- **LoadMultiBitmapFromStream**
  - Loads a FreeImage multi-paged bitmap from a stream and returns the FreeImage memory stream used as temporary buffer.
    - Append FIBITMAP
    - InsertPage FIBITMAP
    - MovePage FIBITMAP
    - DeletePage FIBITMAP

- **LockPage**
  - Locks a page in memory for editing.

- **LookupSVGColor**
  - Converts a SVG color name into a corresponding RGB value.

- **LookupX11Color**
  - Converts an X11 color name into a corresponding RGB value.

- **MakeThumbnail**
  - Creates a thumbnail from a greyscale or RGB(A) image, keeping aspect ratio.

- **MoveMemory(IntPtr, IntPtr, Int64)**
  - Moves a block of memory from one location to another.

- **MoveMemory(IntPtr, IntPtr, UInt32)**
  - Moves a block of memory from one location to another.

- **MoveMemory(Void*, Void*, Int64)**
  - Moves a block of memory from one location to another.
<table>
<thead>
<tr>
<th>Location</th>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MoveMemory(Void*, Void*, UInt32)</td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td></td>
<td>MovePage</td>
<td>Moves the source page to the position of the target page.</td>
</tr>
<tr>
<td></td>
<td>MultigridPoissonSolver</td>
<td>Solves a Poisson equation, remaps result pixels to [0..1], and returns the solution.</td>
</tr>
<tr>
<td></td>
<td>OpenMemory</td>
<td>Opens a memory stream.</td>
</tr>
<tr>
<td></td>
<td>OpenMultiBitmap</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td></td>
<td>OpenMultiBitmapEx(String)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td></td>
<td>OpenMultiBitmapEx(String, Boolean)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td></td>
<td>OpenMultiBitmapEx(String, Boolean, Boolean)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td></td>
<td>OpenMultiBitmapEx(String, Boolean, Boolean, Boolean)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td></td>
<td>OpenMultiBitmapEx(String, FREE_IMAGE_FORMAT, Boolean, Boolean, Boolean)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td></td>
<td>OpenMultiBitmapEx(String, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, Boolean, Boolean, Boolean)</td>
<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
</tbody>
</table>

Note: If no plugin can read the file, the format remains FIF_UNKNOWN. In such cases, the function may still load the bitmap.
Boolean, Boolean) is being read. If no plugin can read the file, format remains FIF_UNKNOWN. Load flags can be provided by the flags parameter.

- **OpenMultiBitmapFromHandle**: Loads a FreeImage multi-pages bitmap from the specified handle using the specified functions. Flags can be provided by the flags parameter.

- **OpenMultiBitmapFromStream(Stream)**: Loads a FreeImage multi-paged bitmap.

- **OpenMultiBitmapFromStream(Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)**: Loads a FreeImage multi-paged bitmap. If no plugin can read the file, format remains FIF_UNKNOWN. Load flags can be provided by the flags parameter.

- **OutputMessageProc**: Calls the set error message function in FreeImage.

- **Paste**: Alpha blend or combine a sub part image with the current dib image. The bit depth of the dst bitmap must be greater than or equal to the bit depth of the src.

- **PreMultiplyWithAlpha**: Applies the alpha value of each pixel to its color components. The alpha value stays unchanged with 32-bits color depth.

- **ReadMemory**: Reads data from a memory stream.
<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RegisterExternalPlugin</td>
<td>Registers a new plugin to be used in FreeImage. The plugin is residing in a DLL. The Init function must be called “Init” and must use the stdcall calling convention.</td>
</tr>
<tr>
<td>RegisterLocalPlugin</td>
<td>Registers a new plugin to be used in FreeImage.</td>
</tr>
<tr>
<td>Rescale</td>
<td>Performs resampling (or scaling, zooming) of a greyscale or RGB(A) image to the desired destination width and height.</td>
</tr>
<tr>
<td>RescaleRect</td>
<td></td>
</tr>
<tr>
<td>Rotate(FIBITMAP, Double)</td>
<td>This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. Rotation is limited to integer multiple of 90°. Some null values are returned for other values or in case the rotation fails.</td>
</tr>
<tr>
<td>RotateT(FIBITMAP, Double, NullableT)</td>
<td></td>
</tr>
<tr>
<td>Rotate4bit</td>
<td>Rotates bitmap. 90, 180 or 360 degrees are returned for rotations that are multiples of 90°. Alternatively, a clone is returned.</td>
</tr>
<tr>
<td>RotateClassic</td>
<td>Obsolete. This function rotates a 1-, 8-bit greyscale image. The rotation is limited to integer multiple of 90°. Null values are returned for other values or in case the rotation fails.</td>
</tr>
</tbody>
</table>
RotateEx

This function performs a rotation and/or translation of an 8-bit greyscale, 24- or 32-bit image, using a 3rd order (cubic) B-Spline.

Save

Saves a previously loaded FIBITMAP to a file.

SaveBitmap(Bitmap, String)

Saves a .NET bitmap to a file.

SaveBitmap(Bitmap, String, FREE_IMAGE_SAVE_FLAGS)

Saves a .NET bitmap to a file.

SaveEx(FIBITMAP, String)

Saves a previously loaded Freelma obj to a file. The format is taken off the filename. If a suitable format was found false will be returned.

SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT)

Saves a previously loaded Freelma obj to a file. The format is taken off the filename. If a suitable format was found false will be returned.

SaveEx(FIBITMAP, String, FREE_IMAGE_SAVE_FLAGS)
SaveEx(FIBITMAP, String, Boolean)

Saves a previously loaded FreeImage bitmap to a file.

SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, Boolean)

Saves a previously loaded FreeImage bitmap to a file.

SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves a previously loaded FreeImage bitmap to a file.

SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, Boolean)

Saves a previously loaded FreeImage bitmap to a file.

SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, FREE_IMAGE_COLOR_DEPTH, Boolean)

Saves a previously loaded FreeImage bitmap to a file.
Save flags can be provided by the flags parameter. Depth can be set to `FICD_AUTO` if available.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SaveToHandle</strong></td>
<td>Saves a bitmap to an arbitrary source.</td>
</tr>
<tr>
<td><strong>SaveToMemory</strong></td>
<td>Saves a previously loaded <code>FIBITMAP</code> to a stream.</td>
</tr>
<tr>
<td><strong>SaveToStream</strong> <code>(FIBITMAP, Stream, FREE_IMAGE_FORMAT)</code></td>
<td>Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling <code>SaveToStream</code>.</td>
</tr>
<tr>
<td><strong>SaveToStream</strong> <code>(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)</code></td>
<td>Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling <code>SaveToStream</code>.</td>
</tr>
<tr>
<td><strong>SaveToStream</strong> <code>(FIBITMAP, Stream, FREE_IMAGE_FORMAT, Boolean)</code></td>
<td>Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling <code>SaveToStream</code>.</td>
</tr>
<tr>
<td><strong>SaveToStream</strong> <code>(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, FREE_IMAGE_COLOR_DEPTH)</code></td>
<td>Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling <code>SaveToStream</code>.</td>
</tr>
<tr>
<td><strong>SaveToStream</strong> <code>(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, Boolean)</code></td>
<td>Saves a previously loaded FreeImage bitmap to a stream. Stream must be set to the correct position before calling <code>SaveToStream</code>.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><img src="image" alt="SaveToStream" /></td>
<td>Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.</td>
</tr>
<tr>
<td><img src="image" alt="SeekMemory" /></td>
<td>Moves the memory handle to a specified location.</td>
</tr>
<tr>
<td><img src="image" alt="SetBackgroundColor" /></td>
<td>Sets the file background color of an image. When saving an image to PNG, this background color is transparently saved to the PNG file. When the bkcolor parameter is null, the background color is removed from the image.</td>
</tr>
<tr>
<td><img src="image" alt="SetChannel" /></td>
<td>Inserts a 8-bit dib into a 24- or 32-bit image. Both images must have the same width and height.</td>
</tr>
<tr>
<td><img src="image" alt="SetComplexChannel" /></td>
<td>Sets the real or imaginary part of a complex image. Both images must have the same width and height.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------</td>
</tr>
<tr>
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monochrome bitmap using a threshold function.
8-bit greyscale brightness levels set to zero for input bitmaps.
Input bitmaps cloned for the monochrome palette.

Converts a High Dynamic Range image to a 24-bit RGB image using a global operator based on logarithmic compression of luminance values, imitating the human response to light.

Apply the Gradient Domain High Dynamic Range Compression to an RGBF image and convert to 24-bit RGB.

Converts a High Dynamic Range image to a 24-bit RGB image using a global operator inspired by photoreceptor physiology of the human visual system.

Converts a High Dynamic Range image (48-bit RGB or 96-bit RGBF) to a 24-bit RGB image, suitable for display.

Deletes a previously loaded FIBITMAP from memory.

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See Also

Reference
- FreelImage Class
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAcquireMemory Method

Provides a direct buffer access to a memory stream.

**Namespace: FreeImageAPI**
**Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)**

### Syntax

```csharp
public static bool AcquireMemory(
    FIMEMORY stream,
    ref IntPtr data,
    ref uint size_in_bytes
)
```

### Parameters

- **stream**
  - Type: `FreeImageAPIFIMEMORY`
  - The target memory stream.

- **data**
  - Type: `SystemIntPtr`
  - Pointer to the data in memory.

- **size_in_bytes**
  - Type: `SystemUInt32`
  - Size of the data in bytes.

### Return Value

- Type: `Boolean`
  - Returns true on success, false on failure.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAdjustBrightness Method

Adjusts the brightness of a 8-, 24- or 32-bit image by a certain amount.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool AdjustBrightness(  
    FIBITMAP dib,  
    double percentage
)
```

### Parameters

- **dib**
  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **percentage**
  
  Type: SystemDouble  
  A value 0 means no change, less than 0 will make the image darker and greater than 0 will make the image brighter.

### Return Value

- Type: Boolean  
  Returns true on success, false on failure.

### See Also

- Reference
FreeImageAdjustColors Method

Adjusts an image's brightness, contrast and gamma as well as it may optionally invert the image within a single operation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool AdjustColors(
    FIBITMAP dib,
    double brightness,
    double contrast,
    double gamma,
    bool invert
)
```

**Parameters**

*dib*  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

*brightness*  
Type: SystemDouble  
Percentage brightness value where -100 <= brightness <= 100.  
A value of 0 means no change, less than 0 will make the image darker and greater than 0 will make the image brighter.

*contrast*  
Type: SystemDouble  
Percentage contrast value where -100 <= contrast <= 100.
A value of 0 means no change, less than 0 will decrease the contrast and greater than 0 will increase the contrast of the image.

**gamma**
Type: **SystemDouble**
Gamma value to be used for gamma correction.
A value of 1.0 leaves the image alone, less than one darkens it, and greater than one lightens it.

This parameter must not be zero or smaller than zero. If so, it will be ignored and no gamma correction will be performed on the image.

**invert**
Type: **SystemBoolean**
If set to true, the image will be inverted.

Return Value
Type: **Boolean**
Returns true on success, false on failure.

Remarks
This function adjusts an image's brightness, contrast and gamma as well as it may optionally invert the image within a single operation. If more than one of these image display properties need to be adjusted, using this function should be preferred over calling each adjustment function separately. That's particularly true for huge images or if performance is an issue.

This function relies on **GetAdjustColorsLookupTable(Byte, Double, Double, Double, Boolean)**, which creates a single lookup table, that combines all adjustment operations requested.

Furthermore, the lookup table created by **GetAdjustColorsLookupTable(Byte, Double, Double, Double, Boolean)** does not depend on the order, in which each single adjustment operation is performed. Due to rounding and byte casting issues, it actually matters in which order individual adjustment operations are performed. Both of the following snippets most likely produce different results:
Better and even faster would be snippet 3:

```csharp
// snippet 3: AdjustColors(dib, 50.0, 15.0, 1.0, false);
```

## See Also

Reference

- FreImage Class
- FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage

Help improve this Documentation: Join the Project
FreeImageAdjustContrast Method

Adjusts the contrast of a 8-, 24- or 32-bit image by a certain amount.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool AdjustContrast(
    FIBITMAP dib,
    double percentage
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **percentage**  
  Type: SystemDouble  
  A value 0 means no change, less than 0 will decrease the contrast and greater than 0 will increase the contrast of the image.

### Return Value

Type: Boolean  
Returns true on success, false on failure.

### See Also
Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAdjustCurve Method

Performs an histogram transformation on a 8-, 24- or 32-bit image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool AdjustCurve(
    FIBITMAP dib,
    byte[] lookUpTable,
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

### Parameters

- **dib**
  Type: **FreeImageAPIFIBITMAP**  
  Handle to a FreeImage bitmap.

- **lookUpTable**
  Type: **SystemByte**  
  The lookup table. It's size is assumed to be 256 in length.

- **channel**
  Type: **FreeImageAPIFREE_IMAGE_COLOR_CHANNEL**  
  The color channel to be transformed.

### Return Value

Type: **Boolean**  
Returns true on success, false on failure.
See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAdjustGamma Method

Performs gamma correction on a 8-, 24- or 32-bit image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static bool AdjustGamma(
    FIBITMAP dib,
    double gamma
)
```

### Parameters

**dib**
- Type: FreeImageAPI FIBITMAP
- Handle to a FreeImage bitmap.

**gamma**
- Type: System.Double
- The parameter represents the gamma value to use (gamma > 0). A value of 1.0 leaves the image alone, less than one darkens it, and greater than one lightens it.

### Return Value
- Type: Boolean
- Returns true on success, false on failure.

### See Also
Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
# FreeImageAllocate Method

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<td>Allocate(Int32, Int32, Int32)</td>
<td>Creates a new bitmap in memory.</td>
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## See Also

Reference
- FreImage Class
- FreImageAPI Namespace

Contact/Feedback: [FreImage.NET Homepage](http://www.freimage.net)
Help improve this Documentation: [Join the Project](http://www.freimage.net)
FreeImageAllocate Method
(Int32, Int32, Int32)

Creates a new bitmap in memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP Allocate(
    int width,
    int height,
    int bpp
)
```

### Parameters

**width**
- Type: `SystemInt32`
- Width of the new bitmap.

**height**
- Type: `SystemInt32`
- Height of the new bitmap.

**bpp**
- Type: `SystemInt32`
- Bit depth of the new Bitmap. Supported pixel depth: 1-, 4-, 8-, 16-, 24-, 32-bit per pixel for standard bitmap.

### Return Value

**Type:** FIBITMAP  
Handle to a FreeImage bitmap.
See Also

Reference
Freelmage Class
Allocate Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAllocate Method (Int32, Int32, Int32, UInt32, UInt32, UInt32)

Creates a new bitmap in memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP Allocate(
    int width,
    int height,
    int bpp,
    uint red_mask,
    uint green_mask,
    uint blue_mask
)
```

### Parameters

- **width**
  - Type: `SystemInt32`
  - Width of the new bitmap.

- **height**
  - Type: `SystemInt32`
  - Height of the new bitmap.

- **bpp**
  - Type: `SystemInt32`
  - Bit depth of the new Bitmap. Supported pixel depth: 1-, 4-, 8-,
16-, 24-, 32-bit per pixel for standard bitmap

red_mask
Type: SystemUInt32
Red part of the color layout. eg: 0xFF0000

green_mask
Type: SystemUInt32
Green part of the color layout. eg: 0x00FF00

blue_mask
Type: SystemUInt32
Blue part of the color layout. eg: 0x0000FF

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
Freelimage Class
Allocate Overload
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
## Overload List

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<td>AllocateEx(Int32, Int32, Int32, NullableRGBQUAD, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)</td>
<td>Allocates a new image of the specified width, height and bit depth and optionally fills it with the specified color. See remarks for further details.</td>
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<tr>
<td>AllocateEx(Int32, Int32, Int32, NullableRGBQUAD, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)</td>
<td>Allocates a new image of the specified width, height and bit depth and optionally fills it with the specified color. See remarks for further details.</td>
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color. See remarks for further details.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAllocateEx Method (Int32, Int32, Int32, Nullable<RGBQUAD>, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)

Allocates a new image of the specified width, height and bit depth and optionally fills it with the specified color. See remarks for further details.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP AllocateEx(
    int width,
    int height,
    int bpp,
    Nullable<RGBQUAD> color,
    FREE_IMAGE_COLOR_OPTIONS options,
    RGBQUAD[] palette
)
```

Parameters

- `width`:
  
  Type: `SystemInt32`

  Width of the new bitmap.

- `height`:


Type: SystemInt32
Height of the new bitmap.

bpp
Type: SystemInt32
Bit depth of the new bitmap. Supported pixel depth: 1-, 4-, 8-, 16-, 24-, 32-bit per pixel for standard bitmaps.

color
Type: SystemNullableRGBQUAD
The color to fill the bitmap with or null.

options
Type: FreeImageAPIFREE_IMAGE_COLOR_OPTIONS
Options to enable or disable function-features.

palette
Type: FreeImageAPIRGBQUAD
The palette of the bitmap or null.

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Remarks
This function is an extension to `Allocate(Int32, Int32, Int32, UInt32, UInt32, UInt32)`, which additionally supports specifying a palette to be set for the newly create image, as well as specifying a background color, the newly created image should initially be filled with.

Basically, this function internally relies on function `Allocate(Int32, Int32, Int32, UInt32, UInt32, UInt32)`, followed by a call to `FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS)`. This is why both parameters color and options behave the same as it is documented for function `FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS)`. So, please refer to the documentation of `FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS)` to learn more about parameters color and options.

The palette specified through parameter palette is only copied to the newly created image, if the desired bit depth is smaller than or equal to 8 bits per pixel. In other words, the palette parameter is only taken into account for palletized images. So, for an 8-bit image, the length is 256, for an 4-bit image it is 16 and it is 2 for a 1-bit image. In other
words, this function does not support partial palettes.

However, specifying a palette is not necessarily needed, even for palletized images. This function is capable of implicitly creating a palette, if \textit{palette} is \texttt{null}. If the specified background color is a greyscale value (red = green = blue) or if option 
\texttt{[:FREE_IMAGE_COLOR_OPTIONS.FICO_ALPHA_IS_INDEX]} is specified, a greyscale palette is created. For a 1-bit image, only if the specified background color is either black or white, a monochrome palette, consisting of black and white only is created. In any case, the darker colors are stored at the smaller palette indices.

If the specified background color is not a greyscale value, or is neither black nor white for a 1-bit image, solely this specified color is injected into the otherwise black-initialized palette. For this operation, option 
\texttt{[:FREE_IMAGE_COLOR_OPTIONS.FICO_ALPHA_IS_INDEX]} is implicit, so the specified \textit{color} is applied to the palette entry, specified by the background color's \texttt{rgbReserved} field. The image is then filled with this palette index.

This function returns a newly created image as function \texttt{Allocate(Int32, Int32, Int32, UInt32, UInt32, UInt32)} does, if both parameters \textit{color} and \textit{palette} are \texttt{null}. If only \textit{color} is \texttt{null}, the palette pointed to by parameter \textit{palette} is initially set for the new image, if a palletized image of type \texttt{FIT_BITMAP} is created. However, in the latter case, this function returns an image, whose pixels are all initialized with zeros so, the image will be filled with the color of the first palette entry.

\section*{See Also}

Reference
\begin{itemize}
\item FreImage Class
\item AllocateEx Overload
\item FreImageAPI Namespace
\end{itemize}
FreeImageAllocateEx Method
(Int32, Int32, Int32, Nullable<RGBQUAD>, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)

Allocates a new image of the specified width, height and bit depth and optionally fills it with the specified color. See remarks for further details.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static FIBITMAP AllocateEx(
    int width,
    int height,
    int bpp,
    Nullable<RGBQUAD> color,
    FREE_IMAGE_COLOR_OPTIONS options,
    RGBQUAD[] palette,
    uint red_mask,
    uint green_mask,
    uint blue_mask
)
```

Parameters

width
Type: `SystemInt32`
Width of the new bitmap.

`height`
Type: `SystemInt32`
Height of the new bitmap.

`bpp`
Type: `SystemInt32`
Bit depth of the new bitmap. Supported pixel depth: 1-, 4-, 8-, 16-, 24-, 32-bit per pixel for standard bitmaps.

`color`
Type: `SystemNullableRGBQUAD`
The color to fill the bitmap with or `null`.

`options`
Type: `FreeImageAPIFREE_IMAGE_COLOR_OPTIONS`
Options to enable or disable function-features.

`palette`
Type: `FreeImageAPIRGBQUAD`
The palette of the bitmap or `null`.

`red_mask`
Type: `SystemUInt32`
Red part of the color layout. eg: 0xFF0000

`green_mask`
Type: `SystemUInt32`
Green part of the color layout. eg: 0x00FF00

`blue_mask`
Type: `SystemUInt32`
Blue part of the color layout. eg: 0x0000FF

Return Value
Type: `FIBITMAP`
Handle to a FreeImage bitmap.

Remarks
This function is an extension to `Allocate(Int32, Int32, Int32, UInt32, UInt32, UInt32)`, which additionally supports specifying a palette to be set for the newly create image, as well as specifying a background color, the newly created image should initially be filled with.
Basically, this function internally relies on function `Allocate(Int32, Int32, Int32, UInt32, UInt32, UInt32)`, followed by a call to `FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS)`. This is why both parameters `color` and `options` behave the same as it is documented for function `FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS)`. So, please refer to the documentation of `FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS)` to learn more about parameters `color` and `options`.

The palette specified through parameter `palette` is only copied to the newly created image, if the desired bit depth is smaller than or equal to 8 bits per pixel. In other words, the `palette` parameter is only taken into account for palletized images. So, for an 8-bit image, the length is 256, for an 4-bit image it is 16 and it is 2 for a 1-bit image. In other words, this function does not support partial palettes.

However, specifying a palette is not necessarily needed, even for palletized images. This function is capable of implicitly creating a palette, if `palette` is `null`. If the specified background color is a greyscale value (red = green = blue) or if option `[!:FREE_IMAGE_COLOR_OPTIONS.FICO_ALPHA_IS_INDEX]` is specified, a greyscale palette is created. For a 1-bit image, only if the specified background color is either black or white, a monochrome palette, consisting of black and white only is created. In any case, the darker colors are stored at the smaller palette indices.

If the specified background color is not a greyscale value, or is neither black nor white for a 1-bit image, solely this specified color is injected into the otherwise black-initialized palette. For this operation, option `[!:FREE_IMAGE_COLOR_OPTIONS.FICO_ALPHA_IS_INDEX]` is implicit, so the specified `color` is applied to the palette entry, specified by the background color’s `rgbReserved` field. The image is then filled with this palette index.

This function returns a newly created image as function `Allocate(Int32, Int32, Int32, UInt32, UInt32, UInt32)` does, if both parameters `color` and `palette` are `null`. If only `color` is `null`, the palette pointed to by parameter `palette` is initially set for the new image, if a palletized image of type `FIT_BITMAP` is created. However, in the latter case, this function returns an image, whose pixels are all initialized with zeros so, the image will be filled with the color of the first palette entry.

⚠️ See Also

Reference
FreeImage Class
AllocateEx Overload
FreeImageAPI Namespace

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### Overload List

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<td>.allocateExTT(FREE_IMAGE_TYPE, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)</td>
<td>Allocates a new image of the specified type, width, height and bit depth and optionally fills it with the specified color. See remarks for further details.</td>
</tr>
<tr>
<td>.allocateExTT(FREE_IMAGE_TYPE, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)</td>
<td>Allocates a new image of the specified type, width, height and bit depth and optionally fills it with</td>
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the specified color. See remarks for further details.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAllocateExTT Method (FREE_IMAGE_TYPE, Int32, Int32, Nullable<T>, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD)

Allocates a new image of the specified type, width, height and bit depth and optionally fills it with the specified color. See remarks for further details.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP AllocateExT<T>(
    FREE_IMAGE_TYPE type,
    int width,
    int height,
    int bpp,
    Nullable<T> color,
    FREE_IMAGE_COLOR_OPTIONS options,
    RGBQUAD[] palette
)
where T : struct, new()
```

Parameters

- `type`
Type: `FreeImageAPIFREE_IMAGE_TYPE`
Type of the image.

`width`
Type: `SystemInt32`
Width of the new bitmap.

`height`
Type: `SystemInt32`
Height of the new bitmap.

`bpp`
Type: `SystemInt32`
Bit depth of the new bitmap. Supported pixel depth: 1-, 4-, 8-, 16-, 24-, 32-bit per pixel for standard bitmap.

`color`
Type: `SystemNullableT`
The color to fill the bitmap with or `null`.

`options`
Type: `FreeImageAPIFREE_IMAGE_COLOR_OPTIONS`
Options to enable or disable function-features.

`palette`
Type: `FreeImageAPIRGBQUAD`
The palette of the bitmap or `null`.

Type Parameters

`T`
The type of the specified color.

Return Value
Type: `FIBITMAP`
Handle to a FreImage bitmap.

Remarks
This function is an extension to `AllocateT(FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32)`, which additionally supports specifying a palette to be set for the newly create image, as well as specifying a background color, the newly created image should initially be filled with.

Basically, this function internally relies on function
AllocateT(FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32), followed by a call to FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS). This is why both parameters color and options behave the same as it is documented for function FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS). So, please refer to the documentation of FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS) to learn more about parameters color and options.

The palette specified through parameter palette is only copied to the newly created image, if its image type is FIT_BITMAP and the desired bit depth is smaller than or equal to 8 bits per pixel. In other words, the palette palette is only taken into account for palletized images. However, if the preceding conditions match and if palette is not null, the palette is assumed to be at least as large as the size of a fully populated palette for the desired bit depth. So, for an 8-bit image, this length is 256, for an 4-bit image it is 16 and it is 2 for a 1-bit image. In other words, this function does not support partial palettes.

However, specifying a palette is not necessarily needed, even for palletized images. This function is capable of implicitly creating a palette, if palette is null. If the specified background color is a greyscale value (red = green = blue) or if option ![:FREE_IMAGE_COLOR_OPTIONS.FICO_ALPHA_IS_INDEX] is specified, a greyscale palette is created. For a 1-bit image, only if the specified background color is either black or white, a monochrome palette, consisting of black and white only is created. In any case, the darker colors are stored at the smaller palette indices.

If the specified background color is not a greyscale value, or is neither black nor white for a 1-bit image, solely this specified color is injected into the otherwise black-initialized palette. For this operation, option ![:FREE_IMAGE_COLOR_OPTIONS.FICO_ALPHA_IS_INDEX] is implicit, so the specified color is applied to the palette entry, specified by the background color's rgbReserved field. The image is then filled with this palette index.

This function returns a newly created image as function AllocateT(FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32) does, if both parameters color and palette are null. If only color is null, the palette pointed to by parameter palette is initially set for the new image, if a palletized image of type FIT_BITMAP is created. However, in the latter case, this function returns an image, whose pixels are all initialized with zeros so, the image will be filled with the color of the first palette entry.
See Also

Reference
FreelImage Class
AllocateExT Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAllocateExTT Method (FREE_IMAGE_TYPE, Int32, Int32, Nullable<T>, FREE_IMAGE_COLOR_OPTIONS, RGBQUAD, UInt32, UInt32, UInt32)

Allocates a new image of the specified type, width, height and bit depth and optionally fills it with the specified color. See remarks for further details.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIBITMAP AllocateExTT<T>(
    FREE_IMAGE_TYPE type,
    int width,
    int height,
    int bpp,
    Nullable<T> color,
    FREE_IMAGE_COLOR_OPTIONS options,
    RGBQUAD[] palette,
    uint red_mask,
    uint green_mask,
    uint blue_mask
)
```

where T : struct, new()
Parameters

\texttt{type}

Type: \texttt{FreelmageAPIFREE\_IMAGE\_TYPE}
Type of the image.

\texttt{width}

Type: \texttt{System\_Int32}
Width of the new bitmap.

\texttt{height}

Type: \texttt{System\_Int32}
Height of the new bitmap.

\texttt{bpp}

Type: \texttt{System\_Int32}
Bit depth of the new bitmap. Supported pixel depth: 1-, 4-, 8-, 16-, 24-, 32-bit per pixel for standard bitmap

\texttt{color}

Type: \texttt{System\_Nullable\_T}
The color to fill the bitmap with or \texttt{null}.

\texttt{options}

Type: \texttt{FreelmageAPIFREE\_IMAGE\_COLOR\_OPTIONS}
Options to enable or disable function-features.

\texttt{palette}

Type: \texttt{FreelmageAPI\_RGBQUAD}
The palette of the bitmap or \texttt{null}.

\texttt{red\_mask}

Type: \texttt{System\_UInt32}
Red part of the color layout. eg: 0xFF0000

\texttt{green\_mask}

Type: \texttt{System\_UInt32}
Green part of the color layout. eg: 0x00FF00

\texttt{blue\_mask}

Type: \texttt{System\_UInt32}
Blue part of the color layout. eg: 0x0000FF

Type Parameters

\texttt{T}
The type of the specified color.
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Remarks

This function is an extension to AllocateT(FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32), which additionally supports specifying a palette to be set for the newly create image, as well as specifying a background color, the newly created image should initially be filled with.

Basically, this function internally relies on function AllocateT(FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32), followed by a call to FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS). This is why both parameters color and options behave the same as it is documented for function FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS). So, please refer to the documentation of FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS) to learn more about parameters color and options.

The palette specified through parameter palette is only copied to the newly created image, if its image type is FIT_BITMAP and the desired bit depth is smaller than or equal to 8 bits per pixel. In other words, the palette is only taken into account for palatized images. However, if the preceding conditions match and if palette is not null, the palette is assumed to be at least as large as the size of a fully populated palette for the desired bit depth. So, for an 8-bit image, this length is 256, for an 4-bit image it is 16 and it is 2 for a 1-bit image. In other words, this function does not support partial palettes.

However, specifying a palette is not necessarily needed, even for palatized images. This function is capable of implicitly creating a palette, if palette is null. If the specified background color is a greyscale value (red = green = blue) or if option ![FREE_IMAGE_COLOR_OPTIONS.FICO_ALPHA_IS_INDEX] is specified, a greyscale palette is created. For a 1-bit image, only if the specified background color is either black or white, a monochrome palette, consisting of black and white only is created. In any case, the darker colors are stored at the smaller palette indices.

If the specified background color is not a greyscale value, or is neither black nor white for a 1-bit image, solely this specified color is injected into the otherwise black-initialized palette. For this operation, option
is implicit, so the specified color is applied to the palette entry, specified by the background color’s \texttt{rgbReserved} field. The image is then filled with this palette index.

This function returns a newly created image as function \texttt{AllocateT(FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32)} does, if both parameters \texttt{color} and \texttt{palette} are \texttt{null}. If only \texttt{color} is \texttt{null}, the palette pointed to by parameter \texttt{palette} is initially set for the new image, if a palletized image of type \texttt{FIT_BITMAP} is created. However, in the latter case, this function returns an image, whose pixels are all initialized with zeros so, the image will be filled with the color of the first palette entry.

\textbf{See Also}

\textbf{Reference}
- FreelImage Class
- AllocateExT Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAllocateT Method

Overload List

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See Also

Reference
- FreedImage Class
- FreedImageAPI Namespace

Contact/Feedback: FreedImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAllocateT Method
(FREE_IMAGE_TYPE, Int32, Int32, Int32)

Creates a new bitmap in memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP AllocateT(
    FREE_IMAGE_TYPE type,
    int width,
    int height,
    int bpp
)
```

Parameters

- **type**  
  Type: FreeImageAPI.FREE_IMAGE_TYPE  
  Type of the image.

- **width**  
  Type: System.Int32  
  Width of the new bitmap.

- **height**  
  Type: System.Int32  
  Height of the new bitmap.

- **bpp**  
  Type: System.Int32  
  Number of bits per pixel.
Bit depth of the new Bitmap. Supported pixel depth: 1-, 4-, 8-, 16-, 24-, 32-bit per pixel for standard bitmap

Return Value
Type: FIBITMAP
Handle to a FreImage bitmap.

See Also

Reference
FreImage Class
AllocateT Overload
FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAllocateT Method
(FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32)

Creates a new bitmap in memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static FIBITMAP AllocateT(
    FREE_IMAGE_TYPE type,
    int width,
    int height,
    int bpp,
    uint red_mask,
    uint green_mask,
    uint blue_mask
)
```

### Parameters

- **type**
  - Type: FreeImageAPIFREE_IMAGE_TYPE
  - Type of the image.

- **width**
  - Type: SystemInt32
  - Width of the new bitmap.
**height**
Type: `SystemInt32`
Height of the new bitmap.

**bpp**
Type: `SystemInt32`
Bit depth of the new Bitmap. Supported pixel depth: 1-, 4-, 8-, 16-, 24-, 32-bit per pixel for standard bitmap

**red_mask**
Type: `SystemUInt32`
Red part of the color layout. eg: 0xFF0000

**green_mask**
Type: `SystemUInt32`
Green part of the color layout. eg: 0x00FF00

**blue_mask**
Type: `SystemUInt32`
Blue part of the color layout. eg: 0x0000FF

Return Value
Type: `FIBITMAP`
Handle to a FreeImage bitmap.

### See Also

**Reference**
- FreeImage Class
- AllocateT Overload
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAppendPage Method

Appends a new page to the end of the bitmap.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void AppendPage(
    FIMULTIBITMAP bitmap,
    FIBITMAP data
)
```

### Parameters

- **bitmap**
  - Type: FreeImageAPIFIMULTIBITMAP
  - Handle to a FreeImage multi-paged bitmap.

- **data**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageApplyColorMapping Method

Applies color mapping for one or several colors on a 1-, 4- or 8-bit palletized or a 16-, 24- or 32-bit high color image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static uint ApplyColorMapping(
    FIBITMAP dib,
    RGBQUAD[] srccolors,
    RGBQUAD[] dstcolors,
    uint count,
    bool ignore_alpha,
    bool swap
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP  
  - Handle to a FreeImage bitmap.

- **srccolors**
  - Type: FreeImageAPIRGBQUAD  
  - Array of colors to be used as the mapping source.

- **dstcolors**
  - Type: FreeImageAPIRGBQUAD  
  - Array of colors to be used as the mapping destination.

- **count**
Type: `SystemUInt32`
The number of colors to be mapped. This is the size of both `srccolors` and `dstcolors`.

`ignore_alpha`
Type: `SystemBoolean`
If true, 32-bit images and colors are treated as 24-bit.

`swap`
Type: `SystemBoolean`
If true, source and destination colors are swapped, that is, each destination color is also mapped to the corresponding source color.

Return Value
Type: `UInt32`
The total number of pixels changed.

Remarks
This function maps up to `count` colors specified in `srccolors` to these specified in `dstcolors`. Thereby, color `srccolors[N]`, if found in the image, will be replaced by color `dstcolors[N]`. If `swap` is `true`, additionally all colors specified in `dstcolors` are also mapped to these specified in `srccolors`. For high color images, the actual image data will be modified whereas, for palletized images only the palette will be changed.
The function returns the number of pixels changed or zero, if no pixels were changed.

Both arrays `srccolors` and `dstcolors` are assumed not to hold less than `count` colors.

For 16-bit images, all colors specified are transparently converted to their proper 16-bit representation (either in RGB555 or RGB565 format, which is determined by the image’s red- green- and blue-mask).

`Note, that this behaviour is different from what ApplyPaletteIndexMapping(FIBITMAP, Byte, Byte, UInt32, Boolean) does, which modifies the actual image data on palletized images.`
See Also

Reference
Freelimage Class
FreelimageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageApplyPaletteIndexMapping Method

Applies palette index mapping for one or several indices on a 1-, 4- or 8-bit palletized image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static uint ApplyPaletteIndexMapping(
    FIBITMAP dib,
    byte[] srcindices,
    byte[] dstindices,
    uint count,
    bool swap
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **srcindices**  
  Type: SystemByte  
  Array of palette indices to be used as the mapping source.

- **dstindices**  
  Type: SystemByte  
  Array of palette indices to be used as the mapping destination.

- **count**  
  Type: SystemUInt32
The number of palette indices to be mapped. This is the size of both srcindices and dstindices.

\textit{swap}

Type: \texttt{SystemBoolean}

If true, source and destination palette indices are swapped, that is, each destination index is also mapped to the corresponding source index.

\textbf{Return Value}

Type: \texttt{UInt32}
The total number of pixels changed.

\section*{Remarks}

This function maps up to \textit{count} palette indices specified in \textit{srcindices} to these specified in \textit{dstindices}. Thereby, index \textit{srcindices}[N], if present in the image, will be replaced by index \textit{dstindices}[N]. If \textit{swap} is \texttt{true}, additionally all indices specified in \textit{dstindices} are also mapped to these specified in \textit{srcindices}. The function returns the number of pixels changed or zero, if no pixels were changed. Both arrays \textit{srcindices} and \textit{dstindices} are assumed not to hold less than \textit{count} indices.

\textbf{Note, that this behaviour is different from what} \texttt{ApplyColorMapping(FIBITMAP, RGBQUAD, RGBQUAD, UInt32, Boolean, Boolean)} \textbf{does, which modifies the actual image data on palletized images.}

\section*{See Also}

\textbf{Reference}

Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageClone Method

Makes an exact reproduction of an existing bitmap, including metadata and attached profile if any.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImage.NET (in FreeImage.NET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP Clone(  
    FIBITMAP dib  
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP  
  - Handle to a FreeImage bitmap.

### Return Value

- Type: FIBITMAP  
  - Handle to a FreeImage bitmap.

### See Also

- **Reference**  
  - FreeImage Class  
  - FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageCloneMetadata Method

Copies the metadata of FreeImage bitmap to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool CloneMetadata(  
    FIBITMAP dst,  
    FIBITMAP src  
)
```

### Parameters

**dst**  
Type: FreeImageAPI.FIBITMAP  
The FreeImage bitmap to copy the metadata to.

**src**  
Type: FreeImageAPI.FIBITMAP  
The FreeImage bitmap to copy the metadata from.

### Return Value

Type: Boolean  
Returns true on success, false on failure.

### See Also

Reference  
FreeImage Class
FreeImageCloneMetadataEx Method

Copies metadata from one FreeImage bitmap to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

#### C#

```
public static int CloneMetadataEx(
    FIBITMAP src,
    FIBITMAP dst,
    FREE_IMAGE_METADATA_COPY flags
)
```

### Parameters

**src**
- Type: FreeImageAPIFIBITMAP  
  Source FreeImage bitmap containing the metadata.

**dst**
- Type: FreeImageAPIFIBITMAP  
  FreeImage bitmap to copy the metadata to.

**flags**
- Type: FreeImageAPIFREE_IMAGE_METADATA_COPY  
  Flags to switch different copy modes.

### Return Value

- Type: Int32  
  Returns -1 on failure else the number of copied tags.
## Exceptions

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<th>Exception</th>
<th>Condition</th>
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<tr>
<td>ArgumentNullException</td>
<td>src or dst is null.</td>
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## See Also

**Reference**
- FreelImage Class
- FreelImageAPI Namespace

Contact/Feedback: [FreelImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
FreeImageCloneTag Method

Creates and returns a copy of a FITAG object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FITAG CloneTag(  
    FITAG tag
)
```

### Parameters

- **tag**
  - Type: FreeImageAPI.FITAG
  - The FITAG to clone.

### Return Value

- Type: FITAG
  - The new FITAG.

### See Also

- Reference
  - Freelmage Class
  - FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageCloseMemory Method

Close and free a memory stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CloseMemory(
    FIMEMORY stream
)
```

### Parameters

- **stream**  
  Type: FreeImageAPIFIMEMORY  
  Handle to a memory stream.

### See Also

- **Reference**  
  FreeImage Class  
  FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageCloseMultiBitmap Method

Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool CloseMultiBitmap(
    FIMULTIBITMAP bitmap,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

Parameters

- **bitmap**
  - Type: FreeImageAPIFIMULTIBITMAP
  - Handle to a FreeImage multi-paged bitmap.

- **flags**
  - Type: FreeImageAPIFREE_IMAGE_SAVE_FLAGS
  - Flags to enable or disable plugin-features.

Return Value

- Type: Boolean
  - Returns true on success, false on failure.

See Also

Reference
### FreeImageCloseMultiBitmapEx Method

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<td><img src="image" alt=" " /> CloseMultiBitmapEx(FIMULTIBITMAP)</td>
<td>Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it. On success the handle will be reset to null.</td>
</tr>
<tr>
<td><img src="image" alt=" " /> CloseMultiBitmapEx(FIMULTIBITMAP, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it.</td>
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changes made to it. On success the handle will be reset to null.

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See Also

Reference
FreelImage Class
FreelImageAPI Namespace

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FreeImageCloseMultiBitmapEx Method (FIMULTIBITMAP)

Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it. On success the handle will be reset to null.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool CloseMultiBitmapEx(
    ref FIMULTIBITMAP bitmap
)
```

### Parameters

- **bitmap**  
  Type: FreeImageAPIFIMULTIBITMAP  
  Handle to a FreeImage multi-paged bitmap.

### Return Value

- Type: Boolean  
  Returns true on success, false on failure.

### See Also

Reference
- FreeImage Class
- CloseMultiBitmapEx Overload
- FreeImageAPI Namespace
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FreeImageCloseMultiBitmapEx Method (FIMULTIBITMAP, FREE_IMAGE_SAVE_FLAGS)

Closes a previously opened multi-page bitmap and, when the bitmap was not opened read-only, applies any changes made to it. On success the handle will be reset to null.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool CloseMultiBitmapEx(
    ref FIMULTIBITMAP bitmap,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **bitmap**  
  Type: FreeImageAPIFIMULTIBITMAP  
  Handle to a FreeImage multi-paged bitmap.

- **flags**  
  Type: FreeImageAPIFREE_IMAGE_SAVE_FLAGS  
  Flags to enable or disable plugin-features.

### Return Value

Type: Boolean  
Returns true on success, false on failure.
See Also

Reference
Freelmage Class
CloseMultiBitmapEx Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageColorQuantize
Method

Quantizes a high-color 24-bit bitmap to an 8-bit palette color bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```c#
public static FIBITMAP ColorQuantize(  
    FIBITMAP dib,  
    FREE_IMAGE_QUANTIZE quantize
)
```

Parameters

*dib*

Type: `FreeImageAPIFIBITMAP`  
Handle to a FreeImage bitmap.

*quantize*

Type: `FreeImageAPIFREE_IMAGE_QUANTIZE`  
Specifies the color reduction algorithm to be used.

Return Value

Type: `FIBITMAP`  
Handle to a FreeImage bitmap.

⚠️ See Also

Reference  
FreeImage Class
## FreeImageColorQuantizeEx Method

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<th>Name</th>
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<td>ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) method that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a provided palette.</td>
</tr>
<tr>
<td>ColorQuantizeEx(FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, RGBQUAD, Int32)</td>
<td>ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) method that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a partial or full provided palette.</td>
</tr>
<tr>
<td>ColorQuantizeEx(FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)</td>
<td>ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) method that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a partial or full provided palette.</td>
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</table>
FREE_IMAGE_QUANTIZE) method that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a partial or full provided palette.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) method that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a provided palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ColorQuantizeEx(  
    FIBITMAP dib,  
    FREE_IMAGE_QUANTIZE quantize,  
    int PaletteSize,  
    RGBQUAD[] ReservePalette,  
    bool minColorDepth
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **quantize**
  - Type: FreeImageAPIFREE_IMAGE_QUANTIZE
Specifies the color reduction algorithm to be used.

**PaletteSize**
Type: `SystemInt32`
Size of the desired output palette.

**ReservePalette**
Type: `FreeImageAPIRGBQUAD`
The provided palette.

**minColorDepth**
Type: `SystemBoolean`
`true` to create a bitmap with the smallest possible color depth for the specified `PaletteSize`.

**Return Value**
Type: `FIBITMAP`
Handle to a FreeImage bitmap.

**See Also**

**Reference**
- `FreeImage Class`
- `ColorQuantizeEx Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
FreeImageColorQuantizeEx Method (FIBITMAP, FREE_IMAGE_QUANTIZE, Int32, RGBQUAD, Int32)

ColorQuantizeEx is an extension to the ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE) method that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a partial or full provided palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ColorQuantizeEx(  
    FIBITMAP dib,  
    FREE_IMAGE_QUANTIZE quantize,  
    int PaletteSize,  
    RGBQUAD[] ReservePalette,  
    int bpp
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.
- **quantize**  
  Type: FreeImageAPIFREE_IMAGE_QUANTIZE
Specifies the color reduction algorithm to be used.

**PaletteSize**
Type: `SystemInt32`
Size of the desired output palette.

**ReservePalette**
Type: `FreeImageAPIRGBQUAD`
The provided palette.

**bpp**
Type: `SystemInt32`
The desired color depth of the created image.

**Return Value**
Type: `FIBITMAP`
Handle to a FreeImage bitmap.

### See Also

**Reference**
- FreiImage Class
- ColorQuantizeEx Overload
- FreiImageAPI Namespace

Contact/Feedback: FreiImage.NET Homepage
Help improve this Documentation: Join the Project
ColorQuantizeEx is an extension to the `ColorQuantize(FIBITMAP, FREE_IMAGE_QUANTIZE)` method that provides additional options used to quantize a 24-bit image to any number of colors (up to 256), as well as quantize a 24-bit image using a partial or full provided palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ColorQuantizeEx(
    FIBITMAP dib,
    FREE_IMAGE_QUANTIZE quantize,
    int PaletteSize,
    int ReserveSize,
    RGBQUAD[] ReservePalette
)
```

#### Parameters

- **dib**  
  Type: `FreeImageAPIFIBITMAP`  
  Handle to a FreeImage bitmap.

- **quantize**  
  Type: `FreeImageAPIFREE_IMAGE_QUANTIZE`
Specifies the color reduction algorithm to be used.

PaletteSize
Type: SystemInt32
Size of the desired output palette.

ReserveSize
Type: SystemInt32
Size of the provided palette of ReservePalette.

ReservePalette
Type: FreeImageAPIRGBQUAD
The provided palette.

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
FreeImage Class
ColorQuantizeEx Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCompare Method

Compares two FreeImage bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool Compare(
    FIBITMAP dib1,
    FIBITMAP dib2,
    FREE_IMAGE_COMPARE_FLAGS flags
)
```

### Parameters

**dib1**  
Type: FreeImageAPIFIBITMAP  
The first bitmap to compare.

**dib2**  
Type: FreeImageAPIFIBITMAP  
The second bitmap to compare.

**flags**  
Type: FreeImageAPIFREE_IMAGECOMPARE_FLAGS  
Determines which components of the bitmaps will be compared.

### Return Value

Type: Boolean  
True in case both bitmaps match the compare conditions, false otherwise.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCompareMemory Method

Overload List

<table>
<thead>
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<th>Description</th>
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</thead>
<tbody>
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<td><code>CompareMemory(IntPtr, IntPtr, Int64)</code></td>
<td>Compares blocks of memory.</td>
</tr>
<tr>
<td><code>CompareMemory(IntPtr, IntPtr, UInt32)</code></td>
<td>Compares blocks of memory.</td>
</tr>
<tr>
<td><code>CompareMemory(Void*, Void*, Int64)</code></td>
<td>Compares blocks of memory.</td>
</tr>
<tr>
<td><code>CompareMemory(Void*, Void*, UInt32)</code></td>
<td>Compares blocks of memory.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage Class
FreeImageAPI Namespace
FreeImageCompareMemory Method (IntPtr, IntPtr, Int64)

Compares blocks of memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool CompareMemory(
    IntPtr buf1,
    IntPtr buf2,
    long length
)
```

**Parameters**

- **buf1**
  - Type: SystemIntPtr  
    A pointer to a block of memory to compare.

- **buf2**
  - Type: SystemIntPtr  
    A pointer to a block of memory to compare.

- **length**
  - Type: SystemInt64  
    Specifies the number of bytes to be compared.

**Return Value**

Type: Boolean  
true, if all bytes compare as equal, false otherwise.
See Also

Reference
FreelImage Class
CompareMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCompareMemory Method (IntPtr, IntPtr, UInt32)

Compares blocks of memory.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool CompareMemory(
    IntPtr buf1,
    IntPtr buf2,
    uint length
)
```

### Parameters

**buf1**

Type: `SystemIntPtr`
A pointer to a block of memory to compare.

**buf2**

Type: `SystemIntPtr`
A pointer to a block of memory to compare.

**length**

Type: `SystemUInt32`
Specifies the number of bytes to be compared.

### Return Value

Type: `Boolean`
true, if all bytes compare as equal, false otherwise.
See Also

Reference
    Freelite Class
    CompareMemory Overload
    FreeliteAPI Namespace

Contact/Feedback: Freelite.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCompareMemory Method (Void, Void, Int64)

Compares blocks of memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool CompareMemory(
    void* buf1,
    void* buf2,
    long length
)
```

### Parameters

**buf1**  
Type: `SystemVoid*`  
A pointer to a block of memory to compare.

**buf2**  
Type: `SystemVoid*`  
A pointer to a block of memory to compare.

**length**  
Type: `SystemInt64`  
Specifies the number of bytes to be compared.

### Return Value

Type: `Boolean`  
true, if all bytes compare as equal, false otherwise.
See Also

Reference
Freelmage Class
CompareMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCompareMemory Method (Void, Void, UInt32)

Compares blocks of memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool CompareMemory(
    void* buf1,
    void* buf2,
    uint length
)
```

**Parameters**

- **buf1**
  - Type: `SystemVoid*`
  - A pointer to a block of memory to compare.

- **buf2**
  - Type: `SystemVoid*`
  - A pointer to a block of memory to compare.

- **length**
  - Type: `SystemUInt32`
  - Specifies the number of bytes to be compared.

**Return Value**

Type: `Boolean`

true, if all bytes compare as equal, false otherwise.
See Also

Reference
Freelmage Class
CompareMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
## FreeImageComposite Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Composite](FIBITMAP, Boolean, RGBQUAD, FIBITMAP)</td>
<td>This function composite a transparent foreground image against a single background color or against a background image.</td>
</tr>
<tr>
<td>![Composite](FIBITMAP, Boolean, RGBQUAD, FIBITMAP)</td>
<td>This function composite a transparent foreground image against a single background color or against a background image.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - [Freelimage Class](#)
  - [FreelimageAPI Namespace](#)

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageComposite Method
(FIBITMAP, Boolean, RGBQUAD, FIBITMAP)

This function composite a transparent foreground image against a single background color or against a background image.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP Composite(
    FIBITMAP fg,
    bool useFileBkg,
    ref RGBQUAD appBkColor,
    FIBITMAP bg
)
```

**Parameters**

*fg*
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

*useFileBkg*
Type: SystemBoolean
When true the background of fg is used if it contains one.

*appBkColor*
Type: FreeImageAPIRGBCQUAD
The application background is used if useFileBkg is false.

*bg*
Type: `FreeImageAPIFIBITMAP`
Image used as background when `useFileBkg` is false or `fg` has no background and `appBkColor` is null.

Return Value
Type: `FIBITMAP`
Handle to a `FreeImage` bitmap.

See Also

Reference
- `FreeImage Class`
- `Composite Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
FreeImageComposite Method
(FIBITMAP, Boolean, RGBQUAD, FIBITMAP)

This function composite a transparent foreground image against a single background color or against a background image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP Composite(
    FIBITMAP fg,
    bool useFileBkg,
    RGBQUAD[] appBkColor,
    FIBITMAP bg
)
```

### Parameters

- **fg**
  - Type: `FreeImageAPIFIBITMAP`  
    Handle to a FreeImage bitmap.

- **useFileBkg**
  - Type: `SystemBoolean`  
    When true the background of `fg` is used if it contains one.

- **appBkColor**
  - Type: `FreeImageAPIRGBQUAD`  
    The application background is used if `useFileBkg` is false and 'appBkColor' is not null.
**bg**

Type: **FreeImageAPIFIBITMAP**

Image used as background when useFileBkg is false or fg has no background and appBkColor is null.

**Return Value**

Type: **FIBITMAP**
Handle to a FreeImage bitmap.

**See Also**

**Reference**

*FreeImage Class*
*Composite Overload*
*FreeImageAPI Namespace*

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# FreeImage

## ConvertColorDepth Method

### Overload List

<table>
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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH)</td>
<td>Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.</td>
</tr>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_DITHER)</td>
<td>Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Boolean)</td>
<td>Converts a FreelImage bitmap from one color depth to another. If the conversion fails the original FreelImage bitmap is returned.</td>
</tr>
<tr>
<td>ConvertColorDepth(FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Byte)</td>
<td>Converts a FreelImage bitmap from one color depth to another. If the conversion fails the original FreelImage bitmap is returned.</td>
</tr>
</tbody>
</table>
FREE_IMAGE_COLOR_DEPTH,
FREE_IMAGE_DITHER,
Boolean) Freemage bitmap from one color depth to another. If the conversion fails the original Freemage bitmap is returned.

ConvertColorDepth(FIBITMAP,
FREE_IMAGE_COLOR_DEPTH,
FREE_IMAGE_QUANTIZE,
Boolean) Converts a Freemage bitmap from one color depth to another. If the conversion fails the original Freemage bitmap is returned.

ConvertColorDepth(FIBITMAP,
FREE_IMAGE_COLOR_DEPTH,
Byte, Boolean) Converts a Freemage bitmap from one color depth to another. If the conversion fails the original Freemage bitmap is returned.
See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage ConvertColorDepth Method (FIBITMAP, FREE_IMAGE_COLOR_DEPTH)

Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion
)
```

### Parameters

**dib**

Type: `FreeImageAPI.FIBITMAP`  
Handle to a FreeImage bitmap.

**conversion**

Type: `FreeImageAPI.FREE_IMAGE_COLOR_DEPTH`  
The desired output format.

### Return Value

Type: `FIBITMAP`  
Handle to a FreeImage bitmap.
Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>

See Also

Reference

- FreelImage Class
- ConvertColorDepth Overload
- FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageConvertColorDepth Method (FIBITMAP, 
FREE_IMAGE_COLOR_DEPTH 
FREE_IMAGE_DITHER)

Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion,
    FREE_IMAGE_DITHER ditherMethod
)
```

Parameters

- **dib**
  Type: FreeImageAPIFIBITMAP
  Handle to a FreeImage bitmap.

- **conversion**
  Type: FreeImageAPIFREE_IMAGE_COLOR_DEPTH
  The desired output format.

- **ditherMethod**
  Type: FreeImageAPIFREE_IMAGE_DITHER
  Dither algorithm when converting with FICD_01_BPP_DITHER.
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>$dib$ is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage Class
ConvertColorDepth Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImageConvertColorDepth Method (FIBITMAP, FREE_IMAGE_COLOR_DEPTH FREE_IMAGE_QUANTIZE)

Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion,
    FREE_IMAGE_QUANTIZE quantizationMethod
)
```

**Parameters**

*dib*
- Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

*conversion*
- Type: FreeImageAPIFREE_IMAGE_COLOR_DEPTH  
  The desired output format.

*quantizationMethod*
- Type: FreeImageAPIFREE_IMAGE_QUANTIZE  
  The quantization algorithm for conversion to 8-bit color depth.
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>dib is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
Freelmage Class
ConvertColorDepth Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageConvertColorDepth Method (FIBITMAP, FREE_IMAGE_COLOR_DEPTH Boolean)

Converts a Freelite bitmap from one color depth to another. If the conversion fails the original Freelite bitmap is returned.

**Namespace:** FreeliteAPI  
**Assembly:** FreeliteNET (in FreeliteNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion,
    bool unloadSource
)
```

### Parameters

- **dib**
  - Type: FreeliteAPI.FIBITMAP  
    - Handle to a Freelite bitmap.

- **conversion**
  - Type: FreeliteAPI.FREE_IMAGE_COLOR_DEPTH  
    - The desired output format.

- **unloadSource**
  - Type: System.Boolean  
    - When true the structure will be unloaded on success.
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>$dib$ is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage Class
ConvertColorDepth Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageConvertColorDepth Method (FIBITMAP, FREE_IMAGE_COLOR_DEPTH, Byte)

Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion,
    byte threshold
)
```

**Parameters**

- **dib**
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **conversion**
  Type: FreeImageAPIFREE_IMAGE_COLOR_DEPTH  
  The desired output format.

- **threshold**
  Type: System.Byte  
  Threshold value when converting with
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>$dib$ is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
Freelmage Class
ConvertColorDepth Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageConvertColorDepth Method (FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_DITHER, Boolean)

Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion,
    FREE_IMAGE_DITHER ditherMethod,
    bool unloadSource
)
```

### Parameters

- **dib**
  - Type: **FreeImageAPI**FIBITMAP
  - Handle to a FreeImage bitmap.

- **conversion**
  - Type: **FreeImageAPI**FREE_IMAGE_COLOR_DEPTH
  - The desired output format.
**ditherMethod**
Type: `FreeImageAPIFREE_IMAGE_DITHER`
Dither algorithm when converting with `FICD_01_BPP_DITHER`.

**unloadSource**
Type: `SystemBoolean`
When true the structure will be unloaded on success.

**Return Value**
Type: `FIBITMAP`
Handle to a FreeImage bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>dib</code> is null.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- `FreeImage Class`
- `ConvertColorDepth Overload`
- `FreeImageAPI Namespace`

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Help improve this Documentation: Join the Project
FreeImageConvertColorDepth Method (FIBITMAP, FREE_IMAGE_COLOR_DEPTH, FREE_IMAGE_QUANTIZE, Boolean)

Converts a FreiImage bitmap from one color depth to another. If the conversion fails the original FreiImage bitmap is returned.

**Namespace:** FreiImageAPI  
**Assembly:** FreiImageNET (in FreiImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion,
    FREE_IMAGE_QUANTIZE quantizationMethod,
    bool unloadSource
)
```

**Parameters**

- **dib**  
  Type: FreiImageAPI FIBITMAP  
  Handle to a FreiImage bitmap.

- **conversion**  
  Type: FreiImageAPI FREE_IMAGE_COLOR_DEPTH  
  The desired output format.
quantizationMethod
Type: FreeImageAPIFREE_IMAGE_QUANTIZE
The quantization algorithm for conversion to 8-bit color depth.

unloadSource
Type: SystemBoolean
When true the structure will be unloaded on success.

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>dib is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage Class
ConvertColorDepth Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageConvertColorDepth Method (FIBITMAP, FREE_IMAGE_COLOR_DEPTH Byte, Boolean)

Converts a FreeImage bitmap from one color depth to another. If the conversion fails the original FreeImage bitmap is returned.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ConvertColorDepth(
    FIBITMAP dib,
    FREE_IMAGE_COLOR_DEPTH conversion,
    byte threshold,
    bool unloadSource
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **conversion**  
  Type: FreeImageAPIFREE_IMAGE_COLOR_DEPTH  
  The desired output format.

- **threshold**  
  Type: SystemByte
Threshold value when converting with  
**FICD_01_BPP_THRESHOLD**.

unloadSource
Type: **SystemBoolean**
When true the structure will be unloaded on success.

Return Value
Type: **FIBITMAP**
Handle to a FreeImage bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- **Freelmage Class**
- **ConvertColorDepth Overload**
- **FreelmageAPI Namespace**

Contact/Feedback: **Freelmage.NET Homepage**
Help improve this Documentation: **Join the Project**
# FreeImageConvertFromRawBits Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ConvertFromRawBits(Byte, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a raw bitmap to a FreeImage bitmap.</td>
</tr>
<tr>
<td>ConvertFromRawBits(IntPtr, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a raw bitmap to a FreeImage bitmap.</td>
</tr>
<tr>
<td>ConvertFromRawBits(Byte, FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a raw bitmap to a FreeImage bitmap.</td>
</tr>
<tr>
<td>ConvertFromRawBits(IntPtr, FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a raw bitmap to a FreeImage bitmap.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FreeImage Class
- FreeImageAPI Namespace
FreeImageConvertFromRawBits Method (Byte, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)

Converts a raw bitmap to a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ConvertFromRawBits(
    byte[] bits,
    int width,
    int height,
    int pitch,
    uint bpp,
    uint red_mask,
    uint green_mask,
    uint blue_mask,
    bool topdown
)
```

### Parameters

- **bits**  
  Type: `System.Byte`  
  Array of bytes containing the raw bitmap.

- **width**
Type: **SystemInt32**
The width in pixels of the raw bitmap.

*height*
Type: **SystemInt32**
The height in pixels of the raw bitmap.

*pitch*
Type: **SystemInt32**
Defines the total width of a scanline in the raw bitmap, including padding bytes.

*bpp*
Type: **SystemUInt32**
The bit depth (bits per pixel) of the raw bitmap.

*red_mask*
Type: **SystemUInt32**
The bit mask describing the bits used to store a single pixel's red component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

*green_mask*
Type: **SystemUInt32**
The bit mask describing the bits used to store a single pixel's green component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

*blue_mask*
Type: **SystemUInt32**
The bit mask describing the bits used to store a single pixel's blue component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

*topdown*
Type: **SystemBoolean**
If true, the raw bitmap is stored in top-down order (top-left pixel first) and in bottom-up order (bottom-left pixel first) otherwise.

**Return Value**
Type: **FIBITMAP**
Handle to a FreeImage bitmap.

*See Also*
Reference
FreelImage Class
ConvertFromRawBits Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageConvertFromRawBits Method (IntPtr, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)

Converts a raw bitmap to a FreeImage bitmap.

**Namespace**: FreeImageAPI

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ConvertFromRawBits(  
    IntPtr bits,  
    int width,  
    int height,  
    int pitch,  
    uint bpp,  
    uint red_mask,  
    uint green_mask,  
    uint blue_mask,  
    bool topdown
    )
```

### Parameters

**bits**
- Type: System.IntPtr
- Pointer to the memory block containing the raw bitmap.

**width**
Type: **SystemInt32**  
The width in pixels of the raw bitmap.

**height**  
Type: **SystemInt32**  
The height in pixels of the raw bitmap.

**pitch**  
Type: **SystemInt32**  
Defines the total width of a scanline in the raw bitmap, including padding bytes.

**bpp**  
Type: **SystemUInt32**  
The bit depth (bits per pixel) of the raw bitmap.

**red_mask**  
Type: **SystemUInt32**  
The bit mask describing the bits used to store a single pixel's red component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

**green_mask**  
Type: **SystemUInt32**  
The bit mask describing the bits used to store a single pixel's green component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

**blue_mask**  
Type: **SystemUInt32**  
The bit mask describing the bits used to store a single pixel's blue component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

**topdown**  
Type: **SystemBoolean**  
If true, the raw bitmap is stored in top-down order (top-left pixel first) and in bottom-up order (bottom-left pixel first) otherwise.

**Return Value**  
Type: **FIBITMAP**  
Handle to a FreeImage bitmap.

**See Also**
FreeImageConvertFromRawBits Method (Byte, FREE_IMAGE_TYPE, Int32, Int32, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)

Converts a raw bitmap to a FreeImage bitmap.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIBITMAP ConvertFromRawBits(
    byte[] bits,
    FREE_IMAGE_TYPE type,
    int width,
    int height,
    int pitch,
    uint bpp,
    uint red_mask,
    uint green_mask,
    uint blue_mask,
    bool topdown
)
```

### Parameters

- **bits**
Type: `SystemByte`
Array of bytes containing the raw bitmap.

`type`
Type: `FreeImageAPIFREE_IMAGE_TYPE`
The type of the raw bitmap.

`width`
Type: `SystemInt32`
The width in pixels of the raw bitmap.

`height`
Type: `SystemInt32`
The height in pixels of the raw bitmap.

`pitch`
Type: `SystemInt32`
Defines the total width of a scanline in the raw bitmap, including padding bytes.

`bpp`
Type: `SystemUInt32`
The bit depth (bits per pixel) of the raw bitmap.

`red_mask`
Type: `SystemUInt32`
The bit mask describing the bits used to store a single pixel's red component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`green_mask`
Type: `SystemUInt32`
The bit mask describing the bits used to store a single pixel's green component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`blue_mask`
Type: `SystemUInt32`
The bit mask describing the bits used to store a single pixel's blue component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`topdown`
Type: `SystemBoolean`
If true, the raw bitmap is stored in top-down order (top-left pixel first) and in bottom-up order (bottom-left pixel first) otherwise.

Return Value
Type: **FIBITMAP**
Handle to a FreeImage bitmap.

### See Also

**Reference**
- FreeImage Class
- ConvertFromRawBits Overload
- FreeImageAPI Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://freimage.net)
Help improve this Documentation: [Join the Project](https://freimage.net)
FreeImageConvertFromRawBits Method (IntPtr,
FREE_IMAGE_TYPE, Int32,
Int32, Int32, UInt32, UInt32,
UInt32, UInt32, Boolean)

Converts a raw bitmap to a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIBITMAP ConvertFromRawBits(
    IntPtr bits,
    FREE_IMAGE_TYPE type,
    int width,
    int height,
    int pitch,
    uint bpp,
    uint red_mask,
    uint green_mask,
    uint blue_mask,
    bool topdown
)
```

### Parameters

- `bits`
Type: **SystemIntPtr**
Pointer to the memory block containing the raw bitmap.

**type**
Type: **FreeImageAPIFREE_IMAGE_TYPE**
The type of the raw bitmap.

**width**
Type: **SystemInt32**
The width in pixels of the raw bitmap.

**height**
Type: **SystemInt32**
The height in pixels of the raw bitmap.

**pitch**
Type: **SystemInt32**
Defines the total width of a scanline in the raw bitmap, including padding bytes.

**bpp**
Type: **SystemUInt32**
The bit depth (bits per pixel) of the raw bitmap.

**red_mask**
Type: **SystemUInt32**
The bit mask describing the bits used to store a single pixel's red component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

**green_mask**
Type: **SystemUInt32**
The bit mask describing the bits used to store a single pixel's green component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

**blue_mask**
Type: **SystemUInt32**
The bit mask describing the bits used to store a single pixel's blue component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

**topdown**
Type: **SystemBoolean**
If true, the raw bitmap is stored in top-down order (top-left pixel first) and in bottom-up order (bottom-left pixel first) otherwise.

**Return Value**
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
FreeImage Class
ConvertFromRawBits Overload
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageConvertTo16Bits555 Method

Converts a bitmap to 16 bits, where each pixel has a color pattern of 5 bits red, 5 bits green and 5 bits blue. One bit in each pixel is unused.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ConvertTo16Bits555(
    FIBITMAP dib
)
```

### Parameters

**dib**
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### Return Value
Type: FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference
FreeImage Class  
FreeImageAPI Namespace
FreeImageConvertTo16Bits565 Method

Converts a bitmap to 16 bits, where each pixel has a color pattern of 5 bits red, 6 bits green and 5 bits blue.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static FIBITMAP ConvertTo16Bits565(FIBITMAP dib)
```

### Parameters

*dib*
- Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

### Return Value

- Type: FIBITMAP
  - Handle to a FreeImage bitmap.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace
FreeImageConvertTo24Bits Method

Converts a bitmap to 24 bits. A clone of the input bitmap is returned for 24-bit bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static FIBITMAP ConvertTo24Bits(
    FIBITMAP dib
)
```

Parameters

`dib`

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FreeImageConvertTo32Bits Method

Converts a bitmap to 32 bits. A clone of the input bitmap is returned for 32-bit bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

^Syntax

```csharp
public static FIBITMAP ConvertTo32Bits(
    FIBITMAP dib
)
```

Parameters

*dib*  
Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

Return Value  
Type: FIBITMAP  
Handle to a FreeImage bitmap.

^See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageConvertTo4Bits Method

Converts a bitmap to 4 bits. If the bitmap was a high-color bitmap (16, 24 or 32-bit) or if it was a monochrome or greyscale bitmap (1 or 8-bit), the end result will be a greyscale bitmap, otherwise (1-bit palletised bitmaps) it will be a palletised bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FIBITMAP ConvertTo4Bits(
    FIBITMAP dib
)
```

### Parameters

**dib**  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageConvertTo8Bits Method

Converts a bitmap to 8 bits. If the bitmap was a high-color bitmap (16, 24 or 32-bit) or if it was a monochrome or greyscale bitmap (1 or 4-bit), the end result will be a greyscale bitmap, otherwise (1 or 4-bit palletised bitmaps) it will be a palletised bitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static FIBITMAP ConvertTo8Bits(
    FIBITMAP dib
)
```

Parameters

*dib*
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
FreeImage Class
FreeImageAPI Namespace
FreeImage

ConvertToGreyscale Method

Converts a bitmap to a 8-bit greyscale image with a linear ramp.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP ConvertToGreyscale(FIBITMAP dib)
```

**Parameters**

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

**Return Value**

- Type: FIBITMAP
  - Handle to a FreeImage bitmap.

**See Also**

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImageConvertToRawBits Method

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<td>Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.</td>
</tr>
<tr>
<td>ConvertToRawBits(IntPtr, FIBITMAP, Int32, UInt32, UInt32, UInt32, Boolean)</td>
<td>Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.</td>
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See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void ConvertToRawBits(
    byte[] bits,
    FIBITMAP dib,
    int pitch,
    uint bpp,
    uint red_mask,
    uint green_mask,
    uint blue_mask,
    bool topdown
)
```

#### Parameters

- **bits**  
  Type: `System.Byte`  
  Array of bytes receiving the raw bitmap.

- **dib**
Type: `FreedImageAPIFIBITMAP`
Handle to a FreeImage bitmap.

`pitch`
Type: `SystemInt32`
The desired total width in bytes of a scanline in the raw bitmap, including any padding bytes.

`bpp`
Type: `SystemUInt32`
The desired bit depth (bits per pixel) of the raw bitmap.

`red_mask`
Type: `SystemUInt32`
The desired bit mask describing the bits used to store a single pixel's red component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`green_mask`
Type: `SystemUInt32`
The desired bit mask describing the bits used to store a single pixel's green component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`blue_mask`
Type: `SystemUInt32`
The desired bit mask describing the bits used to store a single pixel's blue component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`topdown`
Type: `SystemBoolean`
If true, the raw bitmap will be stored in top-down order (top-left pixel first) and in bottom-up order (bottom-left pixel first) otherwise.

See Also

Reference
`FreedImage Class`
`ConvertToRawBits Overload`
`FreedImageAPI Namespace`

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FreeImageConvertToRawBits Method (IntPtr, FIBITMAP, Int32, UInt32, UInt32, UInt32, UInt32, Boolean)

Converts a FreeImage bitmap to a raw bitmap, that is a raw piece of memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void ConvertToRawBits(  
    IntPtr bits,  
    FIBITMAP dib,  
    int pitch,  
    uint bpp,  
    uint red_mask,  
    uint green_mask,  
    uint blue_mask,  
    bool topdown  
)
```

### Parameters

**bits**  
Type: SystemIntPtr  
Pointer to the memory block receiving the raw bitmap.

**dib**
Type: `FreeImageAPIFIBITMAP`  
Handle to a FreeImage bitmap.

`pitch`  
Type: `SystemInt32`  
The desired total width in bytes of a scanline in the raw bitmap, including any padding bytes.

`bpp`  
Type: `SystemUInt32`  
The desired bit depth (bits per pixel) of the raw bitmap.

`red_mask`  
Type: `SystemUInt32`  
The desired bit mask describing the bits used to store a single pixel's red component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`green_mask`  
Type: `SystemUInt32`  
The desired bit mask describing the bits used to store a single pixel's green component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`blue_mask`  
Type: `SystemUInt32`  
The desired bit mask describing the bits used to store a single pixel's blue component in the raw bitmap. This is only applied to 16-bpp raw bitmaps.

`topdown`  
Type: `SystemBoolean`  
If true, the raw bitmap will be stored in top-down order (top-left pixel first) and in bottom-up order (bottom-left pixel first) otherwise.

## See Also

Reference
- `FreelImage Class`
- `ConvertToRawBits Overload`
- `FreelImageAPI Namespace`

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageConvertToRGBF Method

Converts a 24- or 32-bit RGB(A) standard image or a 48-bit RGB image to a FIT_RGBF type image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP ConvertToRGBF(FIBITMAP dib)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageConvertToStandardType Method

Converts a non-standard image whose color type is FIC_MINISBLACK to a standard 8-bit greyscale image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP ConvertToStandardType(
    FIBITMAP src,
    bool scale_linear
)
```

**Parameters**

**src**
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

**scale_linear**
Type: SystemBoolean  
When true the conversion is done by scaling linearly each pixel value from [min, max] to an integer value between [0..255], where min and max are the minimum and maximum pixel values in the image. When false the conversion is done by rounding each pixel value to an integer between [0..255]. Rounding is done using the following formula: 
\[
\text{dst}_{\text{pixel}} = \text{BYTE} \left( \text{MIN}(255, \text{MAX}(0, q)) \right) \quad \text{where} \quad \text{int} \ q = \text{int}(\text{src}_{\text{pixel}} + 0.5);
\]

**Return Value**
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageConvertToType Method

Converts an image of any type to type dst_type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static FIBITMAP ConvertToType(
    FIBITMAP src,
    FREE_IMAGE_TYPE dst_type,
    bool scale_linear
)
```

### Parameters

- **src**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **dst_type**
  - Type: FreeImageAPIFREE_IMAGE_TYPE
  - Destination type.

- **scale_linear**
  - Type: SystemBoolean
  - True to scale linear, else false.

### Return Value

- Type: FIBITMAP
  - Handle to a FreeImage bitmap.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopy Method

Copy a sub part of the current dib image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

#### C#

```csharp
public static FIBITMAP Copy(
    FIBITMAP dib,
    int left,
    int top,
    int right,
    int bottom
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

- **left**
  - Type: System.Int32
  - Specifies the left position of the cropped rectangle.

- **top**
  - Type: System.Int32
  - Specifies the top position of the cropped rectangle.

- **right**
  - Type: System.Int32
  - Specifies the right position of the cropped rectangle.

- **bottom**
  - Type: System.Int32
  - Specifies the bottom position of the cropped rectangle.
Specifies the bottom position of the cropped rectangle.

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
### FreeImageCopyMemory Method

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<td>Copies a block of memory into an array.</td>
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</table>
#### See Also

**Reference**
- FreelImage Class
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (Array, Array, Int32)

Copies the content of one array into another array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    Array dest,
    Array src,
    int len
)
```

### Parameters

- **dest**
  Type: SystemArray  
  An array used as the destination of the copy process.

- **src**
  Type: SystemArray  
  An array used as the source of the copy process.

- **len**
  Type: SystemInt32  
  The size of the content to copy, in bytes.

### See Also

Reference
FreeImage Class
CopyMemory Overload
FreeImageAPI Namespace

Contact/Feedback: FreiImage.NET Homepage
Help improve this Documentation: Join the Project
FreedImageCopyMemory Method (Array, Array, Int64)

Copies the content of one array into another array.

**Namespace:** FreedImageAPI  
**Assembly:** FreedImageNET (in FreedImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    Array dest,
    Array src,
    long len
)
```

### Parameters

- **dest**  
  Type: System.Array  
  An array used as the destination of the copy process.

- **src**  
  Type: System.Array  
  An array used as the source of the copy process.

- **len**  
  Type: System.Int64  
  The size of the content to copy, in bytes.

### See Also

Reference
Freelmage Class
CopyMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (Array, IntPtr, Int32)

Copies a block of memory into an array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static void CopyMemory(
    Array dest,
    IntPtr src,
    int len
)
```

### Parameters

- **dest**  
  Type: `SystemArray`  
  An array used as the destination of the copy process.

- **src**  
  Type: `SystemIntPtr`  
  A pointer to the starting address of the block of memory to copy.

- **len**  
  Type: `SystemInt32`  
  The size of the block of memory to copy, in bytes.

### See Also

Reference
FreeImageCopyMemory Method (Array, IntPtr, Int64)

Copies a block of memory into an array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    Array dest,
    IntPtr src,
    long len
)
```

### Parameters

- **dest**  
  Type: `SystemArray`  
  An array used as the destination of the copy process.

- **src**  
  Type: `SystemIntPtr`  
  A pointer to the starting address of the block of memory to copy.

- **len**  
  Type: `SystemInt64`  
  The size of the block of memory to copy, in bytes.

### See Also

Reference
FreeImageCopyMemory Method (Array, Void, Int32)

Copies a block of memory into an array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static void CopyMemory(
    Array dest,
    void* src,
    int len
)
```

**Parameters**

- **dest**  
  Type: SystemArray  
  An array used as the destination of the copy process.

- **src**  
  Type: SystemVoid*  
  A pointer to the starting address of the block of memory to copy.

- **len**  
  Type: SystemInt32  
  The size of the block of memory to copy, in bytes.

**See Also**

Reference
FreeImageCopyMemory
Method (Array, Void, Int64)

Copies a block of memory into an array.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    Array dest,
    void* src,
    long len
)
```

### Parameters

**dest**
- Type: `SystemArray`
- An array used as the destination of the copy process.

**src**
- Type: `SystemVoid*`
- A pointer to the starting address of the block of memory to copy.

**len**
- Type: `SystemInt64`
- The size of the block of memory to copy, in bytes.

### See Also

Reference
FreeImageCopyMemory Method (Byte, Byte, Int32)

Copies a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    byte* dest,
    byte* src,
    int len
)
```

### Parameters

- **dest**
  - Type: System.Byte*
  - A pointer to the starting address of the copied block's destination.

- **src**
  - Type: System.Byte*
  - A pointer to the starting address of the block of memory to copy.

- **len**
  - Type: System.Int32
  - The size of the block of memory to copy, in bytes.

### Remarks

*CopyMemory* runs faster than MoveMemory(Void*, Void*, UInt32).
However, if both blocks overlap the result is undefined.

See Also

Reference
FreelImage Class
CopyMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (Byte, Byte, Int64)

Copies a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static void CopyMemory(
    byte* dest,
    byte* src,
    long len
)
```

### Parameters

**dest**
- Type: `SystemByte*`  
  A pointer to the starting address of the copied block's destination.

**src**
- Type: `SystemByte*`  
  A pointer to the starting address of the block of memory to copy.

**len**
- Type: `SystemInt64`  
  The size of the block of memory to copy, in bytes.

### Remarks

`CopyMemory` runs faster than `MoveMemory(Void*, Void*, Int64)`.
However, if both blocks overlap the result is undefined.

See Also

Reference
FreelImage Class
CopyMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (IntPtr, Array, Int32)

Copies the content of an array to a memory location.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    IntPtr dest,
    Array src,
    int len
)
```

### Parameters

- **dest**  
  Type: SystemIntPtr  
  A pointer to the starting address of the copied block's destination.

- **src**  
  Type: SystemArray  
  An array used as the source of the copy process.

- **len**  
  Type: SystemInt32  
  The size of the block of memory to copy, in bytes.

### See Also
Reference
FreelImage Class
CopyMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (IntPtr, Array, Int64)

Copies the content of an array to a memory location.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    IntPtr dest,
    Array src,
    long len
)
```

### Parameters

- **dest**  
  Type: `SystemIntPtr`  
  A pointer to the starting address of the copied block's destination.

- **src**  
  Type: `SystemArray`  
  An array used as the source of the copy process.

- **len**  
  Type: `SystemInt64`  
  The size of the block of memory to copy, in bytes.

### See Also
Reference
FreelImage Class
CopyMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (IntPtr, IntPtr, Int32)

Copies a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static void CopyMemory(
    IntPtr dest,
    IntPtr src,
    int len
)
```

### Parameters

- **dest**
  - Type: SystemIntPtr
  - A pointer to the starting address of the copied block's destination.

- **src**
  - Type: SystemIntPtr
  - A pointer to the starting address of the block of memory to copy.

- **len**
  - Type: SystemInt32
  - The size of the block of memory to copy, in bytes.

### Remarks

*CopyMemory* runs faster than *MoveMemory(IntPtr, IntPtr, UInt32).*
However, if both blocks overlap the result is undefined.

See Also

Reference
Freelmage Class
CopyMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (IntPtr, IntPtr, Int64)

Copies a block of memory from one location to another.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static void CopyMemory(
    IntPtr dest,
    IntPtr src,
    long len
)
```

Parameters

*dest*
   Type: SystemIntPtr
   A pointer to the starting address of the copied block's destination.

*src*
   Type: SystemIntPtr
   A pointer to the starting address of the block of memory to copy.

*len*
   Type: SystemInt64
   The size of the block of memory to copy, in bytes.

Remarks

*CopyMemory* runs faster than *MoveMemory(IntPtr, IntPtr, Int64).*
However, if both blocks overlap the result is undefined.

See Also

Reference
Freelmage Class
CopyMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory
Method (Void, Array, Int32)

Copies the content of an array to a memory location.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲Syntax

```csharp
public static void CopyMemory(
    void* dest,
    Array src,
    int len
)
```

**Parameters**

- **dest**
  - Type: `SystemVoid*`  
  - A pointer to the starting address of the copied block's destination.

- **src**
  - Type: `SystemArray`  
  - An array used as the source of the copy process.

- **len**
  - Type: `SystemInt32`  
  - The size of the block of memory to copy, in bytes.

▲ See Also
Reference
Freelmage Class
CopyMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (Void, Array, Int64)

Copies the content of an array to a memory location.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    void* dest,
    Array src,
    long len
)
```

### Parameters

- **dest**
  - Type: `SystemVoid*`
  - A pointer to the starting address of the copied block's destination.

- **src**
  - Type: `SystemArray`
  - An array used as the source of the copy process.

- **len**
  - Type: `SystemInt64`
  - The size of the block of memory to copy, in bytes.

### See Also
FreeImageCopyMemory Method (Void, Void, Int32)

Copies a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void CopyMemory(
    void* dest,
    void* src,
    int len
)
```

### Parameters

- **dest**  
  Type: `SystemVoid`*  
  A pointer to the starting address of the copied block's destination.

- **src**  
  Type: `SystemVoid`*  
  A pointer to the starting address of the block of memory to copy.

- **len**  
  Type: `SystemInt32`  
  The size of the block of memory to copy, in bytes.

### Remarks

`CopyMemory` runs faster than `MoveMemory(Void*, Void*, UInt32)`. 
However, if both blocks overlap the result is undefined.

See Also

Reference
Freelmage Class
CopyMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCopyMemory Method (Void, Void, Int64)

Copies a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static void CopyMemory(
    void* dest,
    void* src,
    long len
)
```

### Parameters

- **dest**  
  Type: `SystemVoid*`  
  A pointer to the starting address of the copied block's destination.

- **src**  
  Type: `SystemVoid*`  
  A pointer to the starting address of the block of memory to copy.

- **len**  
  Type: `SystemInt64`  
  The size of the block of memory to copy, in bytes.

## Remarks

`CopyMemory` runs faster than `MoveMemory(Void*, Void*, Int64)`. 
However, if both blocks overlap the result is undefined.

See Also

Reference
Freelmage Class
CopyMemory Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCreateFromBitmap Method

Converts an .NET Bitmap into a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIBITMAP CreateFromBitmap(
    Bitmap bitmap
)
```

## Parameters

*bitmap*  
Type: System.Drawing.Bitmap  
The Bitmap to convert.

## Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>The bitmaps pixelformat is invalid.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><em>bitmap</em> is null.</td>
</tr>
</tbody>
</table>
Remarks

Copying metadata has been disabled until a proper way of reading and storing metadata in a .NET bitmap is found.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
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FreeImageCreateFromHbitmap Method

Creates a FreeImage DIB from a Device Context/Compatible Bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public static FIBITMAP CreateFromHbitmap(
    IntPtr hbitmap,
    IntPtr hdc
)
```

### Parameters

- **hbitmap**  
  Type: SystemIntPtr  
  Handle to the bitmap.

- **hdc**  
  Type: SystemIntPtr  
  Handle to a device context.

### Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ArgumentNullException

hitmap is null.

See Also

Reference

Freelmage Class

FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCreateICCProfile Method

Creates a new FIICCPROFILE block from ICC profile data previously read from a file or built by a color management system. The profile data is attached to the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static IntPtr CreateICCProfile(  
    FIBITMAP dib,  
    byte[] data,  
    int size
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **data**
  - Type: SystemByte
  - Pointer to the new FIICCPROFILE data.

- **size**
  - Type: SystemInt32
  - Size of the FIICCPROFILE data.

### Return Value

- Type: IntPtr
Pointer to the created FIICCPROFILE structure.

**See Also**

Reference
Freelmage Class
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageCreateICCPProfileEx
Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CreateICCPProfileEx(FIBITMAP, Byte)</td>
<td>Creates a new ICC-Profile for a FreeImage bitmap.</td>
</tr>
<tr>
<td>CreateICCPProfileEx(FIBITMAP, Byte, Int32)</td>
<td>Creates a new ICC-Profile for a FreeImage bitmap.</td>
</tr>
</tbody>
</table>

See Also

Reference
- Freelmage Class
- FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageCreateICCPProfileEx Method (FIBITMAP, Byte)

Creates a new ICC-Profile for a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIICCPROFILE CreateICCPProfileEx(
    FIBITMAP dib,
    byte[] data
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **data**  
  Type: SystemByte  
  The data of the new ICC-Profile.

### Return Value

Type: FIICCPROFILE  
The new ICC-Profile of the bitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>


ArgumentNullException

dib is null.

See Also

Reference
FreelImage Class
CreateICCProfileEx Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageCreateICCProfileEx Method (FIBITMAP, Byte, Int32)

Creates a new ICC-Profile for a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIICCPROFILE CreateICCProfileEx(
    FIBITMAP dib,
    byte[] data,
    int size
)
```

**Parameters**

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **data**  
  Type: SystemByte  
  The data of the new ICC-Profile.

- **size**  
  Type: SystemInt32  
  The number of bytes of data to use.

**Return Value**

Type: FIICCPROFILE
The new ICC-Profile of the FreeImage bitmap.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>dib is null.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- [FreeImage Class](#)
- [CreateICCProfileEx Overload](#)
- [FreeImageAPI Namespace](#)

Contact/Feedback: [FreeImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
FreeImageCreateTag Method

Allocates a new FITAG object. This object must be destroyed with a call to *DeleteTag(FITAG)* when no longer in use.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FITAG CreateTag()
```

**Return Value**  
Type: FITAG  
The new FITAG.

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback:  
Help improve this Documentation:
**FreeImageCreateView Method**

Creates a dynamic read/write view into a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP CreateView(
    FIBITMAP dib,
    int left,
    int top,
    int right,
    int bottom
)
```

### Parameters

- **dib**
  
  Type: **FreeImageAPI**FIBITMAP  
  The FreeImage bitmap on which to create the view.

- **left**
  
  Type: **SystemInt32**  
  The left position of the view's area.

- **top**
  
  Type: **SystemInt32**  
  The top position of the view's area.

- **right**
  
  Type: **SystemInt32**  
  The right position of the view's area.
**bottom**

Type: `SystemInt32`
The bottom position of the view's area.

**Return Value**

Type: `FIBITMAP`
A handle to the newly created view or returns NULL if the view was not created.

**Remarks**

A dynamic view is a FreeImage bitmap with its own width and height, that, however, shares its bits with another FreeImage bitmap. Typically, views are used to define one or more rectangular sub-images of an existing bitmap. All FreeImage operations, like saving, displaying and all the toolkit functions, when applied to the view, only affect the view's rectangular area.

Although the view's backing image's bits not need to be copied around, which makes the view much faster than similar solutions using `Copy(FIBITMAP, Int32, Int32, Int32, Int32)`, a view uses some private memory that needs to be freed by calling `Unload(FIBITMAP)` on the view's handle to prevent memory leaks.

Only the backing image's pixels are shared by the view. For all other image data, notably for the resolution, background color, color palette, transparency table and for the ICC profile, the view gets a private copy of the data. By default, the backing image's metadata is NOT copied to the view.

As with all FreeImage functions that take a rectangle region, top and left positions are included, whereas right and bottom positions are excluded from the rectangle area. Since the memory block shared by the backing image and the view must start at a byte boundary, the value of parameter `left` must be a multiple of 8 for 1-bit images and a multiple of 2 for 4-bit images.

**See Also**

Reference

FreeImage Class
FreeImageAPI Namespace
FreeImageDeletePage Method

Deletes the page on the given position.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void DeletePage(
    FIMULTIBITMAP bitmap,
    int page
)
```

### Parameters

- **bitmap**
  - Type: FreeImageAPIFIMULTIBITMAP
  - Handle to a FreeImage multi-paged bitmap.

- **page**
  - Type: SystemInt32
  - Number of the page to delete.

### See Also

Reference
- FreImage Class
- FreeImageAPI Namespace

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FreeImageDeleteTag Method

Delete a previously allocated FITAG object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void DeleteTag(
    FITAG tag
)
```

### Parameters

- **tag**  
  Type: FreeImageAPIFITAG  
  The FITAG to destroy.

### See Also

**Reference**
- FreImage Class  
- FreImageAPI Namespace

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FreeImageDestroyICCProfile Method

This function destroys an FIICCPROFILE previously created by CreateICCProfile(FIBITMAP, Byte, Int32). After this call the bitmap will contain no profile information. This function should be called to ensure that a stored bitmap will not contain any profile information.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void DestroyICCProfile(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference

- FreerImage Class
- FreeImageAPI Namespace

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FreeImageDither Method

Converts a bitmap to 1-bit monochrome bitmap using a dithering algorithm. For 1-bit input bitmaps, the function clones the input bitmap and builds a monochrome palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP Dither(
    FIBITMAP dib,
    FREE_IMAGE_DITHER algorithm
)
```

### Parameters

- **dib**
  
  Type: `FreeImageAPIFIBITMAP`  
  Handle to a FreeImage bitmap.

- **algorithm**
  
  Type: `FreeImageAPIFREE_IMAGE_DITHER`  
  The dithering algorithm to use.

### Return Value

Type: `FIBITMAP`  
Handle to a FreeImage bitmap.

### See Also

- Reference  
  `FreeImage Class`
FreeImageEnlargeCanvas<T> Method

Enlarges or shrinks the FreeImage bitmap selectively per side and fills newly added areas with the specified background color. See remarks for further details.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP EnlargeCanvas<T>(
    FIBITMAP dib,
    int left,
    int top,
    int right,
    int bottom,
    Nullable<T> color,
    FREE_IMAGE_COLOR_OPTIONS options
)
```

Parameters

- **dib**
  Type: FreeImageAPIFIBITMAP
  Handle to a FreeImage bitmap.

- **left**
  Type: SystemInt32
  The number of pixels, the image should be enlarged on its left side. Negative values shrink the image on its left side.
**top**
Type: `SystemInt32`  
The number of pixels, the image should be enlarged on its top side. Negative values shrink the image on its top side.

**right**
Type: `SystemInt32`  
The number of pixels, the image should be enlarged on its right side. Negative values shrink the image on its right side.

**bottom**
Type: `SystemInt32`  
The number of pixels, the image should be enlarged on its bottom side. Negative values shrink the image on its bottom side.

**color**
Type: `SystemNullable{T}`  
The color, the enlarged sides of the image should be filled with.

**options**
Type: `FreeImageAPIFREE_IMAGE_COLOR_OPTIONS`  
Options that affect the color search process for palletized images.

**Type Parameters**

```
T
```
The type of the specified color.

**Return Value**
Type: `FIBITMAP`  
Handle to a FreeImage bitmap.

**Remarks**

This function enlarges or shrinks an image selectively per side. The main purpose of this function is to add borders to an image. To add a border to any of the image's sides, a positive integer value must be passed in any of the parameters `left, top, right` or `bottom`. This value represents the border's width in pixels. Newly created parts of the image (the border areas) are filled with the specified `color`. Specifying a negative integer value for a certain side, will shrink or
crop the image on this side. Consequently, specifying zero for a certain side will not change the image's extension on that side. So, calling this function with all parameters left, top, right and bottom set to zero, is effectively the same as calling function Clone(FIBITMAP); setting all parameters left, top, right and bottom to value equal to or smaller than zero, my easily be substituted by a call to function Copy(FIBITMAP, Int32, Int32, Int32, Int32). Both these cases produce a new image, which is guaranteed not to be larger than the input image. Thus, since the specified color is not needed in these cases, color may be null.

Both parameters color and options work according to function FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS). So, please refer to the documentation of FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS) to learn more about parameters color and options. For palletized images, the palette of the input image is transparently copied to the newly created enlarged or shrunken image, so any color look-ups are performed on this palette.

### Examples

```c
// create a white color
RGBQUAD c;
c.rgbRed = 0xFF;
c.rgbGreen = 0xFF;
c.rgbBlue = 0xFF;
c.rgbReserved = 0x00;

// add a white, symmetric 10 pixel wide border to the image
dib2 = FreeImage_EnlargeCanvas(dib, 10, 10, 10, 10, c, FREE_IMAGE_COLOR_OPTIONS.FICO_RGB);

// add white, 20 pixel wide stripes to the top and bottom side of the image
dib3 = FreeImage_EnlargeCanvas(dib, 0, 20, 0, 20, c, FREE_IMAGE_COLOR_OPTIONS.FICO_RGB);

// add white, 30 pixel wide stripes to the right side of the image and // cut off the 40 leftmost pixel columns
dib3 = FreeImage_EnlargeCanvas(dib, -40, 0, 30, 0, c, FREE_IMAGE_COLOR_OPTIONS.FICO_RGB);
```
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

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FreeImageFIFSupportsExportBPP Method

Checks if a plugin can save bitmaps in the desired bit depth.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool FIFSupportsExportBPP(
    FREE_IMAGE_FORMAT fif,
    int bpp
)
```

**Parameters**

- **fif**
  
  Type: `FreeImageAPIFREE_IMAGE_FORMAT`  
  The `FREE_IMAGE_FORMAT` of the plugin.

- **bpp**
  
  Type: `SystemInt32`  
  The desired bit depth.

**Return Value**

Type: `Boolean`  
True if the plugin can save bitmaps in the desired bit depth, else false.

**See Also**

Reference
FreeImageFIFSupportsExportType Method

Checks if a plugin can save a bitmap in the desired data type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool FIFSupportsExportType(  
    FREE_IMAGE_FORMAT fif,  
    FREE_IMAGE_TYPE type
)
```

### Parameters

- **fif**  
  Type: FreeImageAPIFREE_IMAGE_FORMAT  
  The FREE_IMAGE_FORMAT of the plugin.

- **type**  
  Type: FreeImageAPIFREE_IMAGE_TYPE  
  The desired image type.

### Return Value

Type: Boolean  
True if the plugin can save bitmaps as the desired type, else false.

### See Also

Reference  
FreeImage Class
FreeImageFIFSupportsICCProfiles Method

Checks if a plugin can load or save an ICC profile.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool FIFSupportsICCProfiles(
    FREE_IMAGE_FORMAT fif
)
```

**Parameters**

*fif*  
Type: FreeImageAPIFREE_IMAGE_FORMAT  
The FREE_IMAGE_FORMAT of the plugin.

**Return Value**

Type: Boolean  
True if the plugin can load or save an ICC profile, else false.

**See Also**

Reference  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.FIFSupportsNoPixels Method

Checks if a plugin can load only the image header

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool FIFSupportsNoPixels(
    FREE_IMAGE_FORMAT fif
)
```

### Parameters

- **fif**
  - Type: FreeImageAPI.FREE_IMAGE_FORMAT
  - The FREE_IMAGE_FORMAT of the plugin.

### Return Value

- Type: Boolean
  - True if the plugin can load only the header, else false.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageFIFSupportsReading Method

Checks if a plugin can load bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool FIFSupportsReading(
    FREE_IMAGE_FORMAT fif
)
```

### Parameters

* `fif`  
  Type: FreeImageAPIFREE_IMAGE_FORMAT  
  The FREE_IMAGE_FORMAT of the plugin.

### Return Value

Type: Boolean  
True if the plugin can load bitmaps, else false.

## See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.FIFSupportsWriting Method

Checks if a plugin can save bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool FIFSupportsWriting(
    FREE_IMAGE_FORMAT fif
)
```

**Parameters**

- **fif**
  - Type: `FREE_IMAGE_FORMAT`
  - The `FREE_IMAGE_FORMAT` of the plugin.

**Return Value**

- Type: `Boolean`
- True if the plugin can save bitmaps, else false.

**See Also**

- Reference: FreeImage Class  
  FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageFillBackground\textit{T} Method

Sets all pixels of the specified image to the color provided through the \textit{color} parameter. See remarks for further details.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C# Copy

```csharp
public static bool FillBackground\textlt;\textit{T}\textgt;(
    FIBITMAP \textit{dib},
    \textit{T} \textit{color},
    FREE_IMAGE_COLOR_OPTIONS \textit{options}
)
where \textit{T} : struct, new()
```

### Parameters

\textit{dib}

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

\textit{color}

Type: \textit{T}  
The color to fill the bitmap with. See remarks for further details.

\textit{options}

Type: FreeImageAPIFREE_IMAGE_COLOR_OPTIONS  
Options that affect the color search process for palletized images.

### Type Parameters
The type of the specified color.

Return Value
Type: Boolean
true on success, false on failure.

Remarks

This function sets all pixels of an image to the color provided through the color parameter. RGBQUAD is used for standard type images. For non standard type images the underlaying structure is used. So, color must be of type Double, if the image to be filled is of type FIT_DOUBLE and must be a FIRGBF structure if the image is of type FIT_RGBF and so on.

However, the fill color is always specified through a RGBQUAD structure for all images of type FIT_BITMAP. So, for 32- and 24-bit images, the red, green and blue members of the RGBQUAD structure are directly used for the image's red, green and blue channel respectively. Although alpha transparent RGBQUAD colors are supported, the alpha channel of a 32-bit image never gets modified by this function. A fill color with an alpha value smaller than 255 gets blended with the image's actual background color, which is determined from the image's bottom-left pixel. So, currently using alpha enabled colors, assumes the image to be unicolor before the fill operation. However, the rgbReserved field is only taken into account, if option [!:FREE_IMAGE_COLOR_OPTIONS.FICO_RGBA] has been specified.

For 16-bit images, the red-, green- and blue components of the specified color are transparently translated into either the 16-bit 555 or 565 representation. This depends on the image's actual red-green- and blue masks.

Special attention must be payed for palletized images. Generally, the RGB color specified is looked up in the image's palette. The found palette index is then used to fill the image. There are some option flags, that affect this lookup process:

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>[!:FREE_IMAGE_COLOR_OPTIONS.FICO_DEFAULT]</td>
<td>Uses the color, that is nearest to the specified color. default behavior and should always find a</td>
</tr>
</tbody>
</table>
However, the visual result may mainly depend on the palette. If the specified color is not found in the palette, the returned palette index, if the specified color is not found, falls back and uses the RGBQUAD’s rgbReserved member (or its low nibble for 4-bit images) as index to be used for the fill operation.

**See Also**

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageFindCloseMetadata Method

Closes the specified metadata search handle and releases associated resources.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static void FindCloseMetadata(
    FIMETADATA mdhandle
)
```

**Parameters**

- `mdhandle`  
  Type: FreeImageAPI.FIMETADATA  
  The handle to close.

**See Also**

- Reference  
  - FreeImage Class  
  - FreeImageAPI Namespace

Contact/Feedback: FreiImage.NET Homepage  
Help improve this Documentation: Join the Project
## FreeImageFindFirstMetadata Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FindFirstMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, FITAG)</td>
<td>Provides information about the first instance of a tag that matches the metadata model.</td>
</tr>
<tr>
<td>FindFirstMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, MetadataTag)</td>
<td>Provides information about the first instance of a tag that matches the metadata model.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FreelImage Class
  - FreelImageAPI Namespace
FreeImageFindFirstMetadata Method
(FREE_IMAGE_MDMODEL, FIBITMAP, FITAG)

Provides information about the first instance of a tag that matches the metadata model.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static FIMETADATA FindFirstMetadata(
    FREE_IMAGE_MDMODEL model,
    FIBITMAP dib,
    out FITAG tag
)
```

Parameters

- **model**
  - Type: `FreeImageAPIFREE_IMAGE_MDMODEL`
  - The model to match.

- **dib**
  - Type: `FreeImageAPIFIBITMAP`
  - Handle to a FreeImage bitmap.

- **tag**
  - Type: `FreeImageAPIFITAG`
  - Tag that matches the metadata model.
Return Value
Type: FIMETADATA
Unique search handle that can be used to call FindNextMetadata or FindCloseMetadata. Null if the metadata model does not exist.

See Also

Reference
FreelImage Class
FindFirstMetadata Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageFindFirstMetadata Method
(FREE_IMAGE_MDMODEL, FIBITMAP, MetadataTag)

Provides information about the first instance of a tag that matches the metadata model.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIMETADATA FindFirstMetadata(
    FREE_IMAGE_MDMODEL model,
    FIBITMAP dib,
    out MetadataTag tag
)
```

### Parameters

- **model**
  - Type: `FreeImageAPI.FREE_IMAGE_MDMODEL`  
  - The model to match.

- **dib**
  - Type: `FreeImageAPI.FIBITMAP`  
  - Handle to a FreeImage bitmap.

- **tag**
  - Type: `FreeImageAPI.MetadataMetadataTag`  
  - Tag that matches the metadata model.
Return Value
Type: FIMETADATA
Unique search handle that can be used to call FindNextMetadata or FindCloseMetadata. Null if the metadata model does not exist.

 Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>$dib$ is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreelImage Class
- FindFirstMetadata Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
### FreeImageFindNextMetadata Method

#### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt=".FindNextMetadata(FIMETADATA, FITAG)" /></td>
<td>Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata, and then alters the tag object contents accordingly.</td>
</tr>
<tr>
<td><img src="image" alt=".FindNextMetadata(FIMETADATA, MetadataTag)" /></td>
<td>Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata, and then alters the tag object contents accordingly.</td>
</tr>
</tbody>
</table>

**See Also**

---

**FreeImage.NET Class Library Reference**
Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageFindNextMetadata Method (FIMETADATA, FITAG)

Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata, and then alters the tag object contents accordingly.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool FindNextMetadata(
    FIMETADATA mdhandle,
    out FITAG tag
)
```

**Parameters**

*mdhandle*
Type: FreeImageAPI.FIMETADATA
Unique search handle provided by FindFirstMetadata.

*tag*
Type: FreeImageAPI.FITAG
Tag that matches the metadata model.

**Return Value**
Type: Boolean
Returns true on success, false on failure.
See Also

Reference

FreeImage Class
FindNextMetadata Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageFindNextMetadata
Method (FIMETADATA, MetadataTag)

Find the next tag, if any, that matches the metadata model argument in a previous call to FindFirstMetadata, and then alters the tag object contents accordingly.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool FindNextMetadata(
    FIMETADATA mdhandle,
    out MetadataTag tag
)
```

**Parameters**

- **mdhandle**
  - Type: `FreeImageAPI.FIMETADATA`
  - Unique search handle provided by FindFirstMetadata.

- **tag**
  - Type: `FreeImageAPI.MetadataMetadataTag`
  - Tag that matches the metadata model.

**Return Value**

- Type: `Boolean`
  - Returns true on success, false on failure.
See Also

Reference
Freelmage Class
FindNextMetadata Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageFlipHorizontal Method

Flip the input dib horizontally along the vertical axis.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool FlipHorizontal(
    FIBITMAP dib
)
```

### Parameters

**dib**  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: **Boolean**  
Returns true on success, false on failure.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

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FreeImageFlipVertical Method

Flip the input dib vertically along the horizontal axis.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool FlipVertical(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### Return Value

- **Type:** Boolean  
  - Returns true on success, false on failure.

### See Also

- Reference
  - FreeImage Class  
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageFreeHbitmap Method

Frees a bitmap handle.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool FreeHbitmap(
    IntPtr hbitmap
)
```

### Parameters

**hbitmap**

Type: SystemIntPtr  
Handle to a bitmap.

### Return Value

Type: Boolean  
True on success, false on failure.

## See Also

**Reference**

FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetAdjustColorsLookupTable Method

Creates a lookup table to be used with AdjustCurve(FIBITMAP, Byte, FREE_IMAGE_COLOR_CHANNEL) which may adjusts brightness and contrast, correct gamma and invert the image with a single call to AdjustCurve(FIBITMAP, Byte, FREE_IMAGE_COLOR_CHANNEL).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static int GetAdjustColorsLookupTable(
    byte[] lookUpTable,
    double brightness,
    double contrast,
    double gamma,
    bool invert
)
```

### Parameters

- **lookUpTable**
  - Type: SystemByte
  - Output lookup table to be used with AdjustCurve(FIBITMAP, Byte, FREE_IMAGE_COLOR_CHANNEL). The size of 'lookUpTable' is assumed to be 256.

- **brightness**
  - Type: SystemDouble
  - Percentage brightness value where -100 <= brightness <= 100.
  - A value of 0 means no change, less than 0 will make the image
darker and greater than 0 will make the image brighter.

**contrast**
Type: SystemDouble
Percentage contrast value where -100 <= contrast <= 100. A value of 0 means no change, less than 0 will decrease the contrast and greater than 0 will increase the contrast of the image.

**gamma**
Type: SystemDouble
Gamma value to be used for gamma correction. A value of 1.0 leaves the image alone, less than one darkens it, and greater than one lightens it.

**invert**
Type: SystemBoolean
If set to true, the image will be inverted.

**Return Value**
Type: Int32
The number of adjustments applied to the resulting lookup table compared to a blind lookup table.

**Remarks**
This function creates a lookup table to be used with AdjustCurve(FIBITMAP, Byte, FREE_IMAGE_COLOR_CHANNEL) which may adjust brightness and contrast, correct gamma and invert the image with a single call to AdjustCurve(FIBITMAP, Byte, FREE_IMAGE_COLOR_CHANNEL). If more than one of these image display properties need to be adjusted, using a combined lookup table should be preferred over calling each adjustment function separately. That's particularly true for huge images or if performance is an issue. Then, the expensive process of iterating over all pixels of an image is performed only once and not up to four times. Furthermore, the lookup table created does not depend on the order, in which each single adjustment operation is performed. Due to rounding and byte casting issues, it actually matters in which order individual adjustment operations are performed. Both of the following snippets most likely produce different results:
Better and even faster would be snippet 3:

```csharp
// snippet 3: byte[] lut = new byte[256];
GetAdjustColorsLookupTable(lut, 50.0, 15.0, 1.0, false);
AdjustCurve(dib, lut, FREE_IMAGE_COLOR_CHANNEL.FICC_RGB);
```

This function is also used internally by `AdjustColors(FIBITMAP, Double, Double, Double, Boolean)`, which does not return the lookup table, but uses it to call `AdjustCurve(FIBITMAP, Byte, FREE_IMAGE_COLOR_CHANNEL.FICC_RGB)` on the passed image.

**See Also**

Reference

FreImage Class

FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage

Help improve this Documentation: Join the Project
FreeImageGetBackgroundColor Method

Returns the file background color of an image. For 8-bit images, the color index in the palette is returned in the rgbReserved member of the bkcolor parameter.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool GetBackgroundColor(
    FIBITMAP dib,
    out RGBQUAD bkcolor
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **bkcolor**
  - Type: FreeImageAPIRGBQUAD
  - The background color.

### Return Value

- **Type:** Boolean
  - Returns true on success, false on failure.

### See Also
Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageGetBitmap Method

Converts a FreeImage bitmap to a .NET Bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static Bitmap GetBitmap(  
    FIBITMAP dib  
)
```

## Parameters

**dib**  
Type: FreeImageAPI::FIBITMAP  
Handle to a FreeImage bitmap.

## Return Value

Type: Bitmap  
The converted .NET Bitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>The image type of <em>dib</em> is not FIT_BITMAP.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>
Remarks

Copying metadata has been disabled until a proper way of reading and storing metadata in a .NET bitmap is found.

See Also

Reference

Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetBitmapForDevice Method

Returns an HBITMAP created by the `CreateDIBitmap()` function which in turn has always the same color depth as the reference DC, which may be provided through `hdc`. The desktop DC will be used, if `IntPtr.Zero` DC is specified. Call `FreeHbitmap(IntPtr)` to free the handle.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static IntPtr GetBitmapForDevice(FIBITMAP dib, IntPtr hdc, bool unload)
```

### Parameters

- **dib**  
  Type: `FreeImageAPIFIBITMAP`  
  Handle to a FreeImage bitmap.

- **hdc**  
  Type: `SystemIntPtr`  
  Handle to a device context.

- **unload**  
  Type: `SystemBoolean`  
  When true the structure will be unloaded on success. If the function failed and returned false, the bitmap was not unloaded.
Return Value
Type: IntPtr
If the function succeeds, the return value is a handle to the compatible bitmap. If the function fails, the return value is Zero.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>$dib$ is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageGetBits Method

Returns a pointer to the data-bits of the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static IntPtr GetBits(  
    FIBITMAP dib
)
```

### Parameters

- **dib**
  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

### Return Value

Type: IntPtr  
Pointer to the data-bits.

## See Also

- **Reference**  
  FreeImage Class  
  FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImage.GetBlueMask Method

Returns a bit pattern describing the blue color component of a pixel in a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint GetBlueMask(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### Return Value

- Type: UInt32
- The bit pattern for blue.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FreeImageGetBPP Method

Returns the size of one pixel in the bitmap in bits.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint GetBPP(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: UInt32  
Size of one pixel in the bitmap in bits.

### See Also

Reference

Freelmage Class  
FreeImageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageGetChannel Method

Retrieves the red, green, blue or alpha channel of a 24- or 32-bit image.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static FIBITMAP GetChannel(  
    FIBITMAP dib,  
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

Parameters

*dib*

Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

*channel*

Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL
The color channel to extract.

Return Value

Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
FreeImageGetColorsUsed Method

Returns the number of colors used in a bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint GetColorsUsed(FIBITMAP dib)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### Return Value

- Type: UInt32
- Palette-size for paletteised bitmaps, and 0 for high-colour bitmaps.

### See Also

- Reference: FreeImage Class, FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
FreeImageGetColorType Method

Investigates the color type of the bitmap by reading the bitmap's pixel bits and analysing them.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FREE_IMAGE_COLOR_TYPE GetColorType(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: FREE_IMAGE_COLOR_TYPE  
The color type of the bitmap.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageGetComplexChannel Method

Retrieves the real part, imaginary part, magnitude or phase of a complex image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public static FIBITMAP GetComplexChannel(
    FIBITMAP src,
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

## Parameters

- **src**
  - Type: FreeImageAPIFIBITMAP  
    Handle to a FreeImage bitmap.

- **channel**
  - Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL  
    The color channel to extract.

## Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

## See Also

Reference
FreeImageGetCopyrightMessage Method

Returns a string containing a standard copyright message.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static string GetCopyrightMessage()
```

**Return Value**

Type: **String**
A standard copyright message.

### See Also

- Reference
  - Freهماmage Class
  - FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
**FreeImageGetDIBSize Method**

Returns the size of the DIB-element of a FIBITMAP in memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static uint GetDIBSize(
    FIBITMAP dib
)
```

**Parameters**

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

**Return Value**

Type: UInt32  
Size of the DIB-element

**See Also**

- Reference  
  FreeImage Class  
  FreeImageAPI Namespace

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FreeImage.GetDotsPerMeterX Method

Returns the horizontal resolution, in pixels-per-meter, of the target device for the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint GetDotsPerMeterX(
    FIBITMAP dib
)
```

### Parameters

**dib**
- Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

### Return Value

- Type: UInt32  
  The horizontal resolution, in pixels-per-meter.

### See Also

- FreeImage Class  
- FreeImageAPI Namespace
FreeImageGetDotsPerMeterY Method

Returns the vertical resolution, in pixels-per-meter, of the target device for the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static uint GetDotsPerMeterY(
    FIBITMAP dib
)
```

**Parameters**

* `dib`  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

**Return Value**

Type: UInt32  
The vertical resolution, in pixels-per-meter.

**See Also**

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageGetFIFCount Method

Retrieves the number of FREE_IMAGE_FORMAT identifiers being currently registered.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static int GetFIFCount()
```

### Return Value

Type: **Int32**  
The number of registered formats.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

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FreeImageGetFIFDescription Method

Returns a descriptive string that describes the bitmap formats the given plugin can read and/or write.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static string GetFIFDescription(
    FREE_IMAGE_FORMAT fif
)
```

### Parameters

- **fif**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT  
  - The desired FREE_IMAGE_FORMAT.

### Return Value

- Type: **String**  
  - A descriptive string that describes the bitmap formats.

## See Also

- **Reference**
  - FreeImage Class  
  - FreeImageAPI Namespace
FreeImage.GetFIFExtensionList Method

Returns a comma-delimited file extension list describing the bitmap formats the given plugin can read and/or write.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static string GetFIFExtensionList(
    FREE_IMAGE_FORMAT fif
)
```

### Parameters

**fif**

Type: FreeImageAPIFREE_IMAGE_FORMAT  
The desired FREE_IMAGE_FORMAT.

### Return Value

Type: **String**  
A comma-delimited file extension list.

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace
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FreeImageGetFIFFromFilename Method

This function takes a filename or a file-extension and returns the plugin that can read/write files with that extension in the form of a FREE_IMAGE_FORMAT identifier.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FREE_IMAGE_FORMAT GetFIFFromFilename(string filename)
```

### Parameters

*filename*

- **Type:** System.String  
- The filename or -extension.

### Return Value

- **Type:** FREE_IMAGE_FORMAT  
- The FREE_IMAGE_FORMAT of the plugin.

### See Also

- Reference  
  - FreelImage Class  
  - FreelImageAPI Namespace
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**FreeImageGetFIFFromFormat** Method

Returns a `FREE_IMAGE_FORMAT` identifier from the format string that was used to register the FIF.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FREE_IMAGE_FORMAT GetFIFFromFormat(
    string format
)
```

**Parameters**

- `format`  
  Type: `System.String`  
  The string that was used to register the plugin.

**Return Value**

Type: `FREE_IMAGE_FORMAT`  
A `FREE_IMAGE_FORMAT` identifier from the format.

**See Also**

Reference  
FreeImage Class  
FreeImageAPI Namespace
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FreeImageGetFIFFromMime Method

Returns a FREE_IMAGE_FORMAT identifier from a MIME content type string (MIME stands for Multipurpose Internet Mail Extension).

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FREE_IMAGE_FORMAT GetFIFFromMime(
    string mime
)
```

Parameters

mime
  Type: System.String
  A MIME content type.

Return Value
  Type: FREE_IMAGE_FORMAT
  A FREE_IMAGE_FORMAT identifier from the MIME.

See Also

Reference
  FreeImage Class
  FreeImageAPI Namespace
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FreeImageGetFIFMimeType Method

Given a FREE_IMAGE_FORMAT identifier, returns a MIME content type string (MIME stands for Multipurpose Internet Mail Extension).

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static string GetFIFMimeType(
    FREE_IMAGE_FORMAT fif
)
```

Parameters

*fif*

Type: FreeImageAPIFREE_IMAGE_FORMAT
The desired FREE_IMAGE_FORMAT.

Return Value

Type: String
A MIME content type string.

See Also

Reference
FreeImage Class
FreeImageAPI Namespace
FreeImageGetFIFRegExpr

Method

Returns a regular expression string that can be used by a regular expression engine to identify the bitmap. FreeImageQt makes use of this function.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static string GetFIFRegExpr(
    FREE_IMAGE_FORMAT fif
)
```

Parameters

*fif*

Type: FreeImageAPIFREE_IMAGE_FORMAT
The desired FREE_IMAGE_FORMAT.

Return Value

Type: String
A regular expression string.

See Also

Reference
FreeImage Class
FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FreeImageGetFileType Method

Orders FreeImage to analyze the bitmap signature.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static FREE_IMAGE_FORMAT GetFileType(
    string filename,
    int size
)
```

Parameters

- `filename`  
  Type: System.String  
  Name of the file to analyze.

- `size`  
  Type: System.Int32  
  Reserved parameter - use 0.

Return Value

Type: FREE_IMAGE_FORMAT  
Type of the bitmap.

See Also

Reference
Freelimage Class
FreeImage.GetFileTypeFromHandle Method

Uses the FreeImageIO structure as described in the topic bitmap management functions to identify a bitmap type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FREE_IMAGE_FORMAT GetFileTypeFromHandle(ref FreeImageIO io,
            fi_handle handle,
            int size)
```

### Parameters

- **io**  
  Type: FreeImageAPI.IOFreeImageIO  
  A FreeImageIO structure with functionpointers to handle the source.

- **handle**  
  Type: FreeImageAPI.IOfi_handle  
  A handle to the source.

- **size**  
  Type: System.Int32  
  Size in bytes of the source.

### Return Value
Type: `FREE_IMAGE_FORMAT`
Type of the bitmap.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

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FreeImageGetFileTypeFromMemory Method

Uses a memory handle to identify a bitmap type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FREE_IMAGE_FORMAT GetFileTypeFromMemory(FIMEMORY stream, int size)
```

### Parameters

- **stream**  
  Type: FreeImageAPIFIMEMORY  
  Pointer to the stream.

- **size**  
  Type: SystemInt32  
  Size in bytes of the source.

### Return Value

Type: FREE_IMAGE_FORMAT  
Type of the bitmap.

### See Also

Reference
FreeImageGetFileTypeFromStream Method

Orders FreeImage to analyze the bitmap signature. In case the stream is not seekable, the stream will have been used and must be recreated for loading.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FREE_IMAGE_FORMAT GetFileTypeFromStream(Stream stream)
```

### Parameters

**stream**  
Type: `System.IO.Stream`  
Name of the stream to analyze.

### Return Value

Type: `FREE_IMAGE_FORMAT`  
Type of the bitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>stream</code> is null.</td>
</tr>
</tbody>
</table>
ArgumentException

stream can not read.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

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FreeImageGetFormat Method

Returns the FREE_IMAGE_FORMAT for the specified ImageFormat.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C# public static FREE_IMAGE_FORMAT GetFormat( ImageFormat imageFormat )

Parameters

imageFormat
Type: System.Drawing.Imaging.ImageFormat
The ImageFormat for which to return the corresponding FREE_IMAGE_FORMAT.

Return Value
Type: FREE_IMAGE_FORMAT
The FREE_IMAGE_FORMAT for the specified ImageFormat

See Also

Reference
Freelimage Class
FreelimageAPI Namespace

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FreeImageGetFormatFromFIF

Method

Returns the string that was used to register a plugin from the system assigned FREE_IMAGE_FORMAT.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static string GetFormatFromFIF(
    FREE_IMAGE_FORMAT fif
)
```

### Parameters

**fif**
Type: FreeImageAPIFREE_IMAGE_FORMAT
The assigned FREE_IMAGE_FORMAT.

### Return Value

**Type:** String
The string that was used to register the plugin.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FreeImageGetFormatParameters Method

Retrieves all parameters needed to create a new FreeImage bitmap from the format of a .NET Image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```
public static bool GetFormatParameters(
    PixelFormat format,
    out FREE_IMAGE_TYPE type,
    out uint bpp,
    out uint red_mask,
    out uint green_mask,
    out uint blue_mask
)
```

**Parameters**

- **format**
  - Type: System.Drawing.ImagingPixelFormat
  - The `PixelFormat` of the .NET Image.

- **type**
  - Type: FreeImageAPIFREE_IMAGE_TYPE
  - Returns the type used for the new bitmap.

- **bpp**
  - Type: System.UInt32
  - Returns the color depth for the new bitmap.

- **red_mask**
Type: `System.UInt32`
Returns the red_mask for the new bitmap.

`green_mask`
Type: `System.UInt32`
Returns the green_mask for the new bitmap.

`blue_mask`
Type: `System.UInt32`
Returns the blue_mask for the new bitmap.

Return Value
Type: `Boolean`
True in case a matching conversion exists; else false.

See Also

Reference
- FreelImage Class
- FreelImageAPI Namespace

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FreeImageGetGreenMask Method

Returns a bit pattern describing the green color component of a pixel in a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static uint GetGreenMask(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  
  Type: `FreeImageAPI.FIBITMAP`
  
  Handle to a FreeImage bitmap.

### Return Value

- Type: `UInt32`
  
  The bit pattern for green.

### See Also

- Reference  
  FreeImage Class  
  FreeImageAPI Namespace
FreeImageGetHbitmap Method

Retrieves an hBitmap for a FreeImage bitmap. Call FreeHbitmap(IntPtr) to free the handle.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static IntPtr GetHbitmap(
    FIBITMAP dib,
    IntPtr hdc,
    bool unload
)
```

### Parameters

**dib**
- Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

**hdc**
- Type: SystemIntPtr  
  A reference device context. Use IntPtr.Zero if no reference is available.

**unload**
- Type: SystemBoolean  
  When true dib will be unloaded if the function succeeded.

### Return Value

- Type: IntPtr
The hBitmap for the FreeImage bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- FreelImage Class
- FreelImageAPI Namespace

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FreeImage.NET Class Library Reference

FreeImageGetHeight Method

Returns the height of the bitmap in pixel units.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static uint GetHeight(
    FIBITMAP dib
)
```

Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

Return Value

- Type: UInt32
- Height of the bitmap.

See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

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FreeImageGetHistogram Method

Computes the image histogram.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool GetHistogram(
    FIBITMAP dib,
    int[] histo,
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **histo**  
  Type: SystemInt32  
  Array of integers with a size of 256.

- **channel**  
  Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL  
  Channel to compute from.

### Return Value

Type: Boolean  
Returns true on success, false on failure.
FreeImageGetICCProfile Method

Retrieves a pointer to the FIICCPROFILE data of the bitmap. This function can also be called safely, when the original format does not support profiles.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static IntPtr GetICCProfile(
    FIBITMAP dib
)
```

### Parameters

**dib**
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

### Return Value

Type: IntPtr
Pointer to the FIICCPROFILE data of the bitmap.

### See Also

Reference
FreeImage Class
FreeImageAPI Namespace
FreeImageGetICCPProfileEx Method

Retrieves the FIICCPROFILE data of the bitmap. This function can also be called safely, when the original format does not support profiles.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIICCPROFILE GetICCPProfileEx(
    FIBITMAP dib
)
```

**Parameters**

- **dib**  
  - Type: FreeImageAPI.FIBITMAP  
    Handle to a FreeImage bitmap.

**Return Value**

- Type: FIICCPROFILE  
  The FIICCPROFILE data of the bitmap.

### See Also

- Reference  
  - FreelImage Class  
  - FreelImageAPI Namespace
Contact/Feedback: [FreeImage.NET Homepage](http://www.freewareยาวת.ונט)
Help improve this Documentation: [Join the Project](http://www.freewareยาวת.ונט)
**FreeImage.GetImageComment Method**

Returns the comment of a JPEG, PNG or GIF image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static string GetImageComment(
    FIBITMAP dib
)
```

### Parameters

**dib**  
Type: `FreeImageAPI.FIBITMAP`  
Handle to a FreeImage bitmap.

### Return Value

Type: `String`  
Comment of the FreeImage bitmap, or null in case no comment exists.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

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FreeImageGetImageType Method

Retrieves the type of the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FREE_IMAGE_TYPE GetImageType(
    FIBITMAP dib
)
```

**Parameters**

- **dib**
  Type: `FreeImageAPI/FIBITMAP`  
  Handle to a FreeImage bitmap.

**Return Value**

Type: `FREE_IMAGE_TYPE`  
Type of the bitmap.

**See Also**

Reference  
FreeImage Class  
FreeImageAPI Namespace

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FreeImage.NET Class Library Reference

FreeImageGetInfo Method

Alias for FreeImage_GetInfoHeader that returns a pointer to a BITMAPINFO rather than to a BITMAPINFOHEADER.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#  

```csharp
public static IntPtr GetInfo(  
    FIBITMAP dib
)
```

Parameters

- `dib`  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

Return Value

Type: IntPtr  
Pointer to the BITMAPINFO structure for the bitmap.

See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

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FreeImageGetInfoEx Method

Returns the BITMAPINFO structure of a FreeImage bitmap. The structure is a copy, so changes will have no effect on the bitmap itself.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static BITMAPINFO GetInfoEx(  
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP  
    - Handle to a FreeImage bitmap.

### Return Value

- Type: BITMAPINFO  
  - BITMAPINFO structure of the bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>dib is null.</td>
</tr>
</tbody>
</table>

### See Also
FreeImageGetInfoHeader Method

Returns a pointer to the BITMAPINFOHEADER of the DIB-element in a FIBITMAP.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static IntPtr GetInfoHeader(  
    FIBITMAP dib
)
```

Parameters

dib
  Type: FreeImageAPIFIBITMAP
  Handle to a FreeImage bitmap.

Return Value
  Type: IntPtr
  Pointer to the header of the bitmap.

See Also

Reference
  FreeImage Class
  FreeImageAPI Namespace
FreeImageGetInfoHeaderEx Method

Returns the BITMAPINFOHEADER structure of a FreeImage bitmap. The structure is a copy, so changes will have no effect on the bitmap itself.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static BITMAPINFOHEADER GetInfoHeaderEx(FIBITMAP dib)
```

Parameters

`dib`
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

Return Value
Type: BITMAPINFOHEADER
BITMAPINFOHEADER structure of the bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>dib</code> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

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FreeImage.GetLine Method

Returns the width of the bitmap in bytes.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static uint GetLine(
    FIBITMAP dib
)
```

## Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

## Return Value

- **Type:** UInt32
  - With of the bitmap in bytes.

## See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

---

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FreeImageGetLockedPageCount Method

Retrieves the number of pages that are locked in a multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static int GetLockedPageCount(
    FIMULTIBITMAP dib
)
```

**Parameters**

*dib*

Type: FreeImageAPI.FIMULTIBITMAP  
Handle to a FreeImage multi-paged bitmap.

**Return Value**

Type: Int32  
Number of locked pages.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>

**See Also**
Reference
FreelImage Class
FreelImageAPI Namespace

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FreeImageGetLockedPageNumbers

Method

Returns an array of page-numbers that are currently locked in memory. When the pages parameter is null, the size of the array is returned in the count variable.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool GetLockedPageNumbers(
    FIMULTIBITMAP bitmap,
    int[] pages,
    ref int count
)
```

**Parameters**

*bitmap*
- Type: FreeImageAPIFIMULTIBITMAP
- Handle to a FreeImage multi-paged bitmap.

*pages*
- Type: SystemInt32
- The list of locked pages in the multi-pages bitmap. If set to null, count will contain the number of pages.

*count*
- Type: SystemInt32
- If *pages* is set to null count will contain the number of locked pages.
Return Value
Type: Boolean
Returns true on success, false on failure.

Examples

```csharp
int[] lockedPages = null;
int count = 0;
GetLockedPageNumbers(dib, lockedPages, ref count);
lockedPages = new int[count];
GetLockedPageNumbers(dib, lockedPages, ref count);
```

See Also

Reference
FreelImage Class
FreeImageAPI Namespace

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FreeImageGetLockedPages Method

Retrieves a list locked pages of a multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static int[] GetLockedPages(
    FIMULTIBITMAP dib
)
```

### Parameters

**dib**  
Type: FreeImageAPIFIMULTIBITMAP  
Handle to a FreeImage multi-paged bitmap.

### Return Value

Type: Int32  
List containing the indexes of the locked pages.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>dib is null.</td>
</tr>
</tbody>
</table>

### See Also
FreeImageGetMetadata Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, FITAG)</td>
<td>Retrieve a metadata attached to a dib.</td>
</tr>
<tr>
<td>GetMetadata(FREE_IMAGE_MDMODEL, FIBITMAP, String, MetadataTag)</td>
<td>Retrieve a metadata attached to a FreeImage bitmap.</td>
</tr>
</tbody>
</table>

See Also

Reference
Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetMetadata Method
(FREE_IMAGE_MDMODEL, FIBITMAP, String, FITAG)

Retrieve a metadata attached to a dib.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static bool GetMetadata(
    FREE_IMAGE_MDMODEL model,
    FIBITMAP dib,
    string key,
    out FITAG tag
)
```

Parameters

model
Type: FreeImageAPIFREE_IMAGE_MDMODEL
The metadata model to look for.

dib
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

key
Type: System.String
The metadata field name.
**tag**
Type: `FreeImageAPI::FITAG`
A FITAG structure returned by the function.

**Return Value**
Type: `Boolean`
Returns true on success, false on failure.

**See Also**

Reference
- `FreeImage Class`
- `GetMetadata Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](http://www.freeimage.net)
Help improve this Documentation: [Join the Project](http://www.freeimage.net)
FreeImageGetMetadata Method

(FREE_IMAGE_MDMODEL, FIBITMAP, String, MetadataTag)

Retrieve a metadata attached to a FreeImage bitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool GetMetadata(
    FREE_IMAGE_MDMODEL model,
    FIBITMAP dib,
    string key,
    out MetadataTag tag
)
```

Parameters

model

Type: FreeImageAPIFREE_IMAGE_MDMODEL
The metadata model to look for.

dib

Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

key
Type: `System.String`  
The metadata field name.

`tag`  
Type: `FreeImageAPI.MetadataMetadataTag`  
A `MetadataTag` structure returned by the function.

Return Value  
Type: `Boolean`  
Returns true on success, false on failure.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ArgumentNullException</code></td>
<td><code>dib</code> is null.</td>
</tr>
</tbody>
</table>

## See Also

Reference  
[Freelmage Class](#)  
[GetMetadata Overload](#)  
[FreeImageAPI Namespace](#)

Contact/Feedback: [Freelmage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
FreeImageGetMetadataCount Method

Returns the number of tags contained in the model metadata model attached to the input dib.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static uint GetMetadataCount(
    FREE_IMAGE_MDMODEL model,
    FIBITMAP dib
)
```

**Parameters**

- `model`  
  Type: FreeImageAPIFREE_IMAGE_MDMODEL  
  The metadata model.

- `dib`  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

**Return Value**

Type: UInt32  
Number of tags contained in the metadata model.

**See Also**

Reference
FreeImage.NET Class Library Reference

FreeImageGetNativeVersion Method

Returns the version of the native FreeImage library.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static Version GetNativeVersion()
```

**Return Value**

Type: `Version`

The version of the native FreeImage library.

### See Also

**Reference**

- FreeImage Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImage.GetPageCount Method

Returns the number of pages currently available in the multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static int GetPageCount(
    FIMULTIBITMAP bitmap
)
```

### Parameters

- **bitmap**  
  Type: FreeImageAPI.FIMULTIBITMAP  
  Handle to a FreeImage multi-paged bitmap.

### Return Value

Type: Int32  
Number of pages.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImage.GetPalette Method

Returns a pointer to the bitmap's palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static IntPtr GetPalette(
    FIBITMAP dib
)
```

**Parameters**

- `dib`  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

**Return Value**

Type: IntPtr  
Pointer to the bitmap's palette.

**See Also**

- Reference  
  FreeImage Class  
  FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageGetPaletteEx
Method

Returns a structure that represents the palette of a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public static Palette GetPaletteEx(
    FIBITMAP dib
)
```

**Parameters**

*dib*

Type: FreImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

**Return Value**

Type: Palette  
A structure representing the bitmaps palette.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>

**See Also**
Reference

Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
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FreeImageGetPitch Method

Returns the width of the bitmap in bytes, rounded to the next 32-bit boundary, also known as pitch or stride or scan width.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#  
public static uint GetPitch(  
    FIBITMAP dib  
)  
```

**Parameters**

- **dib**
  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

**Return Value**

Type: UInt32  
With of the bitmap in bytes.

**See Also**

**Reference**
  
  FreeImage Class  
  FreeImageAPI Namespace

**Contact/Feedback:** FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageGetPixelColor Method

Get the pixel color of a 16-, 24- or 32-bit image at position (x, y), including range check (slow access).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool GetPixelColor(
    FIBITMAP dib,
    uint x,
    uint y,
    out RGBQUAD value
)
```

**Parameters**

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **x**
  - Type: SystemUInt32
  - Pixel position in horizontal direction.

- **y**
  - Type: SystemUInt32
  - Pixel position in vertical direction.

- **value**
  - Type: FreeImageAPIRGBQUAD
  - The pixel color.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetPixelFormat Method

Returns the pixelformat of the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static PixelFormat GetPixelFormat(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

### Return Value

Type: PixelFormat  
PixelFormat of the bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
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</tbody>
</table>

### See Also


Reference
Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
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FreeImageGetPixelIndex Method

Get the pixel index of a palettized image at position (x, y), including range check (slow access).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool GetPixelIndex(
    FIBITMAP dib,
    uint x,
    uint y,
    out byte value
)
```

### Parameters

- **dib**  
  Type: **FreeImageAPI**FIBITMAP  
  Handle to a FreeImage bitmap.

- **x**  
  Type: **SystemUInt32**  
  Pixel position in horizontal direction.

- **y**  
  Type: **SystemUInt32**  
  Pixel position in vertical direction.

- **value**  
  Type: **SystemByte**  
  The pixel index.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageGetPrimaryExtensionFromFIF Method

This function returns the primary (main or most commonly used?) extension of a certain image format (fif). This is done by returning the first of all possible extensions returned by GetFIFExtensionList(). That assumes, that the plugin returns the extensions in ordered form.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static string GetPrimaryExtensionFromFIF(
    FREE_IMAGE_FORMAT fif
)
```

Parameters

- `fif`  
  Type: `FreeImageAPIFREE_IMAGE_FORMAT`  
  The image format to obtain the primary extension for.

Return Value

- Type: `String`  
  The primary extension of the specified image format.

See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageGetRedMask Method

Returns a bit pattern describing the red color component of a pixel in a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static uint GetRedMask(
    FIBITMAP dib
)
```

### Parameters

- **dib**  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

### Return Value

Type: UInt32  
The bit pattern for RED.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageNET Class Library Reference

FreeImageGetResolutionX Method

Retrieves a DIB's resolution in X-direction measured in 'dots per inch' (DPI) and not in 'dots per meter'.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static uint GetResolutionX(
    FIBITMAP dib
)
```

Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

Return Value

- Type: UInt32
  - The resolution in 'dots per inch'.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageGetResolutionY Method

Retrieves a DIB's resolution in Y-direction measured in 'dots per inch' (DPI) and not in 'dots per meter'.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static uint GetResolutionY(
    FIBITMAP dib
)
```

Parameters

- **dib**
  
  Type: FreeImageAPIFIBITMAP
  Handle to a FreeImage bitmap.

Return Value

Type: UInt32
The resolution in 'dots per inch'.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><strong>dib</strong> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetScanLine Method

Returns a pointer to the start of the given scanline in the bitmap's data-bits.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static IntPtr GetScanLine(
    FIBITMAP dib,
    int scanline
)
```

### Parameters

- **dib**  
  Type: [FreeImageAPI.FIBITMAP](#)  
  Handle to a FreeImage bitmap.

- **scanline**  
  Type: [System.Int32](#)  
  Number of the scanline.

### Return Value

- Type: [IntPtr](#)  
  Pointer to the scanline.

### See Also

Reference
Freelmage Class
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageGetTagCount Method

Returns the number of components in the tag (in tag type units).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static uint GetTagCount(
    FITAG tag
)
```

### Parameters

**tag**
- Type: FreeImageAPI.FITAG
- The tag field.

### Return Value
- Type: UInt32
- The number of components.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.GetTagDescription Method

Returns the tag description.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static string GetTagDescription(
    FITAG tag
)
```

### Parameters

**tag**

Type: FreeImageAPI.FITAG

The tag field.

### Return Value

Type: String

The description or NULL if unavailable.

### See Also

Reference

FreeImage Class

FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImage.NET Class Library Reference

FreeImageGetTagID Method

Returns the tag ID.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4  
(3.17.0)

## Syntax

```csharp
public static ushort GetTagID(
    FITAG tag
)
```

### Parameters

**tag**

Type: FreeImageAPI!FITAG  
The tag field.

### Return Value

Type: UInt16  
The ID or 0 if unavailable.

## See Also

Reference

Freelmage Class  
FreeImageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageGetTagKey Method

Returns the tag field name (unique inside a metadata model).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static string GetTagKey(
    FITAG tag
)
```

### Parameters

**tag**  
Type: FreeImageAPI.FITAG  
The tag field.

### Return Value

Type: String  
The field name.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetTagLength Method

Returns the length of the tag value in bytes.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint GetTagLength(
    FITAG tag
)
```

### Parameters

**tag**

Type: FreeImageAPI.FITAG  
The tag field.

### Return Value

Type: UInt32  
The length of the tag value.

### See Also

**Reference**

FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImage.GetTagType Method

Returns the tag data type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FREE_IMAGE_MDTYPE GetTagType(FITAG tag)
```

**Parameters**

- **tag**  
  Type: FreeImageAPI.FITAG  
  The tag field.

**Return Value**

Type: FREE_IMAGE_MDTYPE  
The tag type.

**See Also**

**Reference**
- FreeImage Class  
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImage.NET Class Library Reference

FreeImageGetTagValue Method

Returns the tag value. It is up to the programmer to interpret the returned pointer correctly, according to the results of GetTagType and GetTagCount.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static IntPtr GetTagValue(
    FITAG tag
)
```

Parameters

* `tag`: Type: FreeImageAPIFITAG
  The tag field.

Return Value

Type: IntPtr
Pointer to the value.

See Also

Reference
Freelmage Class
FreeImageAPI Namespace
FreeImageGetTransparencyCount Method

Returns the number of transparent colors in a palletised bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint GetTransparencyCount(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### Return Value
- Type: UInt32
- The number of transparent colors in a palletised bitmap.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

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FreeImageGetTransparencyTable Method

Returns a pointer to the bitmap's transparency table.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static IntPtr GetTransparencyTable(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP  
  - Handle to a FreeImage bitmap.

### Return Value

- Type: IntPtr  
  - Pointer to the bitmap's transparency table.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace

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FreeImageGetTransparencyTableEx Method

Returns the FreeImage bitmap's transparency table. The array is empty in case the bitmap has no transparency table.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static byte[] GetTransparencyTableEx(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: Byte  
The FreeImage bitmap's transparency table.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>dib is null.</td>
</tr>
</tbody>
</table>
FreeImageGetTransparentIndex Method

Returns the palette entry used as transparent color for the image specified. Works for palletised images only and returns -1 for high color images or if the image has no color set to be transparent.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static int GetTransparentIndex(
    FIBITMAP dib
)
```

Parameters

`dib`
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

Return Value
Type: Int32
the index of the palette entry used as transparent color for the image specified or -1 if there is no transparent color found (e.g. the image is a high color image).

See Also

Reference
FreeImage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetTypeParameters Method

Retrieves all parameters needed to create a new FreeImage bitmap from raw bits Image.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool GetTypeParameters(
    FREE_IMAGE_TYPE type,
    int bpp,
    out uint red_mask,
    out uint green_mask,
    out uint blue_mask
)
```

Parameters

- **type**
  Type: `FreeImageAPI.FREE_IMAGE_TYPE`
  The `FREE_IMAGE_TYPE` of the data in memory.

- **bpp**
  Type: `System.Int32`
  The color depth for the data.

- **red_mask**
  Type: `System.UInt32`
  Returns the red_mask for the data.

- **green_mask**
  Type: `System.UInt32`
Returns the green_mask for the data.

blue_mask
Type: System.UInt32
Returns the blue_mask for the data.

Return Value
Type: Boolean
True in case a matching conversion exists; else false.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetUniqueColors Method

This function returns the number of unique colors actually used by the specified 1-, 4-, 8-, 16-, 24- or 32-bit image. This might be different from what function FreeImage_GetColorsUsed() returns, which actually returns the palette size for palletised images. Works for FIT_BITMAP type images only.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static int GetUniqueColors(  
    FIBITMAP dib
)
```

Parameters

*dib*

Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

Return Value

Type: Int32
Returns the number of unique colors used by the image specified or zero, if the image type cannot be handled.

Exceptions
ArgumentNullException
dib is null.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageGetVersion Method

Returns a string containing the current version of the library.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```csharp
public static string GetVersion()
```

Return Value

Type: **String**
The current version of the library.

⚠️ See Also

Reference

Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageGetWidth Method

Returns the width of the bitmap in pixel units.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint GetWidth(
    FIBITMAP dib
)
```

**Parameters**

*dib*

Type: `FreeImageAPI.FIBITMAP`  
Handle to a FreeImage bitmap.

**Return Value**

Type: `UInt32`  
With of the bitmap.

### See Also

- Reference
  - FreeImage Class
  - FreeImageAPI Namespace
FreeImageGetWrapperVersion Method

Returns the internal version of this FreeImage .NET wrapper.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static Version GetWrapperVersion()
```

### Return Value

Type: Version  
The internal version of this FreeImage .NET wrapper.

## See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageHasBackgroundColor Method

Returns whether the bitmap has a file background color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool HasBackgroundColor(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP  
  - Handle to a FreeImage bitmap.

### Return Value

- Type: Boolean  
  - Returns true when the image has a file background color, false otherwise.

### See Also

- Reference  
  - FreImage Class  
  - FreeImageAPI Namespace
Contact/Feedback: FreedImage.NET Homepage
Help improve this Documentation: Join the Project
**FreeImageInsertPage Method**

Inserts a new page before the given position in the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static void InsertPage(
    FIMULTIBITMAP bitmap,
    int page,
    FIBITMAP data
)
```

### Parameters

**bitmap**  
Type: FreeImageAPIFIMULTIBITMAP  
Handle to a FreeImage multi-paged bitmap.

**page**  
Type: SystemInt32  
Page has to be a number smaller than the current number of pages available in the bitmap.

**data**  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### See Also
FreelImageInvert Method

Inverts each pixel data.

Namespace: FreelImageAPI
Assembly: FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool Invert(
    FIBITMAP dib
)
```

Parameters

dib
  Type: FreelImageAPIFIBITMAP
  Handle to a FreelImage bitmap.

Return Value
  Type: Boolean
  Returns true on success, false on failure.

See Also

Reference
  FreelImage Class
  FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageIsAvailable Method

Returns a value indicating if the FreeImage library is available or not. See remarks for further details.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool IsAvailable()
```

### Return Value

Type: **Boolean**  
**false** if the file is not available or out of date; **true**, otherwise.

### Remarks

The FreeImage.NET library is a wrapper for the native C++ library (FreeImage.dll ... dont mix ist up with this library FreeImageNet.dll). The native library **must** be either in the same folder as the program's executable or in a folder contained in the envirent variable **PATH** (for example `%WINDIR%\System32`). Further more must both libraries, including the program itself, be the same architecture (x86 or x64).

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace
## FreeImage.IsExtensionValidForFIF Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![s] IsExtensionValidForFIF(FREE_IMAGE_FORMAT, String)</td>
<td>Checks if an extension is valid for a certain format.</td>
</tr>
<tr>
<td>![s] IsExtensionValidForFIF(FREE_IMAGE_FORMAT, String, StringComparison)</td>
<td>Checks if an extension is valid for a certain format.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - Freelmage Class
  - FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.IsExtensionValidForFIF

Method
(FREE_IMAGE_FORMAT, String)

Checks if an extension is valid for a certain format.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool IsExtensionValidForFIF(
    FREE_IMAGE_FORMAT fif,
    string extension
)
```

**Parameters**

*fif*

Type: FreeImageAPI.FREE_IMAGE_FORMAT
The desired format.

*extension*

Type: System.String
The desired extension.

**Return Value**

Type: Boolean
True if the extension is valid for the given format, false otherwise.

**Exceptions**
<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>extension is null.</td>
</tr>
</tbody>
</table>

See Also

Reference

FreelImage Class
IsExtensionIsValidForFIF Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.IsExtensionValidForFIF Method
(FREE_IMAGE_FORMAT, String, StringComparison)

Checks if an extension is valid for a certain format.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool IsExtensionValidForFIF(
    FREE_IMAGE_FORMAT fif,
    string extension,
    StringComparison comparisonType
)
```

### Parameters

**fif**
- Type: FreeImageAPIFREE_IMAGE_FORMAT
  - The desired format.

**extension**
- Type: SystemString
  - The desired extension.

**comparisonType**
- Type: SystemStringComparison
  - The string comparison type.
Return Value
Type: Boolean
True if the extension is valid for the given format, false otherwise.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>extension is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
Freelimage Class
IsExtensionValidForFIF Overload
FreelimageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
### FreeImage.IsFilenameValidForFIF Method

#### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="IsFilenameValidForFIF(FREE_IMAGE_FORMAT, String)" /></td>
<td>Checks if a filename is valid for a certain format.</td>
</tr>
<tr>
<td><img src="image" alt="IsFilenameValidForFIF(FREE_IMAGE_FORMAT, String, StringComparison)" /></td>
<td>Checks if a filename is valid for a certain format.</td>
</tr>
</tbody>
</table>

#### See Also

- Reference
  - Freelmage Class
  - FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageIsFilenameValidForFIF

Method
(FREE_IMAGE_FORMAT, String)

Checks if a filename is valid for a certain format.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool IsFilenameValidForFIF(
    FREE_IMAGE_FORMAT fif,
    string filename
)
```

Parameters

- `fif`
  Type: FreeImageAPIFREE_IMAGE_FORMAT
  The desired format.

- `filename`
  Type: System.String
  The desired filename.

Return Value
Type: Boolean
True if the filename is valid for the given format, false otherwise.

Exceptions
<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>filename is null.</td>
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</tbody>
</table>

See Also

Reference
- FreelImage Class
- IsFilenameValidForFIF Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.IsFilenameValidForFIF Method
(FREE_IMAGE_FORMAT, String,StringComparison)

Checks if a filename is valid for a certain format.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4
(3.17.0)

Syntax

```csharp
public static bool IsFilenameValidForFIF(
    FREE_IMAGE_FORMAT fif,
    string filename,
    StringComparison comparisonType
)
```

Parameters

- `fif`
  Type: FreeImageAPIFREE_IMAGE_FORMAT
  The desired format.

- `filename`
  Type: System.String
  The desired filename.

- `comparisonType`
  Type: System.StringComparison
  The string comparison type.
Return Value
Type: Boolean
True if the filename is valid for the given format, false otherwise.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>filename is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
Freelmage Class
IsFilenameValidForFIF Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.IsGreyscaleImage Method

Returns whether the image is a greyscale image or not. The function scans all colors in the bitmaps palette for entries where red, green and blue are not all the same (not a grey color). Supports 1-, 4- and 8-bit bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool IsGreyscaleImage(  
    FIBITMAP dib
)
```

**Parameters**

*dib*

Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

**Return Value**

Type: Boolean  
True if the image is a greyscale image, else false.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.IsLittleEndian Method

Returns whether the platform is using Little Endian.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool IsLittleEndian()
```

### Return Value

**Type:** Boolean  
Returns true if the platform is using Little Endian, else false.

### See Also

**Reference**  
Freelmage Class  
FreeImageAPI Namespace

---

Contact/Feedback: Freelmage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageIsPluginEnabled Method

Retrieves the state of a plugin.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static int IsPluginEnabled(
    FREE_IMAGE_FORMAT fif
)
```

Parameters

*fif*

Type: FreeImageAPIFREE_IMAGE_FORMAT
The plugin to check.

Return Value

Type: Int32
1 - enabled. 0 - disables. -1 plugin does not exist.

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
Freelmage.IsRGB555 Method

Verifies whether the Freelmage bitmap is 16bit 555.

**Namespace:** FreelmageAPI  
**Assembly:** FreelmageNET (in FreelmageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool IsRGB555(FIBITMAP dib)
```

### Parameters

**dib**
Type: FreelmageAPIFIBITMAP  
The Freelmage bitmap to verify.

### Return Value

Type: Boolean  
**true** if the bitmap is RGB16-555; otherwise **false**.

## See Also

Reference
- Freelmage Class  
- FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImage.IsRGB565 Method

Verifies whether the FreeImage bitmap is 16bit 565.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool IsRGB565(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - The FreeImage bitmap to verify.

### Return Value

- **Type:** Boolean
  - true if the bitmap is RGB16-565; otherwise false.

### See Also

- **Reference**
  - FreeImage Class
  - FreeImageAPI Namespace

---

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
**FreeImage.IsTransparent Method**

Returns whether the transparency table is enabled.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static bool IsTransparent(
    FIBITMAP dib
)
```

### Parameters

- **dib**  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

### Return Value

Type: Boolean  
Returns true when the transparency table is enabled (1-, 4- or 8-bit images) or when the input dib contains alpha values (32-bit images). Returns false otherwise.

### See Also

- Reference
  - FreeImage Class  
  - FreeImageAPI Namespace
FreeImageJPEGCrop Method

Performs a lossless crop on a JPEG file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool JPEGCrop(
    string src_file,
    string dst_file,
    int left,
    int top,
    int right,
    int bottom
)
```

### Parameters

- **src_file**  
  Type: `System.String`  
  Source filename.

- **dst_file**  
  Type: `System.String`  
  Destination filename.

- **left**  
  Type: `System.Int32`  
  Specifies the left position of the cropped rectangle.

- **top**  
  Type: `System.Int32`  
  Specifies the top position of the cropped rectangle.

- **right**  
  Type: `System.Int32`  
  Specifies the right position of the cropped rectangle.

- **bottom**  
  Type: `System.Int32`  
  Specifies the bottom position of the cropped rectangle.
Type: System.Int32
Specifies the right position of the cropped rectangle.

bottom
Type: System.Int32
Specifies the bottom position of the cropped rectangle.

Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageJPEGTTransform Method

Performs a lossless rotation or flipping on a JPEG file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool JPEGTTransform(
    string src_file,
    string dst_file,
    FREE_IMAGE_JPEG_OPERATION operation,
    bool perfect
)
```

### Parameters

- **src_file**  
  Type: `System.String`  
  Source file.

- **dst_file**  
  Type: `System.String`  
  Destination file; can be the source file; will be overwritten.

- **operation**  
  Type: `FreeImageAPIFREE_IMAGE_JPEG_OPERATION`  
  The operation to apply.

- **perfect**  
  Type: `System.Boolean`  
  To avoid lossy transformation, you can set the perfect parameter to true.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoad Method

Decodes a bitmap, allocates memory for it and returns it as a FIBITMAP.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP Load(
    FREE_IMAGE_FORMAT fif,
    string filename,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

### Parameters

- **fif**  
  Type: FreeImageAPIFREE_IMAGE_FORMAT  
  Type of the bitmap.

- **filename**  
  Type: System.String  
  Name of the file to decode.

- **flags**  
  Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS  
  Flags to enable or disable plugin-features.

### Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadBitmap Method

Loads a .NET Bitmap from a file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C#

```csharp
public static Bitmap LoadBitmap(
    string filename,
    FREE_IMAGE_LOAD_FLAGS flags,
    ref FREE_IMAGE_FORMAT format
)
```

### Parameters

**filename**
Type: `System.String`  
Name of the file to be loaded.

**flags**
Type: `FreeImageAPIFREE_IMAGE_LOAD_FLAGS`  
Flags to enable or disable plugin-features.

**format**
Type: `FreeImageAPIFREE_IMAGE_FORMAT`  
Format of the image. If the format should be taken from the filename use `FIF_UNKNOWN`.

### Return Value

Type: `Bitmap`  
The loaded .NET Bitmap.
## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FileNotFoundException</td>
<td><code>filename</code> does not exists.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>The image type of the image is not <code>FIT_BITMAP</code>.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FreelImage Class
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
# FreeImageLoadEx Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![ Former ] LoadEx(String)</td>
<td>Loads a FreeImage bitmap. The file will be loaded with default loading flags.</td>
</tr>
<tr>
<td>![ Former ] LoadEx(String, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreeImage bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. The file will be loaded with default loading flags.</td>
</tr>
<tr>
<td>![ Former ] LoadEx(String, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Loads a FreeImage bitmap. Load</td>
</tr>
</tbody>
</table>
LoadEx(String, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_FORMAT)

Loads a FreeImage bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. Load flags can be provided by the flags parameter.
FreeImageLoadEx Method (String)

Loads a FreeImage bitmap. The file will be loaded with default loading flags.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP LoadEx(
    string filename
)
```

### Parameters

*filename*
Type: `System.String`
The complete name of the file to load.

### Return Value
Type: `FIBITMAP`
Handle to a FreeImage bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FileNotFoundException</td>
<td><code>filename</code> does not exists.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreeImage Class
LoadEx Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadEx Method (String, FREE_IMAGE_FORMAT)

Loads a FreeImage bitmap. In case the loading format is FIF_UNKNOWN the file's real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. The file will be loaded with default loading flags.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static FIBITMAP LoadEx(
    string filename,
    ref FREE_IMAGE_FORMAT format
)
```

Parameters

filename
Type: SystemString
The complete name of the file to load.

format
Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image. If the format is unknown use FIF_UNKNOWN. In case a suitable format was found by LoadEx it will be returned in format.

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FileNotFoundException</td>
<td>filename does not exists.</td>
</tr>
</tbody>
</table>

See Also

Reference
- Freelmage Class
- LoadEx Overload
- FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadEx Method
(String,
FREE_IMAGE_LOAD_FLAGS)

Loads a FreeImage bitmap. Load flags can be provided by the flags parameter.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP LoadEx(
    string filename,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

**Parameters**

- **filename**
  - Type: **SystemString**
  - The complete name of the file to load.

- **flags**
  - Type: **FreeImageAPI**FREE_IMAGE_LOAD_FLAGS
  - Flags to enable or disable plugin-features.

**Return Value**

- Type: **FIBITMAP**
  - Handle to a FreeImage bitmap.
Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FileNotFoundException</td>
<td>filename does not exists.</td>
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</tbody>
</table>

See Also

Reference
- FreelImage Class
- LoadEx Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadEx Method

(String,
FREE_IMAGE_LOAD_FLAGS,
FREE_IMAGE_FORMAT)

Loads a FreeImage bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. Load flags can be provided by the flags parameter.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP LoadEx(
    string filename,
    FREE_IMAGE_LOAD_FLAGS flags,
    ref FREE_IMAGE_FORMAT format
)
```

Parameters

filename
- Type: SystemString
  The complete name of the file to load.

flags
- Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
  Flags to enable or disable plugin-features.

format
Type: **FreImageAPIFREE_IMAGE_FORMAT**
Format of the image. If the format is unknown use **FIF_UNKNOWN**. In case a suitable format was found by LoadEx it will be returned in format.

**Return Value**
Type: **FIBITMAP**
Handle to a FreImage bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FileNotFoundException</strong></td>
<td><code>filename</code> does not exists.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- FreImage Class
- LoadEx Overload
- FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadFromFile Method

Loads a bitmap from an arbitrary source.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public static FIBITMAP LoadFromHandle(
    FREE_IMAGE_FORMAT fif,
    ref FreeImageIO io,
    fi_handle handle,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

### Parameters

- **fif**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - Type of the bitmap.
- **io**
  - Type: FreeImageAPI.IOFreeImageI
  - A FreeImageIO structure with function pointers to handle the source.
- **handle**
  - Type: FreeImageAPI.IOfi_handle
  - A handle to the source.
- **flags**
  - Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
  - Flags to enable or disable plugin-features.
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadFromMemory Method

Decodes a bitmap from a stream, allocates memory for it and returns it as a FIBITMAP.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public static FIBITMAP LoadFromMemory(
    FREE_IMAGE_FORMAT fif,
    FIMEMORY stream,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

### Parameters

**fif**
Type: FreeImageAPIFREE_IMAGE_FORMAT  
Type of the bitmap.

**stream**
Type: FreeImageAPIFIMEMORY  
Handle to a memory stream.

**flags**
Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS  
Flags to enable or disable plugin-features.

### Return Value
Type: FIBITMAP  
Handle to a FreeImage bitmap.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
## FreImageLoadFromStream Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LoadFromStream(Stream)</td>
<td>Loads a FreImage bitmap. The stream must be set to the correct position before calling LoadFromStream.</td>
</tr>
<tr>
<td>LoadFromStream(Stream, FREE_IMAGE_FORMAT)</td>
<td>Loads a FreImage bitmap. In case the loading format is FIF_UNKNOWN, the bitmaps real format is being analysed. The stream must be set to the correct position before calling LoadFromStream.</td>
</tr>
<tr>
<td>LoadFromStream(Stream, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Loads a FreImage bitmap. The</td>
</tr>
</tbody>
</table>
stream must be set to the correct position before calling 
LoadFromStream.

LoadFromStream(Stream, 
FREE_IMAGE_LOAD_FLAGS, 
FREE_IMAGE_FORMAT)

Loads a 
FreeImage 
bitmap. In case 
the loading format is 
FIF_UNKNOWN 
the bitmaps real 
format is being 
analysed. The 
stream must be 
set to the correct 
position before 
calling 
LoadFromStream.

See Also

Reference

FreImage Class
FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadFromStream Method (Stream)

Loads a FreeImage bitmap. The stream must be set to the correct position before calling LoadFromStream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP LoadFromStream(  
    Stream stream
)
```

**Parameters**

*stream*
  
  Type: System.IOStream  
  The stream to read from.

**Return Value**

Type: FIBITMAP  
Handle to a FreeImage bitmap.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>stream</em> is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><em>stream</em> is not capable of reading.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelImage Class
LoadFromStream Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadFromStream Method (Stream, FREE_IMAGE_FORMAT)

Loads a FreeImage bitmap. In case the loading format is FIF_UNKNOWN the bitmaps real format is being analysed. The stream must be set to the correct position before calling LoadFromStream.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP LoadFromStream(
    Stream stream,
    ref FREE_IMAGE_FORMAT format
)
```

**Parameters**

- **stream**
  - Type: `System.IOStream`
  - The stream to read from.

- **format**
  - Type: `FreeImageAPI/FREE_IMAGE_FORMAT`
  - Format of the image. If the format is unknown use FIF_UNKNOWN. In case a suitable format was found by LoadFromStream it will be returned in format.

**Return Value**

- Type: `FIBITMAP`
Handle to a FreImage bitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>stream is null.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>stream is not capable of reading.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- Freelmage Class
- LoadFromStream Overload
- FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadFromStream Method (Stream, FREE_IMAGE_LOAD_FLAGS)

Loads a FreeImage bitmap. The stream must be set to the correct position before calling LoadFromStream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIBITMAP LoadFromStream(
    Stream stream,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

### Parameters

**stream**  
Type: System.IOStream  
The stream to read from.

**flags**  
Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS  
Flags to enable or disable plugin-features.

### Return Value
Type: FIBITMAP  
Handle to a FreeImage bitmap.
## Exceptions

<table>
<thead>
<tr>
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</table>

## See Also

Reference

- FreelImage Class
- LoadFromStream Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadFromStream Method (Stream, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_FORMAT)

Loads a FreeImage bitmap. In case the loading format is FIF_UNKNOWN the bitmaps real format is being analysed. The stream must be set to the correct position before calling LoadFromStream.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP LoadFromStream(
    Stream stream,
    FREE_IMAGE_LOAD_FLAGS flags,
    ref FREE_IMAGE_FORMAT format
)
```

Parameters

- `stream`
  Type: System.IOStream
  The stream to read from.

- `flags`
  Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
  Flags to enable or disable plugin-features.

- `format`
  Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image. If the format is unknown use **FIF_UNKNOWN**. In case a suitable format was found by LoadFromStream it will be returned in format.

**Return Value**

Type: **FIBITMAP**

Handle to a FreeImage bitmap.

### Exceptions

<table>
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</table>

### See Also

**Reference**

- Freelmage Class
- LoadFromStream Overload
- FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLoadMultiBitmapFromMemory

Open a multi-page bitmap from a memory stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static FIMULTIBITMAP LoadMultiBitmapFromMemory(
    FREE_IMAGE_FORMAT fif,
    FIMEMORY stream,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

### Parameters

**fif**
- Type: `FreeImageAPIFREE_IMAGE_FORMAT`
- Type of the bitmap.

**stream**
- Type: `FreeImageAPIFIMEMORY`
- The stream to decode.

**flags**
- Type: `FreeImageAPIFREE_IMAGE_LOAD_FLAGS`
- Flags to enable or disable plugin-features.

### Return Value

- Type: `FIMULTIBITMAP`
- Handle to a FreeImage multi-paged bitmap.
FreeImageLoadMultiBitmapFromStream Method

Loads a FreeImage multi-paged bitmap from a stream and returns the FreeImage memory stream used as temporary buffer. The bitmap can not be modified by calling AppendPage(FIMULTIBITMAP, FIBITMAP), InsertPage(FIMULTIBITMAP, Int32, FIBITMAP), MovePage(FIMULTIBITMAP, Int32, Int32) or DeletePage(FIMULTIBITMAP, Int32).

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static FIMULTIBITMAP LoadMultiBitmapFromStream(
    Stream stream,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS flags,
    out FIMEMORY memory
)
```

Parameters

- **stream**
  Type: System.IOStream  
The stream to read from.

- **format**
  Type: FreeImageAPIFREE_IMAGE_FORMAT  
  Format of the image.

- **flags**
Type: `FreeImageAPIFREE_IMAGE_LOAD_FLAGS`
Flags to enable or disable plugin-features.

`memory`
Type: `FreeImageAPIFIMEMORY`
The temporary memory buffer used to load the bitmap.

Return Value
Type: `FIMULTIBITMAP`
Handle to a FreeImage multi-paged bitmap.

## Exceptions

<table>
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</tr>
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<tbody>
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</tr>
</tbody>
</table>

## See Also

Reference
`FreeImage Class`
`FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](https://freeimageapi.net)
Help improve this Documentation: [Join the Project](https://github.com/FreeImage/FreeImage.NET)
FreeImageLockPage Method

Locks a page in memory for editing.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FIBITMAP LockPage(
    FIMULTIBITMAP bitmap,
    int page
)
```

### Parameters

**bitmap**  
Type: FreeImageAPI.FIMULTIBITMAP  
Handle to a FreeImage multi-paged bitmap.

**page**  
Type: System.Int32  
Number of the page to lock.

### Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageLookupSVGColor Method

Converts a SVG color name into a corresponding RGB value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

C#  

```csharp
public static bool LookupSVGColor(
    string szColor,
    out byte nRed,
    out byte nGreen,
    out byte nBlue
)
```

**Parameters**

- **szColor**  
  Type: SystemString  
  Name of the color to convert.

- **nRed**  
  Type: SystemByte  
  Red component.

- **nGreen**  
  Type: SystemByte  
  Green component.

- **nBlue**  
  Type: SystemByte  
  Blue component.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageLookupX11Color Method

Converts a X11 color name into a corresponding RGB value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public static bool LookupX11Color(
    string szColor,
    out byte nRed,
    out byte nGreen,
    out byte nBlue
)
```

**Parameters**

- **szColor**  
  Type: System.String  
  Name of the color to convert.

- **nRed**  
  Type: System.Byte  
  Red component.

- **nGreen**  
  Type: System.Byte  
  Green component.

- **nBlue**  
  Type: System.Byte  
  Blue component.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageMakeThumbnail Method

Creates a thumbnail from a greyscale or RGB(A) image, keeping aspect ratio.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP MakeThumbnail(
    FIBITMAP dib,
    int max_pixel_size,
    bool convert
)
```

**Parameters**

- **dib**  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

- **max_pixel_size**  
  Type: System.Int32  
  Thumbnail square size.

- **convert**  
  Type: System.Boolean  
  When true HDR images are transperantly converted to standard images.

**Return Value**

Type: FIBITMAP
Handle to a Freeling bitmap.

See Also

Reference
Freeling Class
FreelingAPI Namespace

Contact/Feedback: Freeling.NET Homepage
Help improve this Documentation: Join the Project
FreeImageMoveMemory Method

## Overload List

<table>
<thead>
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<th>Description</th>
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<tbody>
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<td><code>MoveMemory(IntPtr, IntPtr, Int64)</code></td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td><code>MoveMemory(IntPtr, IntPtr, UInt32)</code></td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td><code>MoveMemory(Void*, Void*, Int64)</code></td>
<td>Moves a block of memory from one location to another.</td>
</tr>
<tr>
<td><code>MoveMemory(Void*, Void*, UInt32)</code></td>
<td>Moves a block of memory from one location to another.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- [FreeImage Class](#)
- [FreeImageAPI Namespace](#)

Contact/Feedback: [FreeImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
**FreeImageMoveMemory**

Method (IntPtr, IntPtr, Int64)

Moves a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static void MoveMemory(
    IntPtr dst,
    IntPtr src,
    long size
)
```

**Parameters**

- **dst**
  - Type: SystemIntPtr
  - A pointer to the starting address of the move destination.

- **src**
  - Type: SystemIntPtr
  - A pointer to the starting address of the block of memory to be moved.

- **size**
  - Type: SystemInt64
  - The size of the block of memory to move, in bytes.

**See Also**
Reference
FreelImage Class
MoveMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageMoveMemory Method (IntPtr, IntPtr, UInt32)

Moves a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void MoveMemory(
    IntPtr dst,
    IntPtr src,
    uint size
)
```

### Parameters

**$dst$**  
Type: SystemIntPtr  
A pointer to the starting address of the move destination.

**$src$**  
Type: SystemIntPtr  
A pointer to the starting address of the block of memory to be moved.

**$size$**  
Type: SystemUInt32  
The size of the block of memory to move, in bytes.

### See Also
Reference

FreelImage Class
MoveMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageMoveMemory Method (Void, Void, Int64)

Moves a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void MoveMemory(
    void* dst,
    void* src,
    long size
)
```

### Parameters

- **dst**  
  Type: SystemVoid*  
  A pointer to the starting address of the move destination.

- **src**  
  Type: SystemVoid*  
  A pointer to the starting address of the block of memory to be moved.

- **size**  
  Type: SystemInt64  
  The size of the block of memory to move, in bytes.

### See Also
Reference
FreelImage Class
MoveMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageMoveMemory
Method (Void, Void, UInt32)

Moves a block of memory from one location to another.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void MoveMemory(
    void* dst,
    void* src,
    uint size
)
```

### Parameters

**dst**

Type: `SystemVoid*`  
Pointer to the starting address of the move destination.

**src**

Type: `SystemVoid*`  
Pointer to the starting address of the block of memory to be moved.

**size**

Type: `SystemUInt32`  
Size of the block of memory to move, in bytes.

### See Also
Reference

FreelImage Class
MoveMemory Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageMovePage Method

Moves the source page to the position of the target page.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool MovePage(
    FIMULTIBITMAP bitmap,
    int target,
    int source
)
```

## Parameters

- **bitmap**  
  Type: FreeImageAPIFIMULTIBITMAP  
  Handle to a FreeImage multi-paged bitmap.

- **target**  
  Type: SystemInt32  
  New position of the page.

- **source**  
  Type: SystemInt32  
  Old position of the page.

## Return Value

- **Type:** Boolean  
  Returns true on success, false on failure.

## See Also
FreeImageMultigridPoissonSolver Method

Solves a Poisson equation, remap result pixels to [0..1] and returns the solution.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP MultigridPoissonSolver(
    FIBITMAP Laplacian,
    int ncycle
)
```

### Parameters

- **Laplacian**
  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **ncycle**
  
  Type: SystemInt32  
  Number of cycles in the multigrid algorithm (usually 2 or 3)

### Return Value

Type: FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference
FreeImageOpenMemory Method

Open a memory stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static FIMEMORY OpenMemory(
    IntPtr data,
    uint size_in_bytes
)
```

### Parameters

- **data**
  Type: `SystemIntPtr`  
  Pointer to the data in memory.
- **size_in_bytes**
  Type: `SystemUInt32`  
  Length of the data in byte.

### Return Value

Type: `FIMEMORY`  
Handle to a memory stream.

### See Also

- Reference  
  FreeImage Class
FreeImageOpenMultiBitmap Method

Loads a FreeImage multi-paged bitmap. Load flags can be provided by the flags parameter.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIMULTIBITMAP OpenMultiBitmap(
    FREE_IMAGE_FORMAT fif,
    string filename,
    bool create_new,
    bool read_only,
    bool keep_cache_in_memory,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

**Parameters**

- **fif**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - Format of the image.

- **filename**
  - Type: SystemString
  - The complete name of the file to load.

- **create_new**
  - Type: SystemBoolean
  - When true a new bitmap is created.

- **read_only**
Type: **SystemBoolean**  
When true the bitmap will be loaded read only.

*keep_cache_in_memory*  
Type: **SystemBoolean**  
When true performance is increased at the cost of memory.

*flags*  
Type: **FreeImageAPI**FREE_IMAGE_LOAD_FLAGS  
Flags to enable or disable plugin-features.

Return Value  
Type: **FIMULTIBITMAP**  
Handle to a FreeImage multi-paged bitmap.

### See Also

Reference  
**FreeImage Class**  
**FreeImageAPI Namespace**

Contact/Feedback:  [FreeImage.NET Homepage](https://www.freeimage奖学金.org)  
Help improve this Documentation:  [Join the Project](https://github.com/Join the Project)
FreeImageOpenMultiBitmapEx Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="String" alt="OpenMultiBitmapEx(String)" /></td>
<td>Loads a FreeImage multipaged bitmap.</td>
</tr>
<tr>
<td>![OpenMultiBitmapEx(String, Boolean)](String, Boolean)</td>
<td>Loads a FreeImage multipaged bitmap.</td>
</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>![OpenMultiBitmapEx(String, FREE_IMAGE_FORMAT, Boolean, Boolean, Boolean)](String, FREE_IMAGE_FORMAT, Boolean, Boolean, Boolean)</td>
<td>Loads a FreeImage multipaged bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains</td>
</tr>
</tbody>
</table>
OpenMultiBitmapEx(String, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, Boolean, Boolean, Boolean)

Loads a FreeImage multi-paged bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. Load flags can be provided by the flags parameter.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOpenMultiBitmapEx
Method (String)

Loads a FreeImage multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIMULTIBITMAP OpenMultiBitmapEx(
    string filename
)
```

### Parameters

*filename*
- **Type:** System.String
- The complete name of the file to load.

### Return Value
- **Type:** FIMULTIBITMAP
- Handle to a FreeImage multi-paged bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>FileNotFoundException</td>
<td><em>filename</em> does not exists while opening.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelImage Class
OpenMultiBitmapEx Overload
FreeImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOpenMultiBitmapEx Method (String, Boolean)

Loads a FreeImage multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIMULTIBITMAP OpenMultiBitmapEx(
    string filename,
    bool keep_cache_in_memory
)
```

### Parameters

- **filename**
  - Type: SystemString
  - The complete name of the file to load.

- **keep_cache_in_memory**
  - Type: SystemBoolean
  - When true performance is increased at the cost of memory.

### Return Value

- Type: FIMULTIBITMAP  
  - Handle to a FreeImage multi-paged bitmap.

### Exceptions

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</thead>
<tbody>
<tr>
<td></td>
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FileNotFoundException

filename does not exist while opening.

See Also

Reference
Freelmage Class
OpenMultiBitmapEx Overload
FreeImageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOpenMultiBitmapEx

Method (String, Boolean, Boolean)

Loads a FreeImage multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIMULTIBITMAP OpenMultiBitmapEx(
    string filename,
    bool read_only,
    bool keep_cache_in_memory
)
```

**Parameters**

- **filename**
  - Type: `SystemString`
  - The complete name of the file to load.

- **read_only**
  - Type: `SystemBoolean`
  - When true the bitmap will be loaded read only.

- **keep_cache_in_memory**
  - Type: `SystemBoolean`
  - When true performance is increased at the cost of memory.

**Return Value**

Type: `FIMULTIBITMAP`
Handle to a FreeImage multi-paged bitmap.

## Exceptions

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## See Also

**Reference**
- FreeImage Class
- OpenMultiBitmapEx Overload
- FreeImageAPI Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://www.freewareopen.com)
Help improve this Documentation: [Join the Project](https://www.freewareopen.com)
FreeImageOpenMultiBitmapEx Method (String, Boolean, Boolean, Boolean)

Loads a FreeImage multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIMULTIBITMAP OpenMultiBitmapEx(
    string filename,
    bool create_new,
    bool read_only,
    bool keep_cache_in_memory
)
```

### Parameters

- **filename**
  - Type: `SystemString`
  - The complete name of the file to load.

- **create_new**
  - Type: `SystemBoolean`
  - When true a new bitmap is created.

- **read_only**
  - Type: `SystemBoolean`
  - When true the bitmap will be loaded read only.

- **keep_cache_in_memory**
  - Type: `SystemBoolean`
When true performance is increased at the cost of memory.

Return Value
Type: FIMULTIBITMAP
Handle to a FreeImage multi-paged bitmap.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FileNotFoundException</td>
<td>filename does not exists while opening.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage Class
OpenMultiBitmapEx Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOpenMultiBitmapEx Method (String, FREE_IMAGE_FORMAT, Boolean, Boolean, Boolean)

Loads a FreeImage multi-paged bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static FIMULTIBITMAP OpenMultiBitmapEx(
    string filename,
    ref FREE_IMAGE_FORMAT format,
    bool create_new,
    bool read_only,
    bool keep_cache_in_memory
)
```

Parameters

**filename**

Type: SystemString

The complete name of the file to load.

**format**

Type: FreeImageAPIFREE_IMAGE_FORMAT

Format of the image. If the format is unknown use
FIF_UNKNOWN. In case a suitable format was found by LoadEx it will be returned in format.

create_new
Type: SystemBoolean
When true a new bitmap is created.

read_only
Type: SystemBoolean
When true the bitmap will be loaded read only.

keep_cache_in_memory
Type: SystemBoolean
When true performance is increased at the cost of memory.

Return Value
Type: FIMULTIBitmap
Handle to a FreeImage multi-paged bitmap.

Exceptions

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See Also

Reference
FreeImage Class
OpenMultiBitmapEx Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOpenMultiBitmapEx
Method (String,
FREE_IMAGE_FORMAT,
FREE_IMAGE_LOAD_FLAGS,
Boolean, Boolean, Boolean)

Loads a FreeImage multi-paged bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. Load flags can be provided by the flags parameter.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static FIMULTIBITMAP OpenMultiBitmapEx(
    string filename,
    ref FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS flags,
    bool create_new,
    bool read_only,
    bool keep_cache_in_memory
)
```

Parameters

*filename*
  Type: System.String
The complete name of the file to load.

**format**
Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image. If the format is unknown use FIF_UNKNOWN. In case a suitable format was found by LoadEx it will be returned in format.

**flags**
Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
Flags to enable or disable plugin-features.

**create_new**
Type: SystemBoolean
When true a new bitmap is created.

**read_only**
Type: SystemBoolean
When true the bitmap will be loaded read only.

**keep_cache_in_memory**
Type: SystemBoolean
When true performance is increased at the cost of memory.

Return Value
Type: FIMULTIBITMAP
Handle to a FreeImage multi-paged bitmap.

### Exceptions

<table>
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<tbody>
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</table>

### See Also

**Reference**
FreeImage Class
OpenMultiBitmapEx Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOpenMultiBitmapFromHandle Method

Loads a FreeImage multi-pages bitmap from the specified handle using the specified functions. Load flags can be provided by the flags parameter.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIMULTIBITMAP OpenMultiBitmapFromHandle(
    FREE_IMAGE_FORMAT fif,
    ref FreeImageIO io,
    fi_handle handle,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

**Parameters**

- **fif**
  - Type: `FreeImageAPI.FREE_IMAGE_FORMAT`  
  - Format of the image.

- **io**
  - Type: `FreeImageAPI.IOFreeImageIO`  
  - IO functions used to read from the specified handle.

- **handle**
  - Type: `FreeImageAPI.IOfi_handle`  
  - The handle to load the bitmap from.

- **flags**
Type: `FreelImageAPIFREE_IMAGE_LOAD_FLAGS`
Flags to enable or disable plugin-features.

Return Value
Type: `FIMULTIBITMAP`
Handle to a FreelImage multi-paged bitmap.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
# FreeImageOpenMultiBitmapFromStream Method

## Overload List

<table>
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<td>Loads a FreeImage multi-paged bitmap.</td>
</tr>
<tr>
<td>![s] OpenMultiBitmapFromStream(Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Loads a FreeImage multi-paged bitmap. In case the loading format is FIF_UNKNOWN the files real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. Load flags can be provided by the flags parameter.</td>
</tr>
</tbody>
</table>
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOpenMultiBitmapFromStream Method (Stream)

Loads a FreeImage multi-paged bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIMULTIBITMAP OpenMultiBitmapFromStream(Stream stream)
```

**Parameters**

*stream*
  
  Type: **System.IOStream**  
  The stream to load the bitmap from.

**Return Value**

Type: **FIMULTIBITMAP**  
Handle to a FreeImage multi-paged bitmap.

**See Also**

Reference  
FreeImage Class  
OpenMultiBitmapFromStream Overload  
FreeImageAPI Namespace
FreeImageOpenMultiBitmapFromStream Method (Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)

Loads a FreeImage multi-paged bitmap. In case the loading format is FIF_UNKNOWN the file’s real format is being analysed. If no plugin can read the file, format remains FIF_UNKNOWN and 0 is returned. Load flags can be provided by the flags parameter.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIMULTIBITMAP OpenMultiBitmapFromStream(
    Stream stream,
    ref FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

**Parameters**

- **stream**
  - Type: System.IOStream
  - The stream to load the bitmap from.

- **format**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - Format of the image. If the format is unknown use
FIF_UNKNOWN

flags
Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
Flags to enable or disable plugin-features.

Return Value
Type: FIMULTIBITMAP
Handle to a FreeImage multi-paged bitmap.

See Also

Reference
FreelImage Class
OpenMultiBitmapFromStream Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageOutputMessageProc Method

Calls the set error message function in FreeImage.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public static void OutputMessageProc(
    FREE_IMAGE_FORMAT fif,
    string message
)
```

### Parameters

- **fif**  
  Type: `FreeImageAPIFREE_IMAGE_FORMAT`  
  Format of the bitmaps.

- **message**  
  Type: `System.String`  
  The error message.

## See Also

- **Reference**  
  FreeImage Class  
  FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePaste Method

Alpha blend or combine a sub part image with the current dib image. The bit depth of the dst bitmap must be greater than or equal to the bit depth of the src.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool Paste(
    FIBITMAP dst,
    FIBITMAP src,
    int left,
    int top,
    int alpha
)
```

Parameters

- **dst**
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **src**
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **left**
  Type: SystemInt32  
  Specifies the left position of the sub image.

- **top**
  Type: SystemInt32  
  Specifies the top position of the sub image.
alpha
Type: SystemInt32
alpha blend factor. The source and destination images are alpha
blended if alpha=0..255. If alpha > 255, then the source image
is combined to the destination image.

Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePreMultiplyWithAlpha Method

Applies the alpha value of each pixel to its color components. The alpha value stays unchanged. Only works with 32-bits color depth.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static bool PreMultiplyWithAlpha(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: Boolean  
Returns true on success, false on failure.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FreeImageReadMemory Method

Reads data from a memory stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public static uint ReadMemory(
    byte[] buffer,
    uint size,
    uint count,
    FIMEMORY stream
)
```

## Parameters

- **buffer**
  - Type: `System.Byte`
  - The buffer to store the data in.

- **size**
  - Type: `System.UInt32`
  - Size in bytes of the items.

- **count**
  - Type: `System.UInt32`
  - Number of items to read.

- **stream**
  - Type: `FreeImageAPI.FIMEMORY`
  - The stream to read from. The memory pointer associated with stream is increased by the number of bytes actually read.
Return Value
Type: UInt32
The number of full items actually read. May be less than count on error or stream-end.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageRegisterExternalPlugin Method

Registers a new plugin to be used in FreeImage. The plugin is residing in a DLL. The Init function must be called “Init” and must use the stdcall calling convention.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FREE_IMAGE_FORMAT RegisterExternalPlugin(
    string path,
    string format,
    string description,
    string extension,
    string regexpr
)
```

### Parameters

- **path**
  - Type: **System.String**
  - Complete path to the dll file hosting the plugin.

- **format**
  - Type: **System.String**
  - A string describing the format of the plugin.

- **description**
  - Type: **System.String**
  - A string describing the plugin.
extension
Type: SystemString
A string with a comma separated list of extensions. For example: "pl,pl2,pl4"

regexpr
Type: SystemString
A regular expression used to identify the bitmap.

Return Value
Type: FREE_IMAGE_FORMAT
The format identifier assigned by FreeImage.

▶ See Also

Reference
- FreImage Class
- FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageRegisterLocalPlugin Method

 Registers a new plugin to be used in FreeImage.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FREE_IMAGE_FORMAT RegisterLocalPlugin(  
    InitProc proc_address,  
    string format,  
    string description,  
    string extension,  
    string regexpr
)
```

### Parameters

**proc_address**
- Type: FreeImageAPI.PluginsInitProc  
  Pointer to the function that initialises the plugin.

**format**
- Type: System.String  
  A string describing the format of the plugin.

**description**
- Type: System.String  
  A string describing the plugin.

**extension**
- Type: System.String  
  A string describing the plugin.
A string with a comma separated list of extensions. f.e: "pl,pl2,pl4"

**regexp**
Type: **System.String**
A regular expression used to identify the bitmap.

**Return Value**
Type: **FREE_IMAGE_FORMAT**
The format identifier assigned by FreeImage.

### See Also

**Reference**
- FreeImage Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageRescale Method

Performs resampling (or scaling, zooming) of a greyscale or RGB(A) image to the desired destination width and height.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public static FIBITMAP Rescale(
    FIBITMAP dib,
    int dst_width,
    int dst_height,
    FREE_IMAGE_FILTER filter
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **dst_width**  
  Type: SystemInt32  
  Destination width.

- **dst_height**  
  Type: SystemInt32  
  Destination height.

- **filter**  
  Type: FreeImageAPIFREE_IMAGE_FILTER  
  The filter to apply.

### Return Value
Type: **FIBITMAP**  
Handle to a FreeImage bitmap.

### See Also

**Reference**  
Freelmage Class  
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageRescaleRect Method


Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP RescaleRect(
    FIBITMAP dib,
    int dst_width,
    int dst_height,
    int left,
    int top,
    int right,
    int bottom,
    FREE_IMAGE_FILTER filter,
    FREE_IMAGE_RESCALE_FLAGS flags
)
```

Parameters

- **dib**
  Type: FreeImageAPI.FIBITMAP

- **dst_width**
  Type: System.Int32

dst_height
Type: SystemInt32

left
Type: SystemInt32

top
Type: SystemInt32

right
Type: SystemInt32

bottom
Type: SystemInt32

filter
Type: FreeImageAPIFREE_IMAGE_FILTER

flags
Type: FreeImageAPIFREE_IMAGE_RESCALE_FLAGS

Return Value
Type: FIBITMAP

See Also
Reference
FreelImage Class
FreelmageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageRotate Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://example.com/image" alt="Image" /> Rotate(FIBITMAP, Double)</td>
<td>This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. 1-bit images rotation is limited to integer multiple of 90°. <strong>null</strong> is returned for other values.</td>
</tr>
<tr>
<td><img src="https://example.com/image" alt="Image" /> RotateT(FIBITMAP, Double, NullableT)</td>
<td>This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. 1-bit images rotation is limited to integer multiple of 90°. <strong>null</strong> is returned for other values.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageRotate Method
(FIBITMAP, Double)

This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. 1-bit images rotation is limited to integer multiple of 90°. null is returned for other values.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FIBITMAP Rotate(
    FIBITMAP dib,
    double angle
)
```

Parameters

- `dib`
  Type: FreeImageAPI#FIBITMAP
  Handle to a FreeImage bitmap.

- `angle`
  Type: SystemDouble
  The angle of rotation.

Return Value

Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also
Reference
Freelimage Class
Rotate Overload
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageRotate<T> Method
(FIBITMAP, Double, Nullable<T>)

This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. 1-bit images rotation is limited to integer multiple of 90°. null is returned for other values.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP Rotate<T>(
    FIBITMAP dib,
    double angle,
    Nullable<T> backgroundColor
)
where T : struct, new()
```

### Parameters

- **dib**
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **angle**
  Type: SystemDouble  
  The angle of rotation.

- **backgroundColor**
  Type: SystemNullableT  
  The color used used to fill the bitmap's background.
Type Parameters

\( T \)

The type of the color to use as background.

Return Value

Type: FIBitmap

Handle to a FreeImage bitmap.

See Also

Reference

FreeImage Class
Rotate Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageRotate4bit Method

Rotates a 4-bit color FreeImage bitmap. Allowed values for `angle` are 90, 180 and 270. In case `angle` is 0 or 360 a clone is returned. 0 is returned for other values or in case the rotation fails.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP Rotate4bit(
    FIBITMAP dib,
    double angle
)
```

**Parameters**

- `dib`  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

- `angle`  
  Type: System.Double  
  The angle of rotation.

**Return Value**

Type: FIBITMAP  
Handle to a FreeImage bitmap.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

**Remarks**

This function is kind of temporary due to FreeImage's lack of rotating 4-bit images. It's particularly used by FreeImageBitmap's method RotateFlip. This function will be removed as soon as FreeImage supports rotating 4-bit images.

**See Also**

Reference
- FreeImage Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageAPI.RotateClassic Method

**Note:** This API is now obsolete.

This function rotates a 1-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. 1-bit images rotation is limited to integer multiple of 90°. `null` is returned for other values.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
[ObsoleteAttribute("RotateClassic is deprecated (use Rotate instead).")]
public static FIBITMAP RotateClassic(
    FIBITMAP dib,
    double angle
)
```

**Parameters**

- `dib`  
  Type: `FreeImageAPI.FIBITMAP`  
  Handle to a FreeImage bitmap.

- `angle`  
  Type: `System.Double`  
  The angle of rotation.

**Return Value**

Type: `FIBITMAP`  
Handle to a FreeImage bitmap.
See Also

Reference

Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
**FreeImage.NET Class Library Reference**

![Question Mark Icon] **FreeImageRotateEx Method**

This function performs a rotation and / or translation of an 8-bit greyscale, 24- or 32-bit image, using a 3rd order (cubic) B-Spline.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static FIBITMAP RotateEx(  
    FIBITMAP dib,  
    double angle,  
    double x_shift,  
    double y_shift,  
    double x_origin,  
    double y_origin,  
    bool use_mask
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **angle**  
  Type: SystemDouble  
  The angle of rotation.

- **x_shift**  
  Type: SystemDouble  
  Horizontal image translation.

- **y_shift**  
  Type: SystemDouble  
  Vertical image translation.
Vertical image translation.

**x_origin**
Type: SystemDouble
Rotation center x-coordinate.

**y_origin**
Type: SystemDouble
Rotation center y-coordinate.

**use_mask**
Type: SystemBoolean
When true the irrelevant part of the image is set to a black color, otherwise, a mirroring technique is used to fill irrelevant pixels.

**Return Value**
Type: FIBITMAP
Handle to a FreeImage bitmap.

**See Also**

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSave Method

Saves a previously loaded FIBITMAP to a file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool Save(
    FREE_IMAGE_FORMAT fif,
    FIBITMAP dib,
    string filename,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **fif**
  - Type: `FreeImageAPIFREE_IMAGE_FORMAT`
  - Type of the bitmap.

- **dib**
  - Type: `FreeImageAPIFIBITMAP`
  - Handle to a FreeImage bitmap.

- **filename**
  - Type: `System.String`
  - Name of the file to save to.

- **flags**
  - Type: `FreeImageAPIFREE_IMAGE_SAVE_FLAGS`
  - Flags to enable or disable plugin-features.

### Return Value

Type: `Boolean`
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveBitmap
Method

Overload List

<table>
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<tbody>
<tr>
<td>![S] SaveBitmap(Bitmap, String)</td>
<td>Saves a .NET Bitmap to a file.</td>
</tr>
<tr>
<td>![S] SaveBitmap(Bitmap, String, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Saves a .NET Bitmap to a file.</td>
</tr>
<tr>
<td>![S] SaveBitmap(Bitmap, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Saves a .NET Bitmap to a file.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveBitmap Method (Bitmap, String)

Saves a .NET Bitmap to a file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SaveBitmap(
    Bitmap bitmap,
    string filename
)
```

### Parameters

- **bitmap**  
  Type: `System.Drawing.Bitmap`  
  The .NET Bitmap to save.

- **filename**  
  Type: `System.String`  
  Name of the file to save to.

### Return Value

Type: `Boolean`  
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

### See Also

**Reference**
- [FreelImage Class](#)
- [SaveBitmap Overload](#)
- [FreelImageAPI Namespace](#)

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveBitmap Method (Bitmap, String, FREE_IMAGE_SAVE_FLAGS)

Saves a .NET Bitmap to a file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SaveBitmap(
    Bitmap bitmap,
    string filename,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **bitmap**  
  Type: System.Drawing.Bitmap  
  The .NET Bitmap to save.

- **filename**  
  Type: System.String  
  Name of the file to save to.

- **flags**  
  Type: FreeImageAPIFREE_IMAGE_SAVE_FLAGS  
  Flags to enable or disable plugin-features.

### Return Value

Type: Boolean
Returns true on success, false on failure.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>The bitmaps pixelformat is invalid.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td>bitmap or filename is null.</td>
</tr>
</tbody>
</table>

## See Also

Reference

- Freeware Class
- SaveBitmap Overload
- FreewareAPI Namespace

Contact/Feedback: Freeware.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveBitmap

Method (Bitmap, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves a .NET Bitmap to a file.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SaveBitmap(
    Bitmap bitmap,
    string filename,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **bitmap**
  - Type: System.Drawing.Bitmap
  - The .NET Bitmap to save.
- **filename**
  - Type: System.String
  - Name of the file to save to.
- **format**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - Format of the bitmap. If the format should be taken from the
filename use **FIF_UNKNOWN**.

**flags**
Type: **FreeImageAPI**FREE_IMAGE_SAVE_FLAGS
Flags to enable or disable plugin-features.

Return Value
Type: **Boolean**
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>bitmap or filename is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>The bitmaps pixelformat is invalid.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- **Freelmage Class**
- **SaveBitmap Overload**
- **FreelmageAPI Namespace**

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveEx Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SaveEx(FIBITMAP, String)</strong></td>
<td>Saves a previously loaded FreeImage bitmap to a file. The format is taken off the filename. If no suitable format was found false will be returned.</td>
</tr>
<tr>
<td><strong>SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT)</strong></td>
<td>Saves a previously loaded FreeImage bitmap to a file. In case the loading format is <code>FIF_UNKNOWN</code> the format is taken off the filename. If no suitable format was found false will be returned.</td>
</tr>
<tr>
<td><strong>SaveEx(FIBITMAP, String, FREE_IMAGE_SAVE_FLAGS)</strong></td>
<td>Saves a previously</td>
</tr>
</tbody>
</table>
SaveEx(FIBITMAP, String, Boolean)

Saves a previously loaded FreImage bitmap to a file. The format is taken off the filename. If no suitable format was found false will be returned.

SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves a previously loaded FreImage bitmap to a file. In case the loading format is FIF_UNKNOWN the format is taken off the filename. If no suitable format was found false will be returned.
| ![icon] | SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, Boolean) | Saves a previously loaded FreeImage bitmap to a file. In case the loading format is `FIF_UNKNOWN` the format is taken off the filename. If no suitable format was found false will be returned. |
| ![icon] | SaveEx(FIBITMAP, String, FREE_IMAGE_SAVE_FLAGS, Boolean) | Saves a previously loaded FreeImage bitmap to a file. The format is taken off the filename. If no suitable format was found false will be returned. Save flags can be provided by the flags parameter. |
| ![icon] | SaveEx(FIBITMAP, String, FREE_IMAGE_FORMAT, Boolean) | Saves a previously loaded FreeImage bitmap to a file. In case the loading format is `FIF_UNKNOWN` the format is taken off the filename. If no suitable format was found false will be returned. Save flags can be provided by the flags parameter. |
FREE_IMAGE_SAVE_FLAGS,
FREE_IMAGE_COLOR_DEPTH,
Boolean)

loaded FreelImage bitmap to a file. In case the loading format is FIF_UNKNOWN the format is taken off the filename. If no suitable format was found false will be returned. Save flags can be provided by the flags parameter. The bitmaps color depth can be set by 'colorDepth'. If set to FICD_AUTO a suitable color depth will be taken if available.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveEx Method
(FIBITMAP, String)

Saves a previously loaded FreeImage bitmap to a file. The format is taken off the filename. If no suitable format was found false will be returned.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static bool SaveEx(
    FIBITMAP dib,
    string filename
)
```

Parameters

dib
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

filename
Type: SystemString
The complete name of the file to save to. The extension will be corrected if it is no valid extension for the selected format or if no extension was specified.

Return Value
Type: Boolean
Returns true on success, false on failure.
Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>\textit{dib} or \textit{filename} is null.</td>
</tr>
</tbody>
</table>

See Also

Reference

- FreelImage Class
- SaveEx Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveEx Method
(FIBITMAP, String, FREE_IMAGE_FORMAT)

Saves a previously loaded FreeImage bitmap to a file. In case the loading format is FIF_UNKNOWN the format is taken off the filename. If no suitable format was found false will be returned.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static bool SaveEx(
    FIBITMAP dib,
    string filename,
    FREE_IMAGE_FORMAT format
)
```

Parameters

dib
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

filename
Type: SystemString
The complete name of the file to save to. The extension will be corrected if it is no valid extension for the selected format or if no extension was specified.

format
Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image. If the format should be taken from the filename use **FIF_UNKNOWN**.

### Return Value

**Type:** Boolean  
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><strong>dib</strong> or <strong>filename</strong> is null.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**

- FreelImage Class  
- SaveEx Overload  
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageSaveEx Method
(FIBITMAP, String, FREE_IMAGE_SAVE_FLAGS)

Saves a previously loaded FreeImage bitmap to a file. The format is taken off the filename. If no suitable format was found false will be returned. Save flags can be provided by the flags parameter.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool SaveEx(
    FIBITMAP dib,
    string filename,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

**Parameters**

**dib**
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

**filename**
Type: SystemString  
The complete name of the file to save to. The extension will be corrected if it is no valid extension for the selected format or if no extension was specified

**flags**
Type: FreeImageAPIFREE_IMAGE_SAVE_FLAGS
Flags to enable or disable plugin-features.

Return Value
Type: Boolean
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>
| ArgumentNullException | *dib* or *filename* is null.

See Also

Reference
Freelmage Class
SaveEx Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveEx Method (FIBITMAP, String, Boolean)

Saves a previously loaded FreeImage bitmap to a file. The format is taken off the filename. If no suitable format was found false will be returned.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SaveEx(
    ref FIBITMAP dib,
    string filename,
    bool unloadSource
)
```

### Parameters

- **dib**
  - Type: **FreelmageAPIFIBITMAP**  
  - Handle to a FreeImage bitmap.

- **filename**
  - Type: **SystemString**  
  - The complete name of the file to save to. The extension will be corrected if it is no valid extension for the selected format or if no extension was specified.

- **unloadSource**
  - Type: **SystemBoolean**  
  - When true the structure will be unloaded on success. If the function failed and returned false, the bitmap was not unloaded.
Return Value
Type: Boolean
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> or <code>filename</code> is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage Class
SaveEx Overload
FreeImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveEx Method
(FIBITMAP, String, 
FREE_IMAGE_FORMAT, 
FREE_IMAGE_SAVE_FLAGS)

Saves a previously loaded FreeImage bitmap to a file. In case the loading format is `FIF_UNKNOWN` the format is taken off the filename. If no suitable format was found false will be returned. Save flags can be provided by the flags parameter.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public static bool SaveEx(
    FIBITMAP dib,
    string filename,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **dib**
  - Type: `FreeImageAPIFIBITMAP`
  - Handle to a FreeImage bitmap.

- **filename**
  - Type: `System.String`
  - The complete name of the file to save to. The extension will be
corrected if it is no valid extension for the selected format or if no extension was specified.

**format**
Type: **FreeImageAPI**FREE_IMAGE_FORMAT
Format of the image. If the format should be taken from the filename use **FIF_UNKNOWN**.

**flags**
Type: **FreeImageAPI**FREE_IMAGE_SAVE_FLAGS
Flags to enable or disable plugin-features.

**Return Value**
Type: **Boolean**
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
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<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>dib</em> or <em>filename</em> is null.</td>
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</tbody>
</table>

### See Also

**Reference**
- FreeImage Class
- SaveEx Overload
- FreeImageAPI Namespace

**Contact/Feedback:** [FreeImage.NET Homepage](https://freeimage.net)
Help improve this Documentation: [Join the Project](https://github.com/FreeImageNet/FreeImage.NET)
FreeImageSaveEx Method
(FIBITMAP, String,
FREE_IMAGE_FORMAT,
Boolean)

Saves a previously loaded FreeImage bitmap to a file. In case the loading format is FIF_UNKNOWN the format is taken off the filename. If no suitable format was found false will be returned.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool SaveEx(
    ref FIBITMAP dib,
    string filename,
    FREE_IMAGE_FORMAT format,
    bool unloadSource
)
```

Parameters

dib
Type: FreeImageAPI.FIBITMAP
Handle to a FreeImage bitmap.

filename
Type: System.String
The complete name of the file to save to. The extension will be corrected if it is no valid extension for the selected format or if
no extension was specified.

*format*
Type: `FreImageAPIFRE_IMAGE_FORMAT`
Format of the image. If the format should be taken from the filename use `FIF_UNKNOWN`.

*unloadSource*
Type: `System.Boolean`
When true the structure will be unloaded on success. If the function failed and returned false, the bitmap was not unloaded.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

 Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> or <code>filename</code> is null.</td>
</tr>
</tbody>
</table>

 See Also

 Reference
FreImage Class
SaveEx Overload
FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveEx Method (FIBITMAP, String, FREE_IMAGE_SAVE_FLAGS, Boolean)

Saves a previously loaded FreeImage bitmap to a file. The format is taken off the filename. If no suitable format was found false will be returned. Save flags can be provided by the flags parameter.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool SaveEx(
    ref FIBITMAP dib,
    string filename,
    FREE_IMAGE_SAVE_FLAGS flags,
    bool unloadSource
)
```

Parameters

- **dib**
  Type: FreeImageAPIFIBITMAP
  Handle to a FreeImage bitmap.

- **filename**
  Type: SystemString
  The complete name of the file to save to. The extension will be corrected if it is no valid extension for the selected format or if
no extension was specified.

**flags**
Type: `FreImageAPIFREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

**unloadSource**
Type: `SystemBoolean`
When true the structure will be unloaded on success. If the function failed and returned false, the bitmap was not unloaded.

**Return Value**
Type: `Boolean`
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> or <code>filename</code> is null.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- Freelmage Class
- SaveEx Overload
- FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
Saves a previously loaded FreeImage bitmap to a file. In case the loading format is `FIF_UNKNOWN` the format is taken off the filename. If no suitable format was found false will be returned. Save flags can be provided by the `flags` parameter. The bitmaps color depth can be set by `colorDepth`. If set to `FICD_AUTO` a suitable color depth will be taken if available.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool SaveEx(  
    ref FIBITMAP dib,  
    string filename,  
    FREE_IMAGE_FORMAT format,  
    FREE_IMAGE_SAVE_FLAGS flags,  
    FREE_IMAGE_COLOR_DEPTH colorDepth,  
    bool unloadSource)
```
Parameters

\textit{dib}
Type: \texttt{FreeImageAPIFIBITMAP}
Handle to a FreeImage bitmap.

\textit{filename}
Type: \texttt{SystemString}
The complete name of the file to save to. The extension will be corrected if it is no valid extension for the selected format or if no extension was specified.

\textit{format}
Type: \texttt{FreeImageAPIFREE_IMAGE_FORMAT}
Format of the image. If the format should be taken from the filename use \texttt{FIF_UNKNOWN}.

\textit{flags}
Type: \texttt{FreeImageAPIFREE_IMAGE_SAVE_FLAGS}
Flags to enable or disable plugin-features.

\textit{colorDepth}
Type: \texttt{FreeImageAPIFREE_IMAGE_COLOR_DEPTH}
The new color depth of the bitmap. Set to \texttt{FICD_AUTO} if Save should take the best suitable color depth. If a color depth is selected that the provided format cannot write an error-message will be thrown.

\textit{unloadSource}
Type: \texttt{SystemBoolean}
When true the structure will be unloaded on success. If the function failed and returned false, the bitmap was not unloaded.

Return Value
Type: \texttt{Boolean}
Returns true on success, false on failure.

\section*{Exceptions}

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{ArgumentException}</td>
<td>A direct color conversion failed.</td>
</tr>
<tr>
<td>\texttt{ArgumentNullException}</td>
<td>\textit{dib} or \textit{filename} is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelImage Class
SaveEx Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveToHandle Method

Saves a bitmap to an arbitrary source.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SaveToHandle(
    FREE_IMAGE_FORMAT fif,
    FIBITMAP dib,
    ref FreeImageIO io,
    fi_handle handle,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **fif**  
  Type: `FreeImageAPIFREE_IMAGE_FORMAT`  
  Type of the bitmap.

- **dib**  
  Type: `FreeImageAPIFIBITMAP`  
  Handle to a FreeImage bitmap.

- **io**  
  Type: `FreeImageAPI.IOFreeImageIO`  
  A FreeImageIO structure with function pointers to handle the source.

- **handle**  
  Type: `FreeImageAPI.IOfi_handle`
A handle to the source.

flags
Type: `FreelImageAPIFREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

See Also

Reference
`FreelImage Class`
`FreelImageAPI Namespace`

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveToMemory Method

Saves a previously loaded FIBITMAP to a stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool SaveToMemory(
    FREE_IMAGE_FORMAT fif,
    FIBITMAP dib,
    FIMEMORY stream,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **fif**
  - Type: `FreeImageAPIFREE_IMAGE_FORMAT`
  - Type of the bitmap.

- **dib**
  - Type: `FreeImageAPIFIBITMAP`
  - Handle to a FreeImage bitmap.

- **stream**
  - Type: `FreeImageAPIFIMEMORY`
  - Handle to a memory stream.

- **flags**
  - Type: `FreeImageAPIFREE_IMAGE_SAVE_FLAGS`
  - Flags to enable or disable plugin-features.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveToStream

Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT)</td>
<td>Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.</td>
</tr>
<tr>
<td>SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.</td>
</tr>
<tr>
<td>SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT,</td>
<td>Saves a previously loaded</td>
</tr>
</tbody>
</table>
Boolean)  

FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.

| SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, FREE_IMAGE_COLOR_DEPTH) |
| Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream. |

| SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, Boolean) |
| Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream. |

| SaveToStream(FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, FREE_IMAGE_COLORDEPTH, Boolean) |
| Saves a previously loaded FreeImage bitmap to a stream. The |
stream must be set to the correct position before calling SaveToStream.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveToStream Method (FIBITMAP, Stream, FREE_IMAGE_FORMAT)

Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool SaveToStream(
    FIBITMAP dib,
    Stream stream,
    FREE_IMAGE_FORMAT format
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **stream**  
  Type: System.IOStream  
  The stream to write to.

- **format**  
  Type: FreeImageAPIFREE_IMAGE_FORMAT  
  Format of the image.

### Return Value
Type: Boolean
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>dib</em> or <em>stream</em> is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><em>stream</em> cannot write.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImage Class
SaveToStream Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveToStream Method (FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool SaveToStream(
    FIBITMAP dib,
    Stream stream,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

**Parameters**

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **stream**  
  Type: System.IOStream  
  The stream to write to.

- **format**  
  Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image.

flags
Type: `FreedImageAPIFREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> or <code>stream</code> is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><code>stream</code> cannot write.</td>
</tr>
</tbody>
</table>

See Also

Reference
- `FreedImage Class`
- `SaveToStream Overload`
- `FreedImageAPI Namespace`

Contact/Feedback: [FreImage.NET Homepage](https://freimage.net)
Help improve this Documentation: [Join the Project](https://github.com/FreImage/FreImage.NET)
FreeImageSaveToStream Method (FIBITMAP, Stream, FREE_IMAGE_FORMAT, Boolean)

Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SaveToStream(
    ref FIBITMAP dib,
    Stream stream,
    FREE_IMAGE_FORMAT format,
    bool unloadSource
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **stream**  
  Type: System.IOStream  
  The stream to write to.

- **format**  
  Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image.

unloadSource
Type: SystemBoolean
When true the structure will be unloaded on success.

Return Value
Type: Boolean
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>dib or stream is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>stream cannot write.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage Class
SaveToStream Overload
FreeImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveToStream Method (FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, FREE_IMAGE_COLOR_DEPTH)

Saves a previously loaded Freimage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.

Namespace: FreeImageAPI
Assembly: FreImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public static bool SaveToStream(
    FIBITMAP dib,
    Stream stream,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags,
    FREE_IMAGE_COLOR_DEPTH colorDepth
)
```

Parameters

- **dib**
  Type: FreeImageAPIFIBITMAP
  Handle to a FreImage bitmap.
- **stream**
  Type: System.IOStream
The stream to write to.

**format**
Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image.

**flags**
Type: FreeImageAPIFREE_IMAGE_SAVE_FLAGS
Flags to enable or disable plugin-features.

**colorDepth**
Type: FreeImageAPIFREE_IMAGE_COLOR_DEPTH
The new color depth of the bitmap. Set to FICD_AUTO if SaveToStream should take the best suitable color depth. If a color depth is selected that the provided format cannot write an error-message will be thrown.

Return Value
Type: Boolean
Returns true on success, false on failure.

⚠️ Exceptions

<table>
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⚠️ See Also

Reference
FreImage Class
SaveToStream Overload
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSaveToStream Method (FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, Boolean)

Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool SaveToStream(
    ref FIBITMAP dib,
    Stream stream,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags,
    bool unloadSource
)
```

### Parameters

- **dib**  
  Type: `FreeImageAPIFIBITMAP`  
  Handle to a FreeImage bitmap.

- **stream**  
  Type: `System.IOStream`
The stream to write to.

format
Type: `FreeImageAPIFREE_IMAGE_FORMAT`
Format of the image.

flags
Type: `FreeImageAPIFREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

unloadSource
Type: `SystemBoolean`
When true the structure will be unloaded on success.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

Exceptions

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</table>

See Also

Reference
- `FreeImage Class`
- `SaveToStream Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimageviewer.net)
Help improve this Documentation: [Join the Project](https://github.com/FreeImage/FreeImage.NET)
FreeImageSaveToStream Method (FIBITMAP, Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS, FREE_IMAGE_COLOR_DEPTH Boolean)

Saves a previously loaded FreeImage bitmap to a stream. The stream must be set to the correct position before calling SaveToStream.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool SaveToStream(
    ref FIBITMAP dib,
    Stream stream,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags,
    FREE_IMAGE_COLOR_DEPTH colorDepth,
    bool unloadSource
)
```

Parameters

*dib*
Type: `FreeImageAPIFIBitmap`
Handle to a FreeImage bitmap.

`stream`
Type: `System.IOStream`
The stream to write to.

`format`
Type: `FreeImageAPIFREE_IMAGE_FORMAT`
Format of the image.

`flags`
Type: `FreeImageAPIFREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

`colorDepth`
Type: `FreeImageAPIFREE_IMAGE_COLOR_DEPTH`
The new color depth of the bitmap. Set to `FICD_AUTO` if `SaveToStream` should take the best suitable color depth. If a color depth is selected that the provided format cannot write an error-message will be thrown.

`unloadSource`
Type: `System.Boolean`
When true the structure will be unloaded on success.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

### Exceptions

<table>
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<td><code>stream</code> cannot write.</td>
</tr>
</tbody>
</table>

### See Also

Reference
`FreeImage Class`
`SaveToStream Overload`
FreeImageSeekMemory Method

Moves the memory handle to a specified location.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public static bool SeekMemory(
    FIMEMORY stream,
    int offset,
    SeekOrigin origin
)
```

**Parameters**

- **stream**
  Type: FreeImageAPI.FIMEMORY  
  Handle to a memory stream.

- **offset**
  Type: System.Int32  
  Number of bytes from origin.

- **origin**
  Type: System.IO.SeekOrigin  
  Initial position.

**Return Value**

Type: Boolean  
Returns true on success, false on failure.
**FreeImageSetBackgroundColor**

**Method**

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>SetBackgroundColor(FIBITMAP, RGBQUAD)</code></td>
<td>Set the file background color of an image. When saving an image to PNG, this background color is transparently saved to the PNG file.</td>
</tr>
</tbody>
</table>

When the `bkcolor` parameter is null, the background
color is removed from the image. This overloaded version of the function with an array parameter is provided to allow passing null in the bkcolor parameter. This is similar to the original C/C++ function. Passing null as bkcolor parameter will unset the dib's previously set background color.
FreeImage.NET Class Library Reference

FreeImageSetBackgroundColor Method (FIBITMAP, RGBQUAD)

Set the file background color of an image. When saving an image to PNG, this background color is transparently saved to the PNG file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool SetBackgroundColor( 
    FIBITMAP dib, 
    ref RGBQUAD bkcolor
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

- **bkcolor**
  - Type: FreeImageAPI.RGBQUAD
  - The new background color.

### Return Value

- Type: Boolean
  - Returns true on success, false on failure.
See Also

Reference
Freelmage Class
SetBackgroundColor Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetBackgroundColor Method (FIBITMAP, RGBQUAD)

Set the file background color of an image. When saving an image to PNG, this background color is transparently saved to the PNG file. When the bkcolor parameter is null, the background color is removed from the image. This overloaded version of the function with an array parameter is provided to allow passing null in the bkcolor parameter. This is similar to the original C/C++ function. Passing null as bkcolor parameter will unset the dib's previously set background color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetBackgroundColor(  
    FIBITMAP dib,  
    RGBQUAD[] bkcolor  
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreelImage bitmap.

- **bkcolor**  
  Type: FreeImageAPIRGBQUAD  
  The new background color. The first entry in the array is used.
Return Value
Type: Boolean
Returns true on success, false on failure.

Examples

```csharp
// create a RGBQUAD color
RGBQUAD color = new RGBQUAD(Color.Green);

// set the dib's background color (using the other
FreeImage.SetBackgroundColor(dib, ref color);

// remove it again (this only works due to the array parameter)
FreeImage.SetBackgroundColor(dib, null);
```

See Also

Reference
Freelmage Class
SetBackgroundColor Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetChannel Method

Insert a 8-bit dib into a 24- or 32-bit image. Both images must have the same width and height.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool SetChannel(
    FIBITMAP dib,
    FIBITMAP dib8,
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

**Parameters**

- **dib**
  - Type: `FreeImageAPIFIBITMAP`  
  - Handle to a FreeImage bitmap.

- **dib8**
  - Type: `FreeImageAPIFIBITMAP`  
  - Handle to the bitmap to insert.

- **channel**
  - Type: `FreeImageAPIFREE_IMAGE_COLOR_CHANNEL`  
  - The color channel to replace.

**Return Value**

- Type: `Boolean`  
  - Returns true on success, false on failure.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetComplexChannel Method

Set the real or imaginary part of a complex image. Both images must have to same width and height.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetComplexChannel(
    FIBITMAP dst,
    FIBITMAP src,
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

### Parameters

- **dst**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **src**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **channel**  
  Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL  
  The color channel to replace.

### Return Value

- **Type:** Boolean  
  Returns true on success, false on failure.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetDotsPerMeterX Method

Set the horizontal resolution, in pixels-per-meter, of the target device for the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void SetDotsPerMeterX(
    FIBITMAP dib,
    uint res
)
```

### Parameters

**dib**  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

**res**  
Type: SystemUInt32  
The new horizontal resolution.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageSetDotsPerMeterY Method

Set the vertical resolution, in pixels-per-meter, of the target device for the bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static void SetDotsPerMeterY(
    FIBITMAP dib,
    uint res
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **res**
  - Type: SystemUInt32
  - The new vertical resolution.

## See Also

Reference
FreeImage Class  
FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FreeImageSetImageComment Method

Sets the comment of a JPEG, PNG or GIF image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetImageComment(
    FIBITMAP dib,
    string comment
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **comment**  
  Type: SystemString  
  New comment of the FreeImage bitmap. Use null to remove the comment.

### Return Value

Type: Boolean  
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>
ArgumentNullException

dib is null.

See Also

Reference
Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetMetadata

Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![SetMetadata](FREE_IMAGE_MDMODEL, FIBITMAP, String, FITAG)</td>
<td>Attach a new FreeImage tag to a dib.</td>
</tr>
<tr>
<td>![SetMetadata](FREE_IMAGE_MDMODEL, FIBITMAP, String, MetadataTag)</td>
<td>Attach a new metadata tag to a FreeImage bitmap.</td>
</tr>
</tbody>
</table>

See Also

Reference

FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreiImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageSetMetadata Method
(FREE_IMAGE_MDMODEL, FIBITMAP, String, FITAG)

Attach a new FreeImage tag to a dib.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C#  
```csharp
public static bool SetMetadata(
    FREE_IMAGE_MDMODEL model,
    FIBITMAP dib,
    string key,
    FITAG tag
)
```

### Parameters

- **model**
  - Type: FreeImageAPIFREE_IMAGE_MDMODEL
  - The metadata model used to store the tag.

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **key**
  - Type: SystemString
  - The tag field name.
tag
  Type: FreeImageAPIFITAG
  The FreeImage tag to be attached.

Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
  FreelImage Class
  SetMetadata Overload
  FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetMetadata Method

(FREE_IMAGE_MDMODEL, FIBITMAP, String, MetadataTag)

Attach a new metadata tag to a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool SetMetadata(  
    FREE_IMAGE_MDMODEL model,  
    FIBITMAP dib,  
    string key,  
    MetadataTag tag
)
```

**Parameters**

- `model`  
  Type: FreeImageAPIFREE_IMAGE_MDMODEL  
  The metadata model used to store the tag.

- `dib`  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- `key`
Type: `System.String`
The tag field name.

`tag`
Type: `FreeImageAPI.MetadataMetadataTag`
The `MetadataTag` to be attached.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

## Exceptions

<table>
<thead>
<tr>
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<tr>
<td><code>ArgumentNullException</code></td>
<td><code>dib</code> is null</td>
</tr>
</tbody>
</table>

## See Also

Reference
- `FreeImage Class`
- `SetMetadata Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetPixelColor Method

Set the pixel color of a 16-, 24- or 32-bit image at position (x, y), including range check (slow access).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool SetPixelColor(
    FIBITMAP dib,
    uint x,
    uint y,
    ref RGBQUAD value
)
```

**Parameters**

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **x**  
  Type: SystemUInt32  
  Pixel position in horizontal direction.

- **y**  
  Type: SystemUInt32  
  Pixel position in vertical direction.

- **value**  
  Type: FreeImageAPIRGBQUAD  
  The new pixel color.
Return Value
Type: **Boolean**
Returns true on success, false on failure.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetPixelIndex Method

Set the pixel index of a palettized image at position (x, y), including range check (slow access).

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool SetPixelIndex(
    FIBITMAP dib,
    uint x,
    uint y,
    ref byte value
)
```

Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP
  - Handle to a FreeImage bitmap.

- **x**
  - Type: SystemUInt32
  - Pixel position in horizontal direction.

- **y**
  - Type: SystemUInt32
  - Pixel position in vertical direction.

- **value**
  - Type: SystemByte
  - The new pixel index.
### Return Value
Type: **Boolean**
Returns true on success, false on failure.

#### See Also

Reference
- Freelmage Class
- FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
**FreeImageSetPluginEnabled Method**

Enables or disables a plugin.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static int SetPluginEnabled(
    FREE_IMAGE_FORMAT fif,
    bool enable
)
```

**Parameters**

- **fif**  
  Type: `FreeImageAPIFREE_IMAGE_FORMAT`  
  The plugin to enable or disable.

- **enable**  
  Type: `SystemBoolean`  
  True: enable the plugin. false: disable the plugin.

**Return Value**

Type: `Int32`  
The previous state of the plugin. 1 - enabled. 0 - disables. -1 plugin does not exist.

**See Also**

Reference
FreeImageSetResolutionX Method

Sets a DIB's resolution in X-direction measured in 'dots per inch' (DPI) and not in 'dots per meter'.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static void SetResolutionX(  
    FIBITMAP dib,  
    uint res  
)
```

### Parameters

**dib**  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

**res**  
Type: SystemUInt32  
The new resolution in 'dots per inch'.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><em>dib</em> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageNET Class Library Reference

FreeImageSetResolutionY Method

Sets a DIB's resolution in Y-direction measured in 'dots per inch' (DPI) and not in 'dots per meter'.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public static void SetResolutionY(
    FIBITMAP dib,
    uint res
)
```

### Parameters

**dib**
- Type: FreeImageAPIFIBITMAP
- Handle to a FreeImage bitmap.

**res**
- Type: SystemUInt32
- The new resolution in 'dots per inch'.

## Exceptions

<table>
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<tr>
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</table>
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetTagCount

Method

Sets the number of data in the tag.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetTagCount(
    FITAG tag,
    uint count
)
```

### Parameters

- **tag**
  - Type: FreeImageAPI.FITAG
  - The tag field.

- **count**
  - Type: System.UInt32
  - New number of data.

### Return Value

- Type: Boolean
  - Returns true on success, false on failure.

### See Also

- Reference
  - FreeImage Class
FreeImageSetTagDescription Method

Sets the tag description.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetTagDescription(
    FITAG tag,
    string description
)
```

### Parameters

**tag**  
Type: FreeImageAPI.FITAG  
The tag field.

**description**  
Type: System.String  
The new description.

### Return Value

Type: Boolean  
Returns true on success, false on failure.

### See Also

Reference  
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageSetTagID Method

Sets the tag ID.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetTagID(
    FITAG tag,
    ushort id
)
```

### Parameters

- **tag**
  - Type: FreeImageAPI.FITAG
  - The tag field.

- **id**
  - Type: System.UInt16
  - The new ID.

### Return Value

- Type: Boolean
  - Returns true on success, false on failure.

### See Also

- Reference  
  - FreeImage Class  
  - FreeImageAPI Namespace
FreeImageSetTagKey Method

Sets the tag field name.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetTagKey(
    FITAG tag,
    string key
)
```

### Parameters

- **tag**
  - Type: FreeImageAPI.FITAG  
  - The tag field.
- **key**
  - Type: System.String  
  - The new name.

### Return Value

- Type: Boolean  
  - Returns true on success, false on failure.

### See Also

- Reference: FreeImage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetTagLength Method

Sets the length of the tag value in bytes.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool SetTagLength(  
    FITAG tag,  
    uint length  
)
```

**Parameters**

- **tag**  
  Type: FreeImageAPI.FITAG  
  The tag field.

- **length**  
  Type: System.UInt32  
  The new length.

**Return Value**

Type: Boolean  
Returns true on success, false on failure.

**See Also**

Reference  
Freimage Class
FreeImage.NET Class Library Reference

FreeImageSetTagType Method

Sets the tag data type.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```csharp
public static bool SetTagType(
    FITAG tag,
    FREE_IMAGE_MDTYPE type
)
```

Parameters

*tag*

Type: FreeImageAPIFITAG  
The tag field.

*type*

Type: FreeImageAPIFREE_IMAGE_MDTYPE  
The new type.

Return Value

Type: Boolean  
Returns true on success, false on failure.

▲ See Also

Reference  
FreeImage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSetTagValue Method

Sets the tag value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool SetTagValue(
    FITAG tag,
    byte[] value
)
```

### Parameters

- **tag**  
  Type: FreeImageAPI.FITAG  
  The tag field.

- **value**  
  Type: System.Byte  
  Pointer to the new value.

### Return Value

Type: Boolean  
Returns true on success, false on failure.

### See Also

Reference  
Freeware Class
FreeImageSetTransparencyTable Method

Set the FreeImage bitmap's transparency table. Only affects palletised bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void SetTransparencyTable(  
    FIBITMAP dib,  
    byte[] table
)
```

### Parameters

- **dib**
  - Type: FreeImageAPIFIBITMAP  
  - Handle to a FreeImage bitmap.

- **table**
  - Type: System.Byte  
  - The FreeImage bitmap's new transparency table.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><strong>dib</strong> or <strong>table</strong> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
Freelimage Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageSetTransparent Method

Tells FreeImage if it should make use of the transparency table or the alpha channel that may accompany a bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static void SetTransparent(
    FIBITMAP dib,
    bool enabled
)
```

### Parameters

- **dib**  
  - Type: FreeImageAPIFIBITMAP  
  - Handle to a FreeImage bitmap.

- **enabled**  
  - Type: SystemBoolean  
  - True to enable the transparency, false to disable.

## See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageSetTransparentIndex Method

Sets the index of the palette entry to be used as transparent color for the image specified. Does nothing on high color images.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void SetTransparentColor(  
    FIBITMAP dib,  
    int index
)
```

### Parameters

**dib**
- Type: `FreeImageAPI/FIBITMAP`
- Handle to a FreeImage bitmap.

**index**
- Type: `System/Int32`
- The index of the palette entry to be set as transparent color.

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace
FreeImageSwapColors Method

Swaps two specified colors on a 1-, 4- or 8-bit palletized or a 16-, 24- or 32-bit high color image.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint SwapColors(
    FIBITMAP dib,
    ref RGBQUAD color_a,
    ref RGBQUAD color_b,
    bool ignore_alpha
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI FIBITMAP
  - Handle to a FreeImage bitmap.

- **color_a**
  - Type: FreeImageAPI RGBQUAD
  - One of the two colors to be swapped.

- **color_b**
  - Type: FreeImageAPI RGBQUAD
  - The other of the two colors to be swapped.

- **ignore_alpha**
  - Type: System.Boolean
  - If true, 32-bit images and colors are treated as 24-bit.
Return Value
Type: UInt32
The total number of pixels changed.

Remarks

This function swaps the two specified colors `color_a` and `color_b` on a palletized or high color image. For high color images, the actual image data will be modified whereas, for palletized images only the palette will be changed.

_Note, that this behaviour is different from what SwapPaletteIndices(FIBITMAP, Byte, Byte) does, which modifies the actual image data on palletized images._

This is just a thin wrapper for ApplyColorMapping(FIBITMAP, RGBQUAD, RGBQUAD, UInt32, Boolean, Boolean) and resolves to:

```
return ApplyColorMapping(dib, color_a, color_b, 1, ignore_alpha, Copy)
```

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageSwapPaletteIndices Method

Swaps two specified palette indices on a 1-, 4- or 8-bit palletized image.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static uint SwapPaletteIndices(
    FIBITMAP dib,
    ref byte index_a,
    ref byte index_b
)
```

Parameters

- `dib`
  Type: FreeImageAPI.FIBITMAP
  Handle to a FreeImage bitmap.

- `index_a`
  Type: System.Byte
  One of the two palette indices to be swapped.

- `index_b`
  Type: System.Byte
  The other of the two palette indices to be swapped.

Return Value

Type: UInt32
The total number of pixels changed.
Remarks

This function swaps the two specified palette indices index_a and index_b on a palletized image. Therefore, not the palette, but the actual image data will be modified. **Note, that this behaviour is different from what SwapColors(FIBITMAP, RGBQUAD, RGBQUAD, Boolean) does on palletized images, which only swaps the colors in the palette.**

This is just a thin wrapper for ApplyColorMapping(FIBITMAP, RGBQUAD, RGBQUAD, UInt32, Boolean, Boolean) and resolves to:

```c
return ApplyPaletteIndexMapping(dib, index_a, index_b, Copy);
```

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageTagToString Method

Converts a FreeImage tag structure to a string that represents the interpreted tag value. The function is not thread safe.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static string TagToString(
    FREE_IMAGE_MDMODEL model,
    FITAG tag,
    uint Make
)
```

Parameters

- **model**
  
  Type: FreeImageAPIFREE_IMAGE_MDMODEL
  The metadata model.

- **tag**
  
  Type: FreeImageAPIFITAG
  The interpreted tag value.

- **Make**
  
  Type: SystemUInt32
  Reserved.

Return Value

- Type: String
  The representing string.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageTellMemory Method

Gets the current position of a memory handle.

**Namespace:** FreImageAPI  
**Assembly:** FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static int TellMemory(
    FIMEMORY stream
)
```

### Parameters

*stream*
  
  Type: FreImageAPI.FIMEMORY  
  Handle to a memory stream.

### Return Value

  Type: Int32  
  The current file position if successful, -1 otherwise.

### See Also

**Reference**
  
  FreImage Class  
  FreImageAPI Namespace

**Contact/Feedback:** FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageThreshold Method

Converts a bitmap to 1-bit monochrome bitmap using a threshold T between [0..255]. The function first converts the bitmap to a 8-bit greyscale bitmap. Then, any brightness level that is less than T is set to zero, otherwise to 1. For 1-bit input bitmaps, the function clones the input bitmap and builds a monochrome palette.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static FIBITMAP Threshold(
    FIBITMAP dib,
    byte t
)
```

Parameters

`dib`
Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

`t`
Type: SystemByte
The threshold.

Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also
FreeImageTmoDrago03 Method

Converts a High Dynamic Range image to a 24-bit RGB image using a global operator based on logarithmic compression of luminance values, imitating the human response to light.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public static FIBITMAP TmoDrago03(
    FIBITMAP src,
    double gamma,
    double exposure
)
```

## Parameters

**src**
- Type: FreeImageAPIFIBITMAP
  Handle to a FreeImage bitmap.

**gamma**
- Type: SystemDouble
  A gamma correction that is applied after the tone mapping. A value of 1 means no correction.

**exposure**
- Type: SystemDouble
  Scale factor allowing to adjust the brightness of the output image.
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageTmoFattal02
Method

Apply the Gradient Domain High Dynamic Range Compression to a RGBF image and convert to 24-bit RGB.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FIBITMAP TmoFattal02(
    FIBITMAP src,
    double color_saturation,
    double attenuation
)
```

**Parameters**

- **src**  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

- **color_saturation**  
  Type: System.Double  
  Color saturation (s parameter in the paper) in [0.4..0.6]

- **attenuation**  
  Type: System.Double  
  Atenuation factor (beta parameter in the paper) in [0.8..0.9]

**Return Value**

Type: FIBITMAP  
Handle to a FreeImage bitmap.
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageTmoReinhard05

Method

Converts a High Dynamic Range image to a 24-bit RGB image using a global operator inspired by photoreceptor physiology of the human visual system.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FIBITMAP TmoReinhard05(
    FIBITMAP src,
    double intensity,
    double contrast
)
```

### Parameters

**src**  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

**intensity**  
Type: SystemDouble  
Controls the overall image intensity in the range [-8, 8].

**contrast**  
Type: SystemDouble  
Controls the overall image contrast in the range [0.3, 1.0].

### Return Value

Type: FIBITMAP
Handle to a FreelImage bitmap.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageToneMapping Method

Converts a High Dynamic Range image (48-bit RGB or 96-bit RGBF) to a 24-bit RGB image, suitable for display.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

C#  

```csharp
public static FIBITMAP ToneMapping(
    FIBITMAP dib,
    FREE_IMAGE_TMO tmo,
    double first_param,
    double second_param
)
```

### Parameters

- **dib**  
  Type: FreeImageAPIFIBITMAP  
  Handle to a FreeImage bitmap.

- **tmo**  
  Type: FreeImageAPIFREE_IMAGE_TMO  
  The tone mapping operator to be used.

- **first_param**  
  Type: SystemDouble  
  Parmeter depending on the used algorithm

- **second_param**  
  Type: SystemDouble  
  Parmeter depending on the used algorithm
Return Value
Type: FIBITMAP
Handle to a FreeImage bitmap.

See Also
Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageUnload Method

Deletes a previously loaded FIBITMAP from memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void Unload(
    FIBITMAP dib
)
```

### Parameters

**dib**  
Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageUnUnloadEx Method

Deletes a previously loaded FreeImage bitmap from memory and resets the handle to 0.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public static void UnloadEx(
    ref FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

## See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageUnlockPage Method

Unlocks a previously locked page and gives it back to the multi-page engine.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static void UnlockPage(
    FIMULTIBITMAP bitmap,
    FIBITMAP data,
    bool changed
)
```

### Parameters

**bitmap**
- Type: FreeImageAPIFIMULTIBITMAP
- Handle to a FreeImage multi-paged bitmap.

**data**
- Type: FreeImageAPIFIBITMAP
- Handle to a FreeImage bitmap.

**changed**
- Type: SystemBoolean
- If true, the page is applied to the multi-page bitmap.

### See Also
Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageWriteMemory Method

Writers data to a memory stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint WriteMemory(
    byte[] buffer,
    uint size,
    uint count,
    FIMEMORY stream
)
```

### Parameters

- **buffer**
  - Type: `System.Byte`
  - The buffer to read the data from.

- **size**
  - Type: `System.UInt32`
  - Size in bytes of the items.

- **count**
  - Type: `System.UInt32`
  - Number of items to write.

- **stream**
  - Type: `FreeImageAPI.FIMEMORY`
  - The stream to write to. The memory pointer associated with stream is increased by the number of bytes actually written.
Return Value
Type: UInt32
The number of full items actually written. May be less than count on error or stream-end.

See Also

Reference
FreelImage Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageZLibCompress Method

Compresses a source buffer into a target buffer, using the ZLib library.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint ZLibCompress(  
    byte[] target,  
    uint target_size,  
    byte[] source,  
    uint source_size
)
```

### Parameters

- **target**
  - Type: `System.Byte`
  - Pointer to the target buffer.

- **target_size**
  - Type: `System.UInt32`
  - Size of the target buffer. Must be at least 0.1% larger than source_size plus 12 bytes.

- **source**
  - Type: `System.Byte`
  - Pointer to the source buffer.

- **source_size**
  - Type: `System.UInt32`
  - Size of the source buffer.
Return Value
Type: **UInt32**
The actual size of the compressed buffer, or 0 if an error occurred.

See Also

Reference
- Freelmage Class
- FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageZLibCRC32

Method

Generates a CRC32 checksum.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public static uint ZLibCRC32(
    uint crc,
    byte[] source,
    uint source_size
)
```

**Parameters**

- **crc**
  
  Type: SystemUInt32
  
  The CRC32 checksum to begin with.

- **source**

  Type: SystemByte
  
  Pointer to the source buffer. If the value is 0, the function returns the required initial value for the crc.

- **source_size**

  Type: SystemUInt32
  
  Size of the source buffer.

**Return Value**

- Type: UInt32

  [Missing <returns> documentation for]
See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageZLibGUnzip Method

Decompresses a source buffer into a target buffer, using the ZLib library.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static uint ZLibGUnzip(
    byte[] target,
    uint target_size,
    byte[] source,
    uint source_size
)
```

### Parameters

**target**
- Type: `System.Byte`
- Pointer to the target buffer.

**target_size**
- Type: `System.UInt32`
- Size of the target buffer. Must have been saved outside of zlib.

**source**
- Type: `System.Byte`
- Pointer to the source buffer.

**source_size**
- Type: `System.UInt32`
- Size of the source buffer.
Return Value
Type: UInt32
The actual size of the uncompressed buffer, or 0 if an error occurred.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
Compresses a source buffer into a target buffer, using the ZLib library.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static uint ZLibGZip(
    byte[] target,
    uint target_size,
    byte[] source,
    uint source_size
)
```

### Parameters

- **target**
  - Type: `System.Byte`
  - Pointer to the target buffer.

- **target_size**
  - Type: `System.UInt32`
  - Size of the target buffer. Must be at least 0.1% larger than `source_size` plus 24 bytes.

- **source**
  - Type: `System.Byte`
  - Pointer to the source buffer.

- **source_size**
  - Type: `System.UInt32`
  - Size of the source buffer.

### Return Value
Type: **UInt32**
The actual size of the compressed buffer, or 0 if an error occurred.

**See Also**

**Reference**
- [FreelImage Class](#)
- [FreelImageAPI Namespace](#)

Contact/Feedback: [FreelImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
FreeImageZLibUncompress

Method

Decompresses a source buffer into a target buffer, using the ZLib library.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static uint ZLibUncompress(
    byte[] target,
    uint target_size,
    byte[] source,
    uint source_size
)
```

**Parameters**

- `target`
  - Type: `System.Byte`
  - Pointer to the target buffer.

- `target_size`
  - Type: `System.UInt32`
  - Size of the target buffer. Must have been saved outside of zlib.

- `source`
  - Type: `System.Byte`
  - Pointer to the source buffer.

- `source_size`
  - Type: `System.UInt32`
  - Size of the source buffer.
Return Value
Type: UInt32
The actual size of the uncompressed buffer, or 0 if an error occurred.

See Also

Reference
Freelmage Class
FreelmageAPI Namespace
The **FreeImage** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI_BITFIELDS</td>
<td>Specifies that the bitmap is not compressed and that the color table consists of three <strong>DWORD</strong> color masks that specify the red, green, and blue components, respectively, of each pixel. This is valid when used with 16- and 32-bpp bitmaps.</td>
</tr>
<tr>
<td>BI_JPEG</td>
<td><strong>Windows 98/Me, Windows 2000/XP:</strong> Indicates that the image is a JPEG image.</td>
</tr>
<tr>
<td>BI_PNG</td>
<td><strong>Windows 98/Me, Windows 2000/XP:</strong> Indicates that the image is a PNG image.</td>
</tr>
<tr>
<td>BI_RGB</td>
<td>An uncompressed format.</td>
</tr>
<tr>
<td>BI_RLE4</td>
<td>An RLE format for bitmaps with 4 bpp. The compression format is a 2-byte format consisting of a count byte followed by two word-length color indexes.</td>
</tr>
<tr>
<td>BI_RLE8</td>
<td>A run-length encoded (RLE)</td>
</tr>
</tbody>
</table>
format for bitmaps with 8 bpp. The compression format is a 2-byte format consisting of a count byte followed by a byte containing a color index.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>s</td>
<td>FI_RGBA_ALPHA</td>
</tr>
<tr>
<td></td>
<td>Number of bytes to shift left within a 4 byte block.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_ALPHA_MASK</td>
</tr>
<tr>
<td></td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_ALPHA_SHIFT</td>
</tr>
<tr>
<td></td>
<td>Number of bits to shift left within a 32 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_BLUE</td>
</tr>
<tr>
<td></td>
<td>Number of bytes to shift left within a 4 byte block.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_BLUE_MASK</td>
</tr>
<tr>
<td></td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_BLUE_SHIFT</td>
</tr>
<tr>
<td></td>
<td>Number of bits to shift left within a 32 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_GREEN</td>
</tr>
<tr>
<td></td>
<td>Number of bytes to shift left within a 4 byte block.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_GREEN_MASK</td>
</tr>
<tr>
<td></td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_GREEN_SHIFT</td>
</tr>
<tr>
<td></td>
<td>Number of bits to shift left within a 32 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_RED</td>
</tr>
<tr>
<td></td>
<td>Number of bytes to shift left within a 4 byte block.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_RED_MASK</td>
</tr>
<tr>
<td></td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI_RGBA_RED_SHIFT</td>
</tr>
<tr>
<td></td>
<td>Number of bits to shift left within a 32 bit block.</td>
</tr>
</tbody>
</table>
within a 32 bit block.

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>s</td>
<td>FI_RGBA_RGB_MASK</td>
<td>Mask indicating the position of color components of a 32 bit color.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_555_BLUE_MASK</td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_555_BLUE_SHIFT</td>
<td>Number of bits to shift left within a 16 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_555_GREEN_MASK</td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_555_GREEN_SHIFT</td>
<td>Number of bits to shift left within a 16 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_555_RED_MASK</td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_555_RED_SHIFT</td>
<td>Number of bits to shift left within a 16 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_565_BLUE_MASK</td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_565_BLUE_SHIFT</td>
<td>Number of bits to shift left within a 16 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_565_GREEN_MASK</td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_565_GREEN_SHIFT</td>
<td>Number of bits to shift left within a 16 bit block.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_565_RED_MASK</td>
<td>Mask indicating the position of the given color.</td>
</tr>
<tr>
<td>s</td>
<td>FI16_565_RED_SHIFT</td>
<td>Number of bits to shift left within a 16 bit block.</td>
</tr>
</tbody>
</table>
within a 16 bit block.

```
<sn>
FREE_IMAGE_MDMODELS Array containing all 'FREE_IMAGE_MDMODEL's
```

See Also

Reference

FreelImage Class
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBI_BITFIELDS Field

Specifies that the bitmap is not compressed and that the color table consists of three **DWORD** color masks that specify the red, green, and blue components, respectively, of each pixel. This is valid when used with 16- and 32-bpp bitmaps.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int BI_BITFIELDS
```

### Field Value

Type: **Int32**

### See Also

Reference  
- [FreeImage Class](#)  
- [FreeImageAPI Namespace](#)

Contact/Feedback: [FreeImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
FreeImageBI_JPEG Field

Windows 98/Me, Windows 2000/XP: Indicates that the image is a JPEG image.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public const int BI_JPEG
```

Field Value
Type: Int32

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBLI_PNG Field

Windows 98/Me, Windows 2000/XP: Indicates that the image is a PNG image.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public const int BI_PNG
```

Field Value
Type: Int32

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBI_RGB Field

An uncompressed format.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public const int BI_RGB
```

Field Value  
Type: `Int32`

### See Also

- Reference  
  - FreeImage Class  
  - FreeImageAPI Namespace

Contact/Feedback: [FreeImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
FreeImageBI_RLE4 Field

An RLE format for bitmaps with 4 bpp. The compression format is a 2-byte format consisting of a count byte followed by two word-length color indexes.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public const int BI_RLE4
```

Field Value
Type: Int32

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBI_RLE8 Field

A run-length encoded (RLE) format for bitmaps with 8 bpp. The compression format is a 2-byte format consisting of a count byte followed by a byte containing a color index.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public const int BI_RLE8
```

### Field Value

Type: `Int32`

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageFI_RGBA_ALPHA Field

Number of bytes to shift left within a 4 byte block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI_RGBA_ALPHA
```

### Field Value

Type: **Int32**

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageFI_RGBA_ALPHA_MASK Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public const uint FI_RGBA_ALPHA_MASK
```

Field Value
Type: UInt32

### See Also

Reference
- **FreeImage Class**
- **FreeImageAPI Namespace**

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Field

Number of bits to shift left within a 32 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI_RGBA_ALPHA_SHIFT
```

### Field Value

Type: `Int32`

### See Also

Reference  
- [FreeImage Class](#)  
- [FreeImageAPI Namespace](#)

Contact/Feedback: [FreeImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
FreeImageFI_RGBA_BLUE Field

Number of bytes to shift left within a 4 byte block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI_RGBA_BLUE
```

**Field Value**  
Type: **Int32**

### See Also

- Reference  
  - FreeImage Class  
  - FreeImageAPI Namespace

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FreeImageFI_RGBA_BLUE_MASK Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public const uint FI_RGBA_BLUE_MASK
```

Field Value  
Type: UInt32

### See Also

- Reference  
  - FreImage Class  
  - FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageFI_RGBA_BLUE_SHIFT Field

Number of bits to shift left within a 32 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public const int FI_RGBA_BLUE_SHIFT
```

Field Value  
Type: Int32

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageFI_RGBA_GREEN Field

Number of bytes to shift left within a 4 byte block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI_RGBA_GREEN
```

**Field Value**  
**Type:** Int32

### See Also

- Reference  
  FreeImage Class  
  FreeImageAPI Namespace

**Contact/Feedback:** FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageFI_RGBA_GREEN_MASK Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public const uint FI_RGBA_GREEN_MASK
```

**Field Value**  
Type: UInt32

### See Also

**Reference**  
- FreeImage Class  
- FreeImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageFI_RGBA_GREEN_SHIFT Field

Number of bits to shift left within a 32 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI_RGBA_GREEN_SHIFT
```

Field Value  
Type: Int32

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
Field

Number of bytes to shift left within a 4 byte block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI_RGBA_RED
```

### Field Value

Type: Int32

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageFI_RGBA_RED_MASK Field

Mask indicating the position of the given color.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public const uint FI_RGBA_RED_MASK
```

Field Value
Type: UInt32

See Also

Reference
FreeImage Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImageFI_RGBA_RED_SHIFT Field

Number of bits to shift left within a 32 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ **Syntax**

```csharp
public const int FI_RGBA_RED_SHIFT
```

**Field Value**

Type: **Int32**

⚠️ **See Also**

**Reference**
- FreeImage Class
- FreeImageAPI Namespace

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FreeImageFI_RGBA_RGB_MAS Field

Mask indicating the position of color components of a 32 bit color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public const uint FI_RGBA_RGB_MASK
```

**Field Value**  
**Type:** UInt32

### See Also

**Reference**  
- FreeImage Class  
- FreeImageAPI Namespace

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Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI16_555_BLUE_MASK
```

**Field Value**

Type: Int32

### See Also

Reference
- FreeImage Class
- FreeImageAPI Namespace

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FreeImageFI16_555_BLUE_SHIFT Field

Number of bits to shift left within a 16 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public const int FI16_555_BLUE_SHIFT
```

Field Value  
Type: **Int32**

**See Also**

- Reference:  
  - FreeImage Class  
  - FreeImageAPI Namespace

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FreeImageFI16_555_GREEN_MASK Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public const int FI16_555_GREEN_MASK
```

**Field Value**  
Type: **Int32**

### See Also

**Reference**  
- FreeImage Class  
- FreeImageAPI Namespace

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FreeImageFI16_555_GREEN_SHIFT Field

Number of bits to shift left within a 16 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI16_555_GREEN_SHIFT
```

Field Value

Type: Int32

### See Also

Reference

FreeImage Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageFI16_555_RED_MASK Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI16_555_RED_MASK
```

**Field Value**  
**Type:** Int32

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace

**Contact/Feedback:** FreeImage.NET Homepage  
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FreeImageFI16_555_RED_SHIFT Field

Number of bits to shift left within a 16 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public const int FI16_555_RED_SHIFT
```

Field Value  
Type: Int32

### See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageFI16_565_BLUE_MASK Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI16_565_BLUE_MASK
```

**Field Value**  
**Type:** Int32

### See Also

- Reference  
  - FreeImage Class  
  - FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageFI16_565_BLUE_SHIFT Field

Number of bits to shift left within a 16 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public const int FI16_565_BLUE_SHIFT
```

Field Value  
Type: Int32

### See Also

**Reference**  
FreeImage Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageFI16_565_GREEN_MASK Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI16_565_GREEN_MASK
```

Field Value  
Type: **Int32**

### See Also

Reference  
- **FreeImage Class**  
- **FreeImageAPI Namespace**

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Help improve this Documentation: Join the Project
Field

Number of bits to shift left within a 16 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public const int FI16_565_GREEN_SHIFT
```

Field Value

Type: Int32

### See Also

Reference
- FreeImage Class
- FreeImageAPI Namespace

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FreeImage.NET Class Library Reference

FreeImageFI16_565_RED_MASK

Field

Mask indicating the position of the given color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public const int FI16_565_RED_MASK
```

Field Value

Type: `Int32`

See Also

Reference  
FreeImage Class  
FreeImageAPI Namespace

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FreeImageFI16_565_RED_SHIFT Field

Number of bits to shift left within a 16 bit block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public const int FI16_565_RED_SHIFT
```

Field Value  
Type: Int32

### See Also

- Reference  
  - FreeImage Class  
  - FreeImageAPI Namespace

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FreeImage.NET Class Library Reference

FreeImage
FREE_IMAGE_MDMODEL Field

Array containing all 'FREE_IMAGE_MDMODEL's.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static readonly FREE_IMAGE_MDMODEL[] FREE_IMAGE_MDMODELS
```

**See Also**

Reference
FreeImage Class
FreeImageAPI Namespace

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FreeImage.NET Class Library Reference

FreeImageBitmap Class

Encapsulates a FreeImage-bitmap.

Inheritance Hierarchy

System\Object  System\MarshalByRefObject  FreeImageAPI\FreeImageBitmap

Namespace: FreeImageAPI  Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
[SerializableAttribute]
public class FreeImageBitmap : MarshalByRefObject, ICloneable, IDisposable, IEnumerable, ISerializable
```

The FreeImageBitmap type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FreeImageBitmap</td>
<td>Initializes a new instance of the FreeImageBitmap class.</td>
</tr>
<tr>
<td>FreeImageBitmap(Bitmap)</td>
<td>Initializes a new instance of the FreeImageBitmap</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Image)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Stream)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified stream.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(String)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified file.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(FIBITMAP)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class. For internal use only.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(FreeImageBitmap)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Bitmap, Size)</code></td>
<td>Initializes a new instance of the</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Image, Size)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Int32, Int32)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified size.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Stream, FREE_IMAGE_FORMAT)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified stream in the specified format.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Stream, FREE_IMAGE_LOAD_FLAGS)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified stream with the specified loading flags.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Stream, Boolean)</code></td>
<td>Initializes a new instance of the</td>
</tr>
<tr>
<td>Constructor</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FreeImageBitmap(SerializationInfo, StreamingContext)</td>
<td>Initializes a new instance of the FreeImageBitmap class.</td>
</tr>
<tr>
<td>FreeImageBitmap(String, FREE_IMAGE_FORMAT)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified file in the specified format.</td>
</tr>
<tr>
<td>FreeImageBitmap(String, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified file with the specified loading flags.</td>
</tr>
<tr>
<td>FreeImageBitmap(String, Boolean)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified file.</td>
</tr>
<tr>
<td>FreeImageBitmap(Type, String)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified resource.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>FreeImageBitmap(FreeImageBitmap, Size)</strong></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td><strong>FreeImageBitmap(Bitmap, Int32, Int32)</strong></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td><strong>FreeImageBitmap(Image, Int32, Int32)</strong></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td><strong>FreeImageBitmap(Int32, Int32, FREE_IMAGE_TYPE)</strong></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified size and type. Only non standard bitmaps are supported.</td>
</tr>
<tr>
<td><strong>FreeImageBitmap(Int32, Int32, Graphics)</strong></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified size.</td>
</tr>
</tbody>
</table>
and with the resolution of the specified Graphics object.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>FreeImageBitmap(Int32, Int32, PixelFormat)</code></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified size and format.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)</code></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified stream in the specified format with the specified loading flags.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(String, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)</code></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified file in the specified format with the specified loading flags.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(FreeImageBitmap, Int32, Int32)</code></td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.</td>
</tr>
</tbody>
</table>
**FreeImageBitmap(Int32, Int32, Int32, PixelFormat, Byte)**

Initializes a new instance of the `FreeImageBitmap` class bases on the specified size, pixel format and pixel data.

**FreeImageBitmap(Int32, Int32, Int32, PixelFormat, IntPtr)**

Initializes a new instance of the `FreeImageBitmap` class bases on the specified size, pixel format and pixel data.

**FreeImageBitmap(Int32, Int32, Int32, Int32, FREE_IMAGE_TYPE, Byte)**

Initializes a new instance of the `FreeImageBitmap` class bases on the specified size, pixel format and pixel data.

**FreeImageBitmap(Int32, Int32, Int32, Int32, FREE_IMAGE_TYPE, IntPtr)**

Initializes a new instance of the `FreeImageBitmap` class bases on the specified size, pixel format and pixel data.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BackgroundColor</strong></td>
<td>Gets or sets the background color of this <a href="#">FreeImageBitmap</a>. In case the value is null, the background color is removed.</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Bits</strong></td>
<td>Pointer to the data-bits of this <a href="#">FreeImageBitmap</a>.</td>
</tr>
<tr>
<td><strong>BlueMask</strong></td>
<td>Bit pattern describing the blue color component of a pixel in this <a href="#">FreeImageBitmap</a>.</td>
</tr>
<tr>
<td><strong>ColorDepth</strong></td>
<td>The size of one pixel in the bitmap in bits.</td>
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<tr>
<td><strong>ColorsUsed</strong></td>
<td>Number of palette entries.</td>
</tr>
<tr>
<td><strong>ColorType</strong></td>
<td>Investigates the color type of this <a href="#">FreeImageBitmap</a> by reading the bitmaps pixel bits and analysing them.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Gets or sets the comment of this <a href="#">FreeImageBitmap</a>. Supported formats are JPEG, PNG and GIF.</td>
</tr>
<tr>
<td><strong>DataSize</strong></td>
<td>Size of the bitmap in memory.</td>
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<tr>
<td><strong>Flags</strong></td>
<td>Gets attribute flags for the pixel data of this <a href="#">FreeImageBitmap</a>.</td>
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<tr>
<td><strong>FrameCount</strong></td>
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<td>Property</td>
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<tr>
<td>GreenMask</td>
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</tr>
<tr>
<td>HasBackgroundColor</td>
<td>Gets whether this &lt;br&gt;FreeImageBitmap has a file background color.</td>
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<tr>
<td>HasPalette</td>
<td>Returns whether this &lt;br&gt;FreeImageBitmap has a palette.</td>
</tr>
<tr>
<td>Height</td>
<td>Height of the bitmap in pixel units.</td>
</tr>
<tr>
<td>HorizontalResolution</td>
<td>Gets the horizontal resolution, in pixels per inch, of this &lt;br&gt;FreeImageBitmap.</td>
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<tr>
<td>ICCProfile</td>
<td>Gets the ICCProfile structure of this &lt;br&gt;FreeImageBitmap.</td>
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<tr>
<td>ImageFormat</td>
<td>Gets the format of the original image in case this &lt;br&gt;FreeImageBitmap was loaded from a file or stream.</td>
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<tr>
<td>ImageType</td>
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<tr>
<td>Info</td>
<td>Returns the BITMAPINFO structure of a this &lt;br&gt;FreeImageBitmap.</td>
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<td>InfoHeader</td>
<td>Returns the</td>
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</table>

in this FreeImageBitmap.

GreenMask      Bit pattern describing the green color component of a pixel in this FreeImageBitmap.

HasBackgroundColor Gets whether this FreeImageBitmap has a file background color.

HasPalette Returns whether this FreeImageBitmap has a palette.

Height Height of the bitmap in pixel units.

HorizontalResolution Gets the horizontal resolution, in pixels per inch, of this FreeImageBitmap.

ICCPProfile Gets the ICCProfile structure of this FreeImageBitmap.

ImageFormat Gets the format of the original image in case this FreeImageBitmap was loaded from a file or stream.

ImageType Type of the bitmap.

Info Returns the BITMAPINFO structure of a this FreeImageBitmap.

InfoHeader Returns the
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<td>Gets whether this FreeImageBitmap has been disposed.</td>
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<tr>
<td>IsRGB555</td>
<td>Gets whether the bitmap is RGB 555.</td>
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<tr>
<td>IsRGB565</td>
<td>Gets whether the bitmap is RGB 565.</td>
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<tr>
<td>IsTransparent</td>
<td>Gets or sets whether this FreeImageBitmap is transparent.</td>
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<tr>
<td>Line</td>
<td>Width, in bytes, of this FreeImageBitmap.</td>
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<tr>
<td>Metadata</td>
<td>Gets a new instance of a metadata representing class.</td>
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<tr>
<td>Palette</td>
<td>Returns a structure that represents the palette of a FreeImage bitmap.</td>
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<tr>
<td>PhysicalDimension</td>
<td>Gets the width and height of this FreeImageBitmap.</td>
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<tr>
<td>Pitch</td>
<td>Returns the width of the bitmap in bytes, rounded to the next 32-bit boundary.</td>
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<td>PixelFormat</td>
<td>Gets the pixel format for this FreeImageBitmap.</td>
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<tr>
<td>PropertyIdList</td>
<td>Gets IDs of the property items stored in this FreeImageBitmap.</td>
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<td>Size</td>
<td>Gets the width and height, in pixels, of this FreeImageBitmap.</td>
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<tr>
<td>Stride</td>
<td>Width, in bytes, of this FreeImageBitmap. In case this FreeImageBitmap is top down Stride will be positive, else negative.</td>
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<tr>
<td>Tag</td>
<td>Gets or sets an object that provides additional data about the FreeImageBitmap.</td>
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<tr>
<td>TransparencyCount</td>
<td>Number of transparent colors in a palletised FreeImageBitmap.</td>
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</table>
### TransparencyTable
Get or sets transparency table of this FreeImageBitmap.

### TransparentIndex
Gets or sets the entry used as transparent color in this FreeImageBitmap. Only works for 1-, 4- and 8-bpp.

### UniqueColors
The number of unique colors actually used by the bitmap. This might be different from what ColorsUsed returns, which actually returns the palette size for palletised images. Works for FIT_BITMAP type bitmaps only.

### VerticalResolution
Gets the vertical resolution, in pixels per inch, of this FreeImageBitmap.

### Width
Width of the bitmap in pixel units.

#### Methods

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<td>AdjustContrast</td>
<td>Adjusts the contrast of a 8-, 24- or 32-bit image by a certain amount.</td>
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<td>AdjustCurve</td>
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<tr>
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<tr>
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<td>Applies palette index mapping for one or several indices palletized image.</td>
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<tr>
<td>CloneMetadataFrom(FreeImageBitmap, FREE_IMAGE_METADATA_COPY)</td>
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<td>ConvertColorDepth</td>
<td>Converts this different color depth. Adding the <code>FICD_FORCE_GREYSCALE</code> first performs a conversion to greyscale. This can be done with any target depth.</td>
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<tr>
<td>ConvertType</td>
<td>Converts this FreeImageBitmap to type case source and destination type are the same, the operation fails. A message can be caught using the 'Message' event.</td>
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<td>Copy(Rectangle)</td>
<td>Copies a subpart of this FreeImageBitmap.</td>
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<tr>
<td>Copy(Int32, Int32, Int32, Int32)</td>
<td>Copies a subpart of this FreeImageBitmap.</td>
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<tr>
<td>CreateICCProfile(Byte)</td>
<td>Creates a new ICC-Profile.</td>
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<tr>
<td>CreateICCProfile(Byte, Int32)</td>
<td>Creates a new ICC-Profile.</td>
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<tr>
<td>CreateNewPropertyItem</td>
<td>Returns a new instance of the PropertyItem accessible constructor.</td>
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<tr>
<td>CreateObjRef</td>
<td>Creates an object that contains all the relevant information required to generate a proxy used to communicate with a remote object. (Inherited from CreateView)</td>
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<td>CreateView</td>
<td>Creates a dynamic read/write view into a FreeImage bitmap.</td>
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<td>Dispose</td>
<td>Performs application-defined tasks associated with freeing, resetting unmanaged resources.</td>
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<tr>
<td>Dispose(Boolean)</td>
<td>Performs application-defined tasks associated with freeing, resetting unmanaged resources.</td>
</tr>
<tr>
<td>EnlargeCanvasT(Int32, Int32, Int32, Int32, NullableT)</td>
<td>Enlarges or shrinks this FreeImageBitmap and fills specified background color.</td>
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<tr>
<td>EnlargeCanvasT(Int32, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS)</td>
<td>Enlarges or shrinks this FreeImageBitmap and fills specified background color.</td>
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<tr>
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<td>Determines whether this and the specified instances are the same. (Overrides Equals)</td>
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<td>Method</td>
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<td>Sets a background color to the specified color.</td>
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<td>Sets a background color to the specified color.</td>
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<tr>
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<td>Frees a bitmap handle.</td>
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<td>Creates a specified file.</td>
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<tr>
<td><code>FromHbitmap(IntPtr)</code></td>
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</tr>
<tr>
<td><code>FromHbitmap(IntPtr, IntPtr)</code></td>
<td>Creates a handle to a GDI bitmap and a handle to a GDI palette.</td>
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<tr>
<td><code>FromHicon</code></td>
<td>Creates a Windows handle to an icon.</td>
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<td>Creates a specified Windows resource.</td>
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<tr>
<td><code>FromStream(Stream)</code></td>
<td>Creates a specified data stream.</td>
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<tr>
<td>FromStream(Stream, Boolean)</td>
<td>Creates a specified data stream.</td>
</tr>
<tr>
<td>FromStream(Stream, Boolean, Boolean)</td>
<td>Creates a specified data stream.</td>
</tr>
<tr>
<td>GetAdjustColorsLookupTable</td>
<td>Creates a lookup table to be used with AdjustCurve() which brightness and contrast, correct gamma and invert the image with a single call to AdjustCurve().</td>
</tr>
<tr>
<td>GetAdjustedColorsLookupTable</td>
<td>Adjust Colors Lookup Table.</td>
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<tr>
<td>GetBounds</td>
<td>Gets the bounds of this FreeImageBitmap.</td>
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<tr>
<td>GetChannel</td>
<td>Retrieves the red, green, blue or alpha channel of a 24- or 32-bit image.</td>
</tr>
<tr>
<td>GetColorConvertedInstance</td>
<td>Converts this different color depth initializing instance. color depth, greyscale conversion palette reorder. Adding the FICD_FORCE_GREYSCALE first perform a conversion to greyscale. This can be done with any target color depth. Adding the FICD_REORDER_PALETTE allow the algorithm to reorder the palette. This operation will not be performed to prevent data loss by mistake.</td>
</tr>
<tr>
<td>GetComplexChannel</td>
<td>Retrieves the real part, imaginary part, magnitude or phase of a complex image.</td>
</tr>
<tr>
<td>GetEnlargedInstance(T(Int32, Int32, Int32, Int32, ...)</td>
<td>Enlarges or shrinks this image.</td>
</tr>
<tr>
<td>Method</td>
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<td>----------------------------------------------------------------------</td>
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<tr>
<td>NullableT)</td>
<td>FreeImageBitmap and fill specified background color returning a new instance.</td>
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<tr>
<td>GetEnlargedInstanceT(Int32, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS)</td>
<td>Enlarges or shrinks this FreeImageBitmap and fills specified background color returning a new instance.</td>
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<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this FreeImageBitmap (Overrides GetHbitmap).</td>
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<tr>
<td>GetHbitmap</td>
<td>Creates a GDI bitmap object from this FreeImageBitmap.</td>
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<tr>
<td>GetHbitmap(Color)</td>
<td>Creates a GDI bitmap object from this FreeImageBitmap.</td>
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<tr>
<td>GetHbitmapForDevice</td>
<td>Creates a GDI bitmap object for the specified device.</td>
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<td>GetHicon</td>
<td>Returns the handle to an icon.</td>
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<tr>
<td>GetLifetimeService</td>
<td>Retrieves the current lifetime service object that controls the lifetime policy</td>
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GetPixel

GetPixelFormatSize

GetPropertyItem

GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32)

GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Palette)

GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Int32, Palette)

GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)

GetRotatedInstance(Double)
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<td><code>GetRotatedInstance(Double, Double, Double, Double, Double, Boolean)</code></td>
<td>This method performs a rotation or translation of an 8-bit greyscale, or 32-bit image, using a 3rd order (cubic) B-Spline initializing a new instance.</td>
</tr>
<tr>
<td><code>GetScaledInstance(Size, FREE_IMAGE_FILTER)</code></td>
<td>Rescales this specified size using the initializing a new instance.</td>
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<tr>
<td><code>GetScaledInstance(Int32, Int32, FREE_IMAGE_FILTER)</code></td>
<td>Rescales this specified size using the initializing a new instance.</td>
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<tr>
<td><code>GetScanline(Int32)</code></td>
<td>Returns an instance representing the scanline since FreeImage bitmaps are always bottom-up aligned, keep in mind that scanline 0 is the image.</td>
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<tr>
<td><code>GetScanlineT(Int32)</code></td>
<td>Returns an instance representing the scanline since FreeImage bitmaps are always bottom-up aligned, keep in mind that scanline 0 is the image.</td>
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<td>GetScanline Pointer</td>
<td>Returns a pointer to the specified scanline.</td>
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<tr>
<td>GetScanlines</td>
<td>Returns a list of structures, representing the scanlines of this bitmap.</td>
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<td>GetThumbnailImage(Int32, Boolean)</td>
<td>Returns a thumbnail for this FreeImageBitmap.</td>
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<td>GetThumbnailImage(Int32, Int32, Image)</td>
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<td>Returns a thumbnail for this FreeImageBitmap.</td>
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<td>GetType</td>
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<td>Converts this FreeImageBitmap type. In case source and destination type are the same, the operation fails. An error message can be caught using the 'Message' event.</td>
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<td>GetWICMetadataHandler</td>
<td>Gets a Imaging Component Metadata Handler for this FreeImageBitmap.</td>
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<td>InitializeLifetimeService</td>
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<td>Returns a value that indicates whether the pixel format for this <code>FreeImageBitmap</code> information.</td>
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<td>IsCanonicalPixelFormat</td>
<td>Returns a value that indicates whether the pixel format is 32 bits per pixel.</td>
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<td>IsExtendedPixelFormat</td>
<td>Returns a value that indicates whether the pixel format is 64 bits per pixel.</td>
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<td>JPEGCrop(String, String, Rectangle)</td>
<td>Performs a lossless crop on a JPEG file.</td>
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<tr>
<td>JPEGCrop(String, String, Int32, Int32, Int32, Int32)</td>
<td>Performs a lossless crop on a JPEG file.</td>
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<td>Performs a lossless rotation or flipping on a JPEG file.</td>
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<tr>
<td>LockBits(Rectangle, ImageLockMode, PixelFormat)</td>
<td>This function is not yet implemented.</td>
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<tr>
<td>LockBits(Rectangle, ImageLockMode, PixelFormat, BitmapData)</td>
<td>This function is not yet implemented.</td>
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<td>LookupSVGColor</td>
<td>Converts a SVG color name into a corresponding RGB value.</td>
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<td>Converts an X11 color name into a corresponding RGB value.</td>
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<td>MakeThumbnail</td>
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- MakeTransparent

- MakeTransparent(Color)

- MemberwiseClone

- MemberwiseClone(Boolean)

- MultigridPoissonSolver

- Paste(FreeImageBitmap, Point, Int32)

- Paste(FreeImageBitmap, Int32, Int32, Int32)

- PreMultiplyWithAlpha
Quantize(FREE_IMAGE_QUANTIZE, Int32) Quantizes 24-bit image to 8-bit, creating a new palette.

Quantize(FREE_IMAGE_QUANTIZE, Int32, Palette) Quantizes 24-bit image to 8-bit, creating a new specified palette.

Quantize(FREE_IMAGE_QUANTIZE, Int32, Int32, Palette) Quantizes 24-bit image to 8-bit, creating a new specified palette.

Quantize(FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD) Quantizes 24-bit image to 8-bit, creating a new specified palette.

RemovePropertyItem Removes the specified property item from this image.

Rescale(Size, FREE_IMAGE_FILTER) Rescales this image to the specified size using the specified filter.

Rescale(Int32, Int32, FREE_IMAGE_FILTER) Rescales this image to the specified size using the specified filter.

RescaleRect

Rotate(Double) This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image.
### Rotate(Double, Double, Double, Double, Double, Boolean)

This method performs a rotation and/or translation of an 8-bit greyscale, or 32-bit image, using a 3rd order (cubic) B-Spline.

### RotateT(Double, NullableT)

This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears.

### RotateFlip

This method rotates, flips, or rotates and flips this image.

### Save(String)

Saves this specified file.

### Save(Stream, FREE_IMAGE_FORMAT)

Saves this specified stream in the specified format.

### Save(String, FREE_IMAGE_FORMAT)

Saves this specified file in the specified format.

### Save(Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves this specified stream in the specified format using the specified saving flags.

### Save(String, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves this specified file in the specified format using the specified saving flags.

### SaveAdd

Adds a frame to the file specified in a
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<td>Adds a frame to the file specified in a previous call to the method.</td>
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<td>SaveAdd(String, FreeImageBitmap, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Adds a specified frame to the file specified using the specified parameters.</td>
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<td>Selects the frame specified by the user.</td>
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<td>Function</td>
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<td>SetChannel</td>
<td>Insert a 8-bit dib into a 24-or 32-bit image.</td>
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<tr>
<td>SetComplexChannel</td>
<td>Set the real or imaginary part of a complex image. hold the same width and height.</td>
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<tr>
<td>SetPixel</td>
<td>Sets this pixel in the FreeImageBitmap.</td>
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<td>SetResolution</td>
<td>Sets the resolution for this FreeImageBitmap.</td>
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<td>SwapColors</td>
<td>Swaps two specified colors on a 1-, 4- or 8-bit palletized high color image.</td>
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<tr>
<td>SwapPaletteIndices</td>
<td>Swaps two specified palette indices on a 1-, 4- or 8-bit palletized image.</td>
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<td>TmoDrago03</td>
<td>Converts a High Dynamic Range image to a 24-bit RGB image using a global operator based on logarithmic compression, imitating physiology.</td>
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<td>TmoFattal02</td>
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<tr>
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<td>Determines whether two specified <code>FreeImageBitmap</code> objects have the same value.</td>
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<tr>
<td>(Bitmap to <code>FreeImageBitmap</code>)</td>
<td>Converts a <code>Bitmap</code> instance to a <code>FreeImageBitmap</code> instance.</td>
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<tr>
<td>(<code>FreeImageBitmap</code> to Bitmap)</td>
<td>Converts a <code>FreeImageBitmap</code> instance to a <code>Bitmap</code> instance.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Determines whether two specified <code>FreeImageBitmap</code> objects have different values.</td>
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</table>

### See Also

Reference

*FreeImageAPI Namespace*

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### FreeImageBitmap Constructor

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<td>Initializes a new instance of the FreeImageBitmap class bases on the specified stream.</td>
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<td>FreeImageBitmap(String)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified String.</td>
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</tr>
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<td><code>FreeImageBitmap(FIBITMAP)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class. For internal use only.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(FreeImageBitmap)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Bitmap, Size)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Image, Size)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image with the specified size.</td>
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<tr>
<td><code>FreeImageBitmap(Int32, Int32)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified size.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
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</tr>
<tr>
<td><code>FreeImageBitmap(Stream, FREE_IMAGE_FORMAT)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified stream in the specified format.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Stream, FREE_IMAGE_LOAD_FLAGS)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified stream with the specified loading flags.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Stream, Boolean)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified stream.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(SerializationInfo, StreamingContext)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(String, FREE_IMAGE_FORMAT)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified file in the specified format.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(String, FREE_IMAGE_LOAD_FLAGS)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified file with the specified loading flags.</td>
</tr>
<tr>
<td>Constructor</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>FreeImageBitmap(String, Boolean)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified file.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Type, String)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified resource.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(FreeImageBitmap, Size)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Bitmap, Int32, Int32)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Int32, Int32, FREE_IMAGE_TYPE)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class based on the specified size and type. Only non standard bitmaps are supported.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Int32, Int32, Graphics)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class based on the specified size and with the resolution of the specified <code>Graphics</code> object.</td>
</tr>
<tr>
<td><code>FreeImageBitmap(Int32, Int32, PixelFormat)</code></td>
<td>Initializes a new instance of the <code>FreeImageBitmap</code> class based on the specified size and format.</td>
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</tbody>
</table>
| ```FreeImageBitmap(Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)``` | Initializes a new instance of the `FreeImageBitmap` class based on the specified stream in the specified format with the specified image with the specified size.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
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<tr>
<td>FreeImageBitmap(String, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified file in the specified format with the specified loading flags.</td>
</tr>
<tr>
<td>FreeImageBitmap(FreeImageBitmap, Int32, Int32)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.</td>
</tr>
<tr>
<td>FreeImageBitmap(Int32, Int32, Int32, PixelFormat, Byte)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified size, pixel format and pixel data.</td>
</tr>
<tr>
<td>FreeImageBitmap(Int32, Int32, Int32, PixelFormat, IntPtr)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified size, pixel format and pixel data.</td>
</tr>
<tr>
<td>FreeImageBitmap(Int32, Int32, Int32, Int32, FREE_IMAGE_TYPE, Byte)</td>
<td>Initializes a new instance of the FreeImageBitmap class bases on the specified size, pixel format and pixel data.</td>
</tr>
</tbody>
</table>
FreeImageBitmap(Int32, Int32, Int32, Int32, FREE_IMAGE_TYPE, IntPtr)

Initializes a new instance of the FreeImageBitmap class bases on the specified size, pixel format and pixel data.

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

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FreeImageBitmap Constructor

Initializes a new instance of the FreeImageBitmap class.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
protected FreeImageBitmap()
```

## See Also

**Reference**

- FreeImageBitmap Class
- FreeImageBitmap Overload
- FreeImageAPI Namespace

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FreeImageBitmap Constructor (Bitmap)

Initializes a new instance of the FreeImageBitmap class based on the specified image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FreeImageBitmap(Bitmap original)
```

**Parameters**

- `original`  
  Type: System.Drawing.Bitmap  
  The original to clone from.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>original</code> is a null reference.</td>
</tr>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>

**Remarks**
Although this constructor supports creating images in both formats `Format32bppPArgb` and `Format64bppPArgb`, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreeImageBitmap`.

See Also

Reference
- `FreeImageBitmap Class`
- `FreeImageBitmap Overload`
- `FreeImageAPI Namespace`

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FreeImageBitmap Constructor (Image)

Initializes a new instance of the FreeImageBitmap class bases on the specified image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    Image original
)
```

### Parameters

- `original`
  
  Type: System.DrawingImage  
  The original to clone from.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>

### Remarks

Although this constructor supports creating images in both formats **Format32bppPArgb** and **Format64bppPArgb**, bitmaps created in
these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreeImageBitmap`.

### See Also

Reference
- `FreeImageBitmap Class`
- `FreeImageBitmap Overload`
- `FreeImageAPI Namespace`

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FreeImageBitmap Constructor (Stream)

Initializes a new instance of the FreeImageBitmap class bases on the specified stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    Stream stream
)
```

### Parameters

**stream**  
Type: `System.IOStream`  
Stream to read from.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>stream is a null reference.</td>
</tr>
</tbody>
</table>

### Remarks
You must keep the stream open for the lifetime of the FreeImageBitmap.

See Also

Reference
FreeImageBitmap Class
FreeImageBitmap Overload
FreeImageAPI Namespace

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FreeImageBitmap Constructor (String)

Initializes a new instance of the FreeImageBitmap class based on the specified file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    string filename
)
```

### Parameters

- **filename**
  Type: System.String  
The complete name of the file to load.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><code>filename</code> is a null reference.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td><code>filename</code> does not exist.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelImageBitmap Class
FreelImageBitmap Overload
FreelImageAPI Namespace

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FreeImageBitmap Constructor (FIBITMAP)

Initializes a new instance of the FreeImageBitmap class. For internal use only.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected FreeImageBitmap(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
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</table>

### See Also

Reference
FreeImageBitmap Class
FreeImageBitmap Overload
FreeImageAPI Namespace

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FreeImageBitmap Constructor (FreeImageBitmap)

Initializes a new instance of the FreeImageBitmap class bases on the specified image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FreeImageBitmap(
    FreeImageBitmap original
)
```

**Parameters**

*original*

Type: FreeImageAPI!FreeImageBitmap  
The original to clone from.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><em>original</em> is a null reference.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelImageBitmap Class
FreelImageBitmap Overload
FreelImageAPI Namespace

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FreeImageBitmap Constructor (Bitmap, Size)

Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    Bitmap original,
    Size newSize
)
```

### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>original</td>
<td>System.Drawing.Bitmap</td>
<td>The original to clone from.</td>
</tr>
<tr>
<td>newSize</td>
<td>System.Drawing.Size</td>
<td>The Size structure that represent the size of the new FreeImageBitmap.</td>
</tr>
</tbody>
</table>

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
ArgumentNullException
original is a null reference.

ArgumentOutOfRangeException
newSize.Width or newSize.Height are less or equal zero.

Remarks
Although this constructor supports creating images in both formats Format32bppPArgb and Format64bppPArgb, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in FreelImageBitmap.

See Also
Reference
FreelImageBitmap Class
FreelImageBitmap Overload
FreelImageAPI Namespace

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FreeImageBitmap Constructor (Image, Size)

Initializes a new instance of the FreeImageBitmap class based on the specified image with the specified size.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public FreeImageBitmap(
    Image original,
    Size newSize
)
```

### Parameters

- **original**
  - Type: System.DrawingImage
  - The original to clone from.

- **newSize**
  - Type: System.DrawingSize
  - The Size structure that represents the size of the new FreeImageBitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
**Remarks**

Although this constructor supports creating images in both formats `Format32bppPArgb` and `Format64bppPArgb`, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreeImageBitmap`.

**See Also**

Reference
- `FreeImageBitmap Class`
- `FreeImageBitmap Overload`
- `FreeImageAPI Namespace`

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FreeImageBitmap Constructor (Int32, Int32)

Initializes a new instance of the FreeImageBitmap class based on the specified size.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    int width,
    int height
)
```

### Parameters

- **width**
  - Type: `SystemInt32`
  - The width, in pixels, of the new `FreeImageBitmap`.

- **height**
  - Type: `SystemInt32`
  - The height, in pixels, of the new `FreeImageBitmap`.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreeImageBitmap Class
FreeImageBitmap Overload
FreeImageAPI Namespace

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FreeImageBitmap

Constructor (Stream, FREE_IMAGE_FORMAT)

Initializes a new instance of the FreeImageBitmap class bases on the specified stream in the specified format.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FreeImageBitmap(
    Stream stream,
    FREE_IMAGE_FORMAT format
)
```

**Parameters**

- `stream`
  - Type: System.IOStream
  - Stream to read from.

- `format`
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - Format of the image.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
ArgumentNullException

stream is a null reference.

Remarks

You must keep the stream open for the lifetime of the FreeImageBitmap.

See Also

Reference

FreeImageBitmap Class
FreeImageBitmap Overload
FreeImageAPI Namespace

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FreeImageBitmap Constructor
(Stream,
FREE_IMAGE_LOAD_FLAGS)

Initializes a new instance of the FreeImageBitmap class bases on the specified stream with the specified loading flags.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public FreeImageBitmap(
    Stream stream,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

### Parameters

**stream**
- Type: `System.IOStream`
- Stream to read from.

**flags**
- Type: `FreeImageAPIFREE_IMAGE_LOAD_FLAGS`
- Flags to enable or disable plugin-features.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
ArgumentNullException

stream is a null reference.

Remarks

You must keep the stream open for the lifetime of the Freelite Bitmap.

See Also

Reference
Freelite Bitmap Class
Freelite Bitmap Overload
Freelite API Namespace

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FreeImageNET Class Library Reference

FreeImageBitmap Constructor (Stream, Boolean)

Initializes a new instance of the FreeImageBitmap class bases on the specified stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    Stream stream,
    bool useIcm
)
```

### Parameters

- **stream**
  - Type: System.IO.Stream
  - Stream to read from.

- **useIcm**
  - Type: System.Boolean
  - Ignored.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
ArgumentNullException  

stream is a null reference.

Remarks

You must keep the stream open for the lifetime of the FreeImageBitmap.

See Also

Reference
FreeImageBitmap Class
FreeImageBitmap Overload
FreeImageAPI Namespace

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FreeImageBitmap Constructor (SerializationInfo, StreamingContext)

Initializes a new instance of the FreeImageBitmap class.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FreeImageBitmap(
    SerializationInfo info,
    StreamingContext context
)
```

### Parameters

- **info**
  - Type: System.Runtime.Serialization.SerializationInfo  

- **context**
  - Type: System.Runtime.Serialization.StreamingContext  

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exception | The operation failed.
--- | ---
SerializationException | The operation failed.

See Also

Reference
- FreelImageBitmap Class
- FreelImageBitmap Overload
- FreelImageAPI Namespace

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FreeImageBitmap Constructor (String, FREE_IMAGE_FORMAT)

Initializes a new instance of the FreeImageBitmap class bases on the specified file in the specified format.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FreeImageBitmap(
    string filename,
    FREE_IMAGE_FORMAT format
)
```

Parameters

- **filename**
  - Type: System.String
  - The complete name of the file to load.

- **format**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - Format of the image.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>Exception Type</td>
<td>Message</td>
</tr>
<tr>
<td>----------------</td>
<td>---------</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><code>filename</code> is a null reference.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td><code>filename</code> does not exist.</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
- [FreeImageBitmap Class](#)
- [FreeImageBitmap Overload](#)
- [FreeImageAPI Namespace](#)

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FreeImageBitmap Constructor

(String,
FREE_IMAGE_LOAD_FLAGS)

Initializes a new instance of the FreeImageBitmap class bases on the specified file with the specified loading flags.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FreeImageBitmap(
    string filename,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

Parameters

- `filename`
  Type: System.String
  The complete name of the file to load.

- `flags`
  Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
  Flags to enable or disable plugin-features.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
**ArgumentNullException**
filename is a null reference.

**FileNotFoundException**
filename does not exist.

### See Also

Reference
- FreeImageBitmap Class
- FreeImageBitmap Overload
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap
Constructor (String, Boolean)

Initializes a new instance of the FreeImageBitmap class bases on the specified file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FreeImageBitmap(  
    string filename,  
    bool useIcm  
)
```

**Parameters**

- **filename**
  - Type: System.String
  - The complete name of the file to load.

- **useIcm**
  - Type: System.Boolean
  - Ignored.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><code>filename</code> is a null reference.</td>
</tr>
</tbody>
</table>
FileNotFoundException

filename does not exist.

See Also

Reference
FreelmageBitmap Class
FreelmageBitmap Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageBitmap Constructor (Type, String)

Initializes a new instance of the FreeImageBitmap class bases on the specified resource.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(  
    Type type,  
    string resource
)
```

### Parameters

- **type**  
  Type: `SystemType`  
  The class used to extract the resource.
- **resource**  
  Type: `SystemString`  
  The name of the resource.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
</tbody>
</table>
FreeImageBitmap Constructor
(FreeImageBitmap, Size)

Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    FreeImageBitmap original,
    Size newSize
)
```

### Parameters

- **original**
  - Type: FreeImageAPIFreeImageBitmap
  - The original to clone from.

- **newSize**
  - Type: System.DrawingSize
  - The Size structure that represent the size of the new FreeImageBitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

FreeImage.NET Class Library Reference
<table>
<thead>
<tr>
<th>Exception</th>
<th>The operation failed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>original is a null reference.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>newSize.Width or newSize.Height are less or equal zero.</td>
</tr>
</tbody>
</table>

## See Also

### Reference
- FreelImageBitmap Class
- FreelImageBitmap Overload
- FreelImageAPI Namespace

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FreeImageBitmap
Constructor (Bitmap, Int32, Int32)

Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FreeImageBitmap(
    Bitmap original,
    int width,
    int height
)
```

**Parameters**

- **original**  
  Type: System.Drawing.Bitmap  
  The original to clone from.

- **width**  
  Type: System.Int32  
  The width, in pixels, of the new FreeImageBitmap.

- **height**  
  Type: System.Int32  
  The height, in pixels, of the new FreeImageBitmap.
## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td>original is a null reference.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>width or height are less or equal zero.</td>
</tr>
</tbody>
</table>

## Remarks

Although this constructor supports creating images in both formats `Format32bppPArgb` and `Format64bppPArgb`, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreeImageBitmap`.

## See Also

Reference
- `FreeImageBitmap Class`
- `FreeImageBitmap Overload`
- `FreeImageAPI Namespace`

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FreeImageBitmap Constructor (Image, Int32, Int32)

Initializes a new instance of the FreeImageBitmap class bases on the specified image with the specified size.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    Image original,
    int width,
    int height
)
```

### Parameters

- **original**
  - Type: System.DrawingImage
  - The original to clone from.

- **width**
  - Type: System.Int32
  - The width, in pixels, of the new FreeImageBitmap.

- **height**
  - Type: System.Int32
  - The height, in pixels, of the new FreeImageBitmap.
## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td>original is a null reference.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>width or height are less or equal zero.</td>
</tr>
</tbody>
</table>

## Remarks

Although this constructor supports creating images in both formats `Format32bppPArgb` and `Format64bppPArgb`, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreeImageBitmap`.

## See Also

- Reference
  - `FreeImageBitmap` Class
  - `FreeImageBitmap` Overload
  - `FreeImageAPI` Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://freeimageapi.net)
Help improve this Documentation: [Join the Project](https://github.com/FreeImageNet/FreeImage.NET)
FreeImageBitmap

Constructor (Int32, Int32, FREE_IMAGE_TYPE)

Initializes a new instance of the FreeImageBitmap class bases on the specified size and type. Only non standard bitmaps are supported.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public FreeImageBitmap(
    int width,
    int height,
    FREE_IMAGE_TYPE type
)
```

Parameters

width
Type: System.Int32
The width, in pixels, of the new FreeImageBitmap.

height
Type: System.Int32
The height, in pixels, of the new FreeImageBitmap.

type
Type: FreeImageAPIFREE_IMAGE_TYPE
The type of the bitmap.
Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td><em>type</em> is FIT_BITMAP or FIT_UNKNOWN.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><em>type</em> is invalid.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td><em>width</em> or <em>height</em> are less or equal zero.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreelImageBitmap Class
- FreelImage(Bitmap Overload
- FreelImageAPI Namespace

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FreeImageBitmap Constructor (Int32, Int32, Graphics)

Initializes a new instance of the FreeImageBitmap class based on the specified size and with the resolution of the specified Graphics object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FreeImageBitmap(
    int width,
    int height,
    Graphics g
)
```

**Parameters**

- **width**  
  Type: SystemInt32  
  The width, in pixels, of the new FreeImageBitmap.

- **height**  
  Type: SystemInt32  
  The height, in pixels, of the new FreeImageBitmap.

- **g**  
  Type: System.Drawing.Graphics  
  The Graphics object that specifies the resolution for the new FreeImageBitmap.
## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>$g$ is a null reference.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FreelyBitmap Class
- FreelyBitmap Overload
- FreelyAPI Namespace

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FreeImageBitmap
Constructor (Int32, Int32, PixelFormat)

Initializes a new instance of the FreeImageBitmap class bases on the specified size and format.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    int width,
    int height,
    PixelFormat format
)
```

### Parameters

- **width**
  - Type: System.Int32  
  - The width, in pixels, of the new FreeImageBitmap.

- **height**
  - Type: System.Int32  
  - The height, in pixels, of the new FreeImageBitmap.

- **format**
  - Type: System.Drawing.Imaging.PixelFormat  
  - The PixelFormat enumeration for the new FreeImageBitmap.
## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>format is invalid.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>width or height are less or equal zero.</td>
</tr>
</tbody>
</table>

### Remarks

Although this constructor supports creating images in both formats `Format32bppPArgb` and `Format64bppPArgb`, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreeImageBitmap`.

### See Also

Reference
- `FreeImageBitmap Class`
- `FreeImageBitmap Overload`
- `FreeImageAPI Namespace`
FreeImageBitmap Constructor
(Stream,
FREE_IMAGE_FORMAT,
FREE_IMAGE_LOAD_FLAGS)

Initializes a new instance of the FreeImageBitmap class bases on the specified stream in the specified format with the specified loading flags.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FreeImageBitmap(
    Stream stream,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

Parameters

**stream**
Type: System.IOStream
Stream to read from.

**format**
Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image.

**flags**
Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
Flags to enable or disable plugin-features.
Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td>stream is a null reference.</td>
</tr>
</tbody>
</table>

Remarks

You must keep the stream open for the lifetime of the FreeImageBitmap.

See Also

Reference
- FreeImageBitmap Class
- FreeImageBitmap Overload
- FreeImageAPI Namespace

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Help improve this Documentation: [Join the Project](https://github.com/FreelImageNET/FreelImage.NET)
FreeImageBitmap Constructor
(String,
FREE_IMAGE_FORMAT,
FREE_IMAGE_LOAD_FLAGS)

Initializes a new instance of the FreeImageBitmap class bases on the specified file in the specified format with the specified loading flags.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

#### Syntax

[C#]
```
public FreeImageBitmap(
    string filename,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS flags
)
```

#### Parameters

- **filename**
  - Type: System.String
  - The complete name of the file to load.

- **format**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - Format of the image.

- **flags**
  - Type: FreeImageAPIFREE_IMAGE_LOAD_FLAGS
  - Flags to enable or disable plugin-features.
## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><code>filename</code> is a null reference.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td><code>filename</code> does not exist.</td>
</tr>
</tbody>
</table>

## See Also

### Reference
- FreelImageBitmap Class
- FreelImageBitmap Overload
- FreelImageAPI Namespace

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FreeImageBitmap Constructor
(FreeImageBitmap, Int32, Int32)

Initializes a new instance of the FreeImageBitmap class based on the specified image with the specified size.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap(
    FreeImageBitmap original,
    int width,
    int height
)
```

### Parameters

- **original**  
  Type: FreeImageAPI\FreeImageBitmap  
  The original to clone from.

- **width**  
  Type: System\Int32  
  Width of the new FreeImageBitmap.

- **height**  
  Type: System\Int32  
  Height of the new FreeImageBitmap.
Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td>original is a null reference.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>width or height are less or equal zero.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreelImageBitmap Class
- FreelImageBitmap Overload
- FreelImageAPI Namespace

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FreeImageBitmap

Constructor (Int32, Int32, Int32, PixelFormat, Byte)

Initializes a new instance of the FreeImageBitmap class bases on the specified size, pixel format and pixel data.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public FreeImageBitmap(
    int width,
    int height,
    int stride,
    PixelFormat format,
    byte[] bits
)
```

### Parameters

- **width**
  
  Type: **SystemInt32**
  
  The width, in pixels, of the new FreeImageBitmap.

- **height**
  
  Type: **SystemInt32**
  
  The height, in pixels, of the new FreeImageBitmap.

- **stride**
  
  Type: **SystemInt32**
  
  Integer that specifies the byte offset between the beginning of
one scan line and the next. This is usually (but not necessarily) the number of bytes in the pixel format (for example, 2 for 16 bits per pixel) multiplied by the width of the bitmap. The value passed to this parameter must be a multiple of four.

**format**
- Type: `System.Drawing.Imaging.PixelFormat`
- The `PixelFormat` enumeration for the new `FreeImageBitmap`.

**bits**
- Type: `System.Byte`
- Array of bytes containing the bitmap data.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><code>format</code> is invalid.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td><code>width</code> or <code>height</code> are less or equal zero.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><code>bits</code> is null</td>
</tr>
</tbody>
</table>

### Remarks

Although this constructor supports creating images in both formats `Format32bppPArgb` and `Format64bppPArgb`, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreeImageBitmap`.

### See Also

- Reference
  - `FreeImageBitmap Class`
  - `FreeImageBitmap Overload`
  - `FreeImageAPI Namespace`
FreeImageBitmap Constructor (Int32, Int32, Int32, PixelFormat, IntPtr)

Initializes a new instance of the FreeImageBitmap class bases on the specified size, pixel format and pixel data.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FreeImageBitmap(
    int width,
    int height,
    int stride,
    PixelFormat format,
    IntPtr scan0
)
```

### Parameters

- **width**
  - Type: SystemInt32
  - The width, in pixels, of the new FreeImageBitmap.

- **height**
  - Type: SystemInt32
  - The height, in pixels, of the new FreeImageBitmap.

- **stride**
  - Type: SystemInt32
  - Integer that specifies the byte offset between the beginning of
one scan line and the next. This is usually (but not necessarily) the number of bytes in the pixel format (for example, 2 for 16 bits per pixel) multiplied by the width of the bitmap. The value passed to this parameter must be a multiple of four.

*format*
Type: `System.Drawing.Imaging.PixelFormat`
The PixelFormat enumeration for the new `FreelImageBitmap`.

*scan0*
Type: `System.IntPtr`
Pointer to an array of bytes that contains the pixel data.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><em>format</em> is invalid.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td><em>width</em> or <em>height</em> are less or equal zero.</td>
</tr>
</tbody>
</table>

### Remarks

Although this constructor supports creating images in both formats `Format32bppPArgb` and `Format64bppPArgb`, bitmaps created in these formats are treated like any normal 32-bit RGBA and 64-bit RGBA images respectively. Currently, there is no support for automatic premultiplying images in `FreelImageBitmap`.

### See Also

Reference
- `FreelImageBitmap Class`
- `FreelImageBitmap Overload`
- `FreelImageAPI Namespace`

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FreeImageBitmap Constructor (Int32, Int32, Int32, Int32, FREE_IMAGE_TYPE, Byte)

Initializes a new instance of the FreeImageBitmap class based on the specified size, pixel format and pixel data.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public FreeImageBitmap(
    int width,
    int height,
    int stride,
    int bpp,
    FREE_IMAGE_TYPE type,
    byte[] bits
)
```

Parameters

- **width**
  - Type: SystemInt32
  - The width, in pixels, of the new FreeImageBitmap.

- **height**
  - Type: SystemInt32
  - The height, in pixels, of the new FreeImageBitmap.
**stride**
Type: `SystemInt32`
Integer that specifies the byte offset between the beginning of one scan line and the next. This is usually (but not necessarily) the number of bytes in the pixel format (for example, 2 for 16 bits per pixel) multiplied by the width of the bitmap. The value passed to this parameter must be a multiple of four.

**bpp**
Type: `SystemInt32`
The color depth of the new `FreeImageBitmap`

**type**
Type: `FreeImageAPIFREE_IMAGE_TYPE`
The type for the new `FreeImageBitmap`.

**bits**
Type: `SystemByte`
Array of bytes containing the bitmap data.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
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</tr>
<tr>
<td>ArgumentException</td>
<td><code>format</code> is invalid.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td><code>width</code> or <code>height</code> are less or equal zero.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td><code>bits</code> is null</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- `FreeImageBitmap Class`
- `FreeImageBitmap Overload`
- `FreeImageAPI Namespace`

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FreeImageBitmap Constructor (Int32, Int32, Int32, Int32, FREE_IMAGE_TYPE, IntPtr)

Initializes a new instance of the FreeImageBitmap class bases on the specified size, pixel format and pixel data.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FreeImageBitmap(
    int width,
    int height,
    int stride,
    int bpp,
    FREE_IMAGE_TYPE type,
    IntPtr scan0
)
```

Parameters

width
Type: SystemInt32
The width, in pixels, of the new FreeImageBitmap.

height
Type: SystemInt32
The height, in pixels, of the new FreeImageBitmap.
**stride**
Type: `SystemInt32`  
Integer that specifies the byte offset between the beginning of one scan line and the next. This is usually (but not necessarily) the number of bytes in the pixel format (for example, 2 for 16 bits per pixel) multiplied by the width of the bitmap. The value passed to this parameter must be a multiple of four.

**bpp**
Type: `SystemInt32`  
The color depth of the new `FreeImageBitmap`

**type**
Type: `FreeImageAPIFREE_IMAGE_TYPE`  
The type for the new `FreeImageBitmap`.

**scan0**
Type: `SystemIntPtr`  
Pointer to an array of bytes that contains the pixel data.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td><code>ArgumentException</code></td>
<td><code>format</code> is invalid.</td>
</tr>
<tr>
<td><code>ArgumentOutOfRangeException</code></td>
<td><code>width</code> or <code>height</code> are less or equal zero.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**

- `FreeImageBitmap Class`
- `FreeImageBitmap Overload`
- `FreeImageAPI Namespace`

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FreeImageBitmap Properties

The **FreeImageBitmap** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BackgroundColor</strong></td>
<td>Gets or sets the background color of this <strong>FreeImageBitmap</strong>. In case the value is null, the background color is removed.</td>
</tr>
<tr>
<td><strong>Bits</strong></td>
<td>Pointer to the data-bits of this <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td><strong>BlueMask</strong></td>
<td>Bit pattern describing the blue color component of a pixel in this <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td><strong>ColorDepth</strong></td>
<td>The size of one pixel in the bitmap in bits.</td>
</tr>
<tr>
<td><strong>ColorsUsed</strong></td>
<td>Number of palette entries.</td>
</tr>
<tr>
<td><strong>ColorType</strong></td>
<td>Investigates the color type of this <strong>FreeImageBitmap</strong> by reading the bitmaps pixel bits and analysing them.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Gets or sets the comment of this <strong>FreeImageBitmap</strong>.</td>
</tr>
</tbody>
</table>
Supported formats are JPEG, PNG and GIF.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DataSize</td>
<td>Size of the bitmap in memory.</td>
</tr>
<tr>
<td>Flags</td>
<td>Gets attribute flags for the pixel data of this FreeImageBitmap.</td>
</tr>
<tr>
<td>FrameCount</td>
<td>Gets the number of frames in this FreeImageBitmap.</td>
</tr>
<tr>
<td>GreenMask</td>
<td>Bit pattern describing the green color component of a pixel in this FreeImageBitmap.</td>
</tr>
<tr>
<td>HasBackgroundColor</td>
<td>Gets whether this FreeImageBitmap has a file background color.</td>
</tr>
<tr>
<td>HasPalette</td>
<td>Returns whether this FreeImageBitmap has a palette.</td>
</tr>
<tr>
<td>Height</td>
<td>Height of the bitmap in pixel units.</td>
</tr>
<tr>
<td>HorizontalResolution</td>
<td>Gets the horizontal resolution, in pixels per inch, of this FreeImageBitmap.</td>
</tr>
<tr>
<td>ICCProfile</td>
<td>Gets the ICCProfile structure of this FreeImageBitmap.</td>
</tr>
<tr>
<td>ImageFormat</td>
<td>Gets the format of the original image in case this FreeImageBitmap.</td>
</tr>
</tbody>
</table>
**FreeImageBitmap** was loaded from a file or stream.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
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<tbody>
<tr>
<td>ImageType</td>
<td>Type of the bitmap.</td>
</tr>
<tr>
<td>Info</td>
<td>Returns the <strong>BITMAPINFO</strong> structure of this <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td>InfoHeader</td>
<td>Returns the <strong>BITMAPINFOHEADER</strong> structure of this <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td>IsDisposed</td>
<td>Gets whether this <strong>FreeImageBitmap</strong> has been disposed.</td>
</tr>
<tr>
<td>IsRGB555</td>
<td>Gets whether the bitmap is RGB 555.</td>
</tr>
<tr>
<td>IsRGB565</td>
<td>Gets whether the bitmap is RGB 565.</td>
</tr>
<tr>
<td>IsTransparent</td>
<td>Gets or sets whether this <strong>FreeImageBitmap</strong> is transparent.</td>
</tr>
<tr>
<td>Line</td>
<td>Width, in bytes, of this <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td>Metadata</td>
<td>Gets a new instance of a metadata representing class.</td>
</tr>
<tr>
<td>Palette</td>
<td>Returns a structure that represents the palette of a <strong>FreeImage</strong> bitmap.</td>
</tr>
<tr>
<td>Property</td>
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</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PhysicalDimension</td>
<td>Gets the width and height of this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>Pitch</td>
<td>Returns the width of the bitmap in bytes, rounded to the next 32-bit boundary.</td>
</tr>
<tr>
<td>PixelFormat</td>
<td>Gets the pixel format for this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>PropertyIdList</td>
<td>Gets IDs of the property items stored in this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>PropertyItems</td>
<td>Gets all the property items (pieces of metadata) stored in this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>RawFormat</td>
<td>Gets the format of this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>RedMask</td>
<td>Bit pattern describing the red color component of a pixel in this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>Scan0</td>
<td>Pointer to the scanline of the top most pixel row of this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>Size</td>
<td>Gets the width and height, in pixels, of this <code>FreeImageBitmap</code>.</td>
</tr>
<tr>
<td>Stride</td>
<td>Width, in bytes, of this <code>FreeImageBitmap</code>. In case this <code>FreeImageBitmap</code> is</td>
</tr>
</tbody>
</table>
top down **Stride** will be positive, else negative.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Tag</strong></td>
<td>Gets or sets an object that provides additional data about the <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td><strong>TransparencyCount</strong></td>
<td>Number of transparent colors in a palletised <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td><strong>TransparencyTable</strong></td>
<td>Get or sets transparency table of this <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td><strong>TransparentIndex</strong></td>
<td>Gets or sets the entry used as transparent color in this <strong>FreeImageBitmap</strong>. Only works for 1-, 4- and 8-bpp.</td>
</tr>
<tr>
<td><strong>UniqueColors</strong></td>
<td>The number of unique colors actually used by the bitmap. This might be different from what <strong>ColorsUsed</strong> returns, which actually returns the palette size for palletised images. Works for FIT_BITMAP type bitmaps only.</td>
</tr>
<tr>
<td><strong>VerticalResolution</strong></td>
<td>Gets the vertical resolution, in pixels per inch, of this <strong>FreeImageBitmap</strong>.</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>Width of the bitmap in pixel units.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapBackgroundColor Property

Gets or sets the background color of this FreeImageBitmap. In case the value is null, the background color is removed.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<Color> BackgroundColor { get; set; }
```

### Property Value

Type: NullableColor

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidOperationException</td>
<td>Get: There is no background color available.</td>
</tr>
<tr>
<td>Exception</td>
<td>Set: Setting background color failed.</td>
</tr>
</tbody>
</table>

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace
FreeImageBitmap Bits Property

Pointer to the data-bits of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public IntPtr Bits { get; }
```

**Property Value**

Type: IntPtr

### See Also

- Reference
  - FreeImageBitmap Class
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitMap.BlueMask Property

Bit pattern describing the blue color component of a pixel in this FreeImageBitMap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public uint BlueMask { get; }
```

### Property Value

Type: UInt32

### See Also

- Reference
  - FreeImageBitMap Class
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmap ColorDepth Property

The size of one pixel in the bitmap in bits.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int ColorDepth { get; }
```

### Property Value

Type: **Int32**

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitmapColorsUsed Property

Number of palette entries.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int ColorsUsed { get; }
```

### Property Value

Type: `Int32`

### See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapColorType Property

Investigates the color type of this `FreeImageBitmap` by reading the bitmaps pixel bits and analysing them.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```csharp
public FREE_IMAGE_COLOR_TYPE ColorType { get; }
```

**Property Value**
Type: `FREE_IMAGE_COLOR_TYPE`

▲ See Also

**Reference**
- `FreeImageBitmap` Class
- `FreeImageAPI` Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmap Comment Property

Gets or sets the comment of this FreeImageBitmap. Supported formats are JPEG, PNG and GIF.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

★ Syntax

```csharp
public string Comment { get; set; }
```

Property Value  
Type: String

★ See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapDataSize Property

Size of the bitmap in memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public int DataSize { get; }
```

**Property Value**

Type: **Int32**

### See Also

**Reference**
- FreeImageBitmap Class
- FreeImageAPI Namespace

**Contact/Feedback:** FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmapFlags Property

Gets attribute flags for the pixel data of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public int Flags { get; }
```

### Property Value

Type: Int32

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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FreeImageBitmap FrameCount Property

Gets the number of frames in this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int FrameCount { get; }
```

**Property Value**
Type: Int32

**See Also**

Reference  
- FreeImageBitmap Class  
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitmap GreenMask Property

Bit pattern describing the green color component of a pixel in this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public uint GreenMask { get; }
```

**Property Value**  
Type: UInt32

### See Also

**Reference**  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmap HasBackground Property

Gets whether this FreeImageBitmap has a file background color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public bool HasBackgroundColor { get; }
```

**Property Value**  
Type: Boolean

**See Also**

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitmap HasPalette Property

Returns whether this FreeImageBitmap has a palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public bool HasPalette { get; }
```

### Property Value

Type: **Boolean**

### See Also

**Reference**  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmapHeight Property

Height of the bitmap in pixel units.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public int Height { get; }
```

**Property Value**

Type: **Int32**

### See Also

**Reference**

FreeImageBitmap Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmap.HorizontalResolution Property

Gets the horizontal resolution, in pixels per inch, of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```
public float HorizontalResolution { get; }
```

**Property Value**

Type: Single

**See Also**

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapICCProfile Property

Gets the ICCProfile structure of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FIICCPROFILE ICCProfile { get; }
```

### Property Value

Type: FIICCPROFILE

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitmap ImageFormat Property

Gets the format of the original image in case this FreeImageBitmap was loaded from a file or stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FREE_IMAGE_FORMAT ImageFormat { get; }
```

**Property Value**  
Type: **FREE_IMAGE_FORMAT**

### See Also

**Reference**  
- FreeImageBitmap Class  
- FreeImageAPI Namespace

Contact/Feedback: [FreeImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
FreeImageBitmapImageType

Property

Type of the bitmap.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
C#
public FREE_IMAGE_TYPE ImageType { get; }
```

### Property Value

Type: **FREE_IMAGE_TYPE**

### See Also

Reference

- FreeImageBitmap Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapInfo Property

Returns the BITMAPINFO structure of a this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public BITMAPINFO Info { get; }
```

### Property Value

Type: BITMAPINFO

### See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmapInfoHeader Property

Returns the BITMAPINFOHEADER structure of this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public BITMAPINFOHEADER InfoHeader { get; }
```

Property Value
Type: BITMAPINFOHEADER

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap.IsDisposed Property

Gets whether this FreeImageBitmap has been disposed.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsDisposed {
    get;
}
```

**Property Value**

Type: Boolean

### See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmap.IsRGB555 Property

Gets whether the bitmap is RGB 555.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsRGB555 { get; }
```

### Property Value

Type: Boolean

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmap.IsRGB565 Property

Gets whether the bitmap is RGB 565.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool IsRGB565 { get; }
```

**Property Value**

Type: Boolean

**See Also**

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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FreeImageBitmap.IsTransparent Property

Gets or sets whether this FreeImageBitmap is transparent.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool IsTransparent { get; set; }
```

**Property Value**

Type: Boolean

**See Also**

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapLine Property

Width, in bytes, of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int Line { get; }
```

**Property Value**

Type: Int32

**See Also**

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitmapMetadata Property

Gets a new instance of a metadata representing class.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public ImageMetadata Metadata { get; }
```

### Property Value

Type: ImageMetadata

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitmapPalette Property

Returns a structure that represents the palette of a FreeImage bitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public Palette Palette { get; }
```

Property Value
Type: Palette

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidOperationException</td>
<td>HasPalette is false.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImageBitmapPhysicalDimension Property

Gets the width and height of this FreeImageBitmap.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public SizeF PhysicalDimension { get; }
```

### Property Value

<table>
<thead>
<tr>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SizeF</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FreeImageBitmap Class
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmapPitch Property

Returns the width of the bitmap in bytes, rounded to the next 32-bit boundary.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int Pitch { get; }
```

**Property Value**  
Type: Int32

**See Also**

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace
FreeImageBitmapPixelFormat Property

Gets the pixel format for this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public PixelFormat PixelFormat { get; }
```

**Property Value**  
Type: **PixelFormat**

### See Also

- Reference  
  FreeImageBitmap Class  
  FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmap.PropertyIdList Property

Gets IDs of the property items stored in this FreeImageBitmap.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public int[] PropertyIdList { get; }
```

Property Value

Type: Int32

See Also

Reference

FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmap.PropertyItems Property

Gets all the property items (pieces of metadata) stored in this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public PropertyItem[] PropertyItems { get; }
```

Property Value
Type: PropertyItem

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap RawFormat Property

Gets the format of this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public ImageFormat RawFormat { get; }
```

Property Value
Type: ImageFormat

See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap RedMask Property

Bit pattern describing the red color component of a pixel in this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```c#
public uint RedMask { get; }
```

Property Value
Type: UInt32

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapScan0 Property

Pointer to the scanline of the top most pixel row of this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public IntPtr Scan0 { get; }
```

Property Value

Type: IntPtr

See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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FreeImageBitmapSize Property

Gets the width and height, in pixels, of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Size Size { get; }
```

### Property Value

Type: Size

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
**FreeImageBitmapStride Property**

Width, in bytes, of this `FreeImageBitmap`. In case this `FreeImageBitmap` is top down `Stride` will be positive, else negative.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int Stride { get; }
```

**Property Value**

Type: Int32

**See Also**

Reference  
- FreeImageBitmap Class  
- FreeImageAPI Namespace

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FreeImageBitmapTag Property

Gets or sets an object that provides additional data about the FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Object Tag { get; set; }
```

### Property Value

Type: **Object**

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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FreeImageBitmap.TransparencyCount Property

Number of transparent colors in a palletised FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int TransparencyCount { get; }
```

### Property Value

Type: Int32

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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FreeImageBitmap.TransparencyTable Property

Get or sets transparency table of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] TransparencyTable { get; set; }
```

### Property Value

Type: **Byte**

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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FreeImageBitmap.TransparentIndex Property

Gets or sets the entry used as transparent color in this FreeImageBitmap. Only works for 1-, 4- and 8-bpp.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public int TransparentIndex { get; set; }
```

Property Value
Type: Int32

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

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FreeImageBitmapUniqueColors Property

The number of unique colors actually used by the bitmap. This might be different from what ColorsUsed returns, which actually returns the palette size for palletised images. Works for FIT_BITMAP type bitmaps only.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public int UniqueColors { get; }
```

Property Value  
Type: Int32

### See Also

**Reference**  
FreeImageBitmap Class  
FreeImageAPI Namespace

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FreeImageBitmap VerticalResolution Property

Gets the vertical resolution, in pixels per inch, of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public float VerticalResolution { get; }
```

**Property Value**  
Type: Single

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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FreeImageBitmapWidth Property

Width of the bitmap in pixel units.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int Width { get; }
```

### Property Value

Type: **Int32**

### See Also

**Reference**
- FreeImageBitmap Class
- FreeImageAPI Namespace

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FreeImageBitmap Methods

The FreeImageBitmap type exposes the following members.

## Methods

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<th>Name</th>
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<td>AdjustBrightness</td>
<td>Adjusts the brightness of an 8-, 24- or 32-bit image by a certain amount.</td>
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<tr>
<td>AdjustColors</td>
<td>Adjusts an image's brightness, contrast and gamma as well as it may invert the image within a single operation.</td>
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<tr>
<td>AdjustContrast</td>
<td>Adjusts the contrast of an 8-, 24- or 32-bit image by a certain amount.</td>
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<td>AdjustGamma</td>
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<tr>
<td>ApplyPaletteIndexMapping</td>
<td>Applies palette index mapping for one or several indices palletized image.</td>
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<tr>
<td>Clone</td>
<td>Creates a deep copy of this FreeImageBitmap.</td>
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<tr>
<td><strong>Method</strong></td>
<td>Description</td>
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<tr>
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</tr>
<tr>
<td>CloneMetadataFrom(FreeImageBitmap)</td>
<td>Copies the metadata from another FreeImageBitmap.</td>
</tr>
<tr>
<td>CloneMetadataFrom(FreeImageBitmap, FREE_IMAGE_METADATA_COPY)</td>
<td>Copies the metadata from another FreeImageBitmap options.</td>
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<tr>
<td>Composite</td>
<td>This method composite a transparent foreground image against a single background color or background image.</td>
</tr>
<tr>
<td>ConvertColorDepth</td>
<td>Converts this different color depth.bpp specifies color depth, greyscale conversion. Adding FICD_FORCE_GREYSCALE first perform a conversion to greyscale. This can be done with any target depth. Adding FICD_REORDER_PALETTE allows the algorithm to reorder the palette. This operation will not be performed to prevent data loss by mistake.</td>
</tr>
<tr>
<td>ConvertType</td>
<td>Converts this FreeImageBitmap to type case source and destination type are the same, the operation fails. Message can be caught using the 'Message' event.</td>
</tr>
</tbody>
</table>
Copy(Rectangle)  Copy a sub-part of this FreeImageBitmap

Copy(Int32, Int32, Int32, Int32)  Copy a sub-part of this FreeImageBitmap

CreateICCProfile(Byte)  Creates a new ICC-Profile.

CreateICCProfile(Byte, Int32)  Creates a new ICC-Profile.

CreateNewPropertyItem  Returns a new instance of the PropertyItem
accessible constructor.

CreateObjRef  Creates an object that contains all the
relevant information required to
generate a proxy used to communicate
with a remote object.

(Inherited from CreateView  Creates a dynamic read/write view into
a FreeImage bitmap.

Dispose  Performs application-defined tasks
associated with freeing,
resetting unmanaged resources.

Dispose(Boolean)  Performs application-defined tasks
associated with freeing,
resetting unmanaged resources.

EnlargeCanvas(Int32, Int32, Int32, Nullable<FREE_IMAGE_COLOR_OPTIONS>)  Enlarges or shrinks this FreeImageBitmap
and fills specified background color.

EnlargeCanvasT(Int32, Int32, Int32, Int32, NullableT)  Enlarges or shrinks this FreeImageBitmap
and fills specified background color.

Further details.
EnlargeCanvas(Int32, Int32, Int32, Int32, Nullable, FREE_IMAGE_COLOR_OPTIONS)

Enlarges or shrinks this FreeImageBitmap and fills specified background color.

Equals

Determines whether this and the specified instances are the same.

(Overrides)

FillBackground(T)

Sets all pixels to the specified color.

(Overrides)

FillBackground(T, FREE_IMAGE_COLOR_OPTIONS)

Sets all pixels to the specified color.

Finalize

Frees all managed and unmanaged resources.

(Overrides)

FreeBitmap

Frees a bitmap handle.

FromFile(String)

Creates a specified file.

FromFile(String, Boolean)

Creates a specified file with management information in that file.

FromHbitmap(IntPtr)

Creates a
Create a handle to a GDI bitmap.

Create a handle to a GDI palette.

Create a Windows handle to an icon.

Create a specified Windows resource.

Create a specified data stream.

Create a specified data stream.

Create a specified data stream.

Create a lookup table to be used with AdjustCurve(), which adjusts brightness and contrast, corrects gamma and inverts the image with a single call to AdjustCurve().

Get the bounds of this FreeImageBitmap.

Retrieve the red, green, blue or alpha channel of a 24- or 32-bit image.

Convert this instance to a different color depth or greyscale conversion, palette reordering.

Adding the FICD_FORCE_GREYSCALE compiler directive.
first perform a conversion to greyscale. This can be done with any target color depth. Adding the FICD_REORDER_PALETTE allows the algorithm to reorder the palette. This operation will not be performed to prevent data loss by mistake.

- **GetComplexChannel**
  - Retrieves the real part, imaginary part, magnitude or phase of a complex image.

- **GetEnlargedInstanceT(Int32, Int32, Int32, Int32, NullableT)**
  - Enlarges or shrinks this `FreeImageBitmap` and fills specified background color returning a new instance.

- **GetEnlargedInstanceT(Int32, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS)**
  - Enlarges or shrinks this `FreeImageBitmap` and fills specified background color returning a new instance further details.

- **GetHashCode**
  - Returns a hash code for this `FreeImageBitmap` (Overrides `GetHbitmap`)

- **GetHbitmap**
  - Creates a GDI bitmap object from this `FreeImageBitmap`
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<td>GetHbitmap(Color)</td>
<td>Creates a GDI bitmap object from this depth.</td>
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<tr>
<td>GetHbitmapForDevice</td>
<td>Creates a GDI bitmap object from this depth.</td>
</tr>
<tr>
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<tr>
<td>GetHicon</td>
<td>Returns the handle to an icon.</td>
</tr>
<tr>
<td>GetHistogram</td>
<td>Computes the image histogram.</td>
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<tr>
<td>GetLifetimeService</td>
<td>Retrieves the current lifetime service object that controls the lifetime policy for this instance.</td>
</tr>
<tr>
<td>(Inherited from GetPixel)</td>
<td>Gets the pixel.</td>
</tr>
<tr>
<td>FreeImageBitmap</td>
<td></td>
</tr>
<tr>
<td>GetPixelFormatSize</td>
<td>Returns the color depth, in number of bits per pixel, format.</td>
</tr>
<tr>
<td>GetPropertyItem</td>
<td>Gets the specified property item from this FreeImageBitmap.</td>
</tr>
<tr>
<td>GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32)</td>
<td>Quantizes this 24 bit, using the specified initializing a new 8 bit instance with the specified palette size.</td>
</tr>
<tr>
<td>GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Palette)</td>
<td>Quantizes this 24 bit, using the specified and reservePalette bit instance with the specified palette.</td>
</tr>
<tr>
<td>GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Int32, Palette)</td>
<td>Quantizes this 24 bit, and reservePalette bit instance up to palette.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
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<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)</td>
<td>Quantizes this 24 bit, using the specified and up to reservePalette instance.</td>
</tr>
<tr>
<td>GetRotatedInstance(Double)</td>
<td>Rotates this specified angle initializing a new instance.</td>
</tr>
<tr>
<td>GetRotatedInstance(Double, Double, Double, Double, Double, Boolean)</td>
<td>This method performs a rotation or translation of an 8-bit greyscale or 32-bit image, using a 3rd order (cubic) B-Spline initializing a new instance.</td>
</tr>
<tr>
<td>GetRotatedInstanceT(Double, NullableT)</td>
<td>Rotates this specified angle initializing a new instance.</td>
</tr>
<tr>
<td>GetScaledInstance(Size, FREE_IMAGE_FILTER)</td>
<td>Rescales this specified size using the initializing a new instance.</td>
</tr>
<tr>
<td>GetScaledInstance(Int32, Int32, FREE_IMAGE_FILTER)</td>
<td>Rescales this specified size using the initializing a new instance.</td>
</tr>
<tr>
<td>GetScanline(Int32)</td>
<td>Returns an instance representing the scanline.</td>
</tr>
</tbody>
</table>

Since FreeImage bitmaps are always reserved...
### `GetScanlineT(Int32)`

Returns a representation of the scanline.

Since FreeImage bitmaps are bottom-up aligned, keep in mind that scanline 0 is the bottom-most line of the image.

### `GetScanlinePointer`

Returns a pointer to the specified scanline.

Since free images are bottom-up, the bottom line of the image.

### `GetScanlines`

Returns a list of structures, representing the scanlines of this `FreeImageBitmap`.

Since FreeImage bitmaps are bottom-up, scanline 0 is the bottom-most line of the image. Each color depth has a different representation due to different memory layouts.

### `GetThumbnailImage(Int32, Boolean)`

Obsoleted.

Returns a thumbnail for this `FreeImageBitmap`.

Ratio is maximum width or height of the thumbnail.

### `GetThumbnailImage(Int32, Int32, ImageGetThumbnailImageAbort, IntPtr)`

Returns a thumbnail for this `FreeImageBitmap`.

### `GetType`

Gets the type (Inherited from `System.Object`).
GetTypeConvertedInstance

Converts this FreeImageBitmap type. In case source and destination type are the same, the operation fails. An error message can be caught using the 'Message' event.

GetWICMetadataHandler

Gets a Imaging Component Metadata Handler for this instance.

InitializeLifetimeService

Obtains a lifetime service object to control the lifetime policy for this instance. (Inherited from Invert)

Invert

Inverts each pixel data.

IsAlphaPixelFormat

Returns a value that indicates whether the pixel format for this FreeImageBitmap information.

IsCanonicalPixelFormat

Returns a value that indicates whether the pixel format is 32 bits per pixel.

IsExtendedPixelFormat

Returns a value that indicates whether the pixel format is 64 bits per pixel.

JPEGCrop(String, String, Rectangle)

Performs a lossless crop on a JPEG file.

JPEGCrop(String, String, Int32, Int32, Int32, Int32)

Performs a lossless crop on a JPEG file.

JPEGTransform

Performs a lossless rotation or flipping on a JPEG file.

LockBits(Rectangle, ImageLockMode, PixelFormat)

This function is not yet implemented.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
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<tbody>
<tr>
<td><code>LockBits(Rectangle, ImageLockMode, PixelFormat, BitmapData)</code></td>
<td>This function is not yet implemented.</td>
</tr>
<tr>
<td><code>LookupSVGColor</code></td>
<td>Converts a SVG color name into a corresponding RGB value.</td>
</tr>
<tr>
<td><code>LookupX11Color</code></td>
<td>Converts an X11 color name into a corresponding RGB value.</td>
</tr>
<tr>
<td><code>MakeThumbnail</code></td>
<td>Returns a thumbnail for this FreeImageBitmap with a specified ratio.</td>
</tr>
<tr>
<td><code>MakeTransparent</code></td>
<td>Makes the default transparent color transparent for this instance.</td>
</tr>
<tr>
<td><code>MakeTransparent(Color)</code></td>
<td>Makes the specified color transparent for this instance.</td>
</tr>
<tr>
<td><code>MemberwiseClone</code></td>
<td>Creates a shallow copy of the current Object.</td>
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<tr>
<td><code>MemberwiseClone(Boolean)</code></td>
<td>Creates a MarshalByRefObject.</td>
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<tr>
<td><code>MultigridPoissonSolver</code></td>
<td>Solves a Poisson equation, remap result pixels to [0..1] and returns the solution.</td>
</tr>
<tr>
<td><code>Paste(FreeImageBitmap, Point, Int32)</code></td>
<td>Alpha blend or combine a sub part image with this bitmap with a bit depth than or equal to this instance.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>Paste(FreeImageBitmap, Int32, Int32, Int32)</code></td>
<td>Alpha blend or combine a sub part image with this bit depth than or equal to the bit depth this instance.</td>
</tr>
<tr>
<td><code>PreMultiplyWithAlpha</code></td>
<td>Applies the alpha value of each pixel to its color components. The pixel stays unchanged.</td>
</tr>
<tr>
<td><code>Quantize(FREE_IMAGE_QUANTIZE, Int32)</code></td>
<td>Quantizes this 24 bit color to 8 bit creating a new palette of the specified size.</td>
</tr>
<tr>
<td><code>Quantize(FREE_IMAGE_QUANTIZE, Int32, Palette)</code></td>
<td>Quantizes this 24 bit color to 8 bit creating a new palette of the specified size.</td>
</tr>
<tr>
<td><code>Quantize(FREE_IMAGE_QUANTIZE, Int32, Int32, Palette)</code></td>
<td>Quantizes this 24 bit color to 8 bit creating a new palette of the specified size.</td>
</tr>
<tr>
<td><code>Quantize(FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)</code></td>
<td>Quantizes this 24 bit color to 8 bit creating a new palette of the specified size.</td>
</tr>
<tr>
<td><code>RemovePropertyItem</code></td>
<td>Removes the specified property item from this</td>
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<tr>
<td>Method</td>
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</tr>
<tr>
<td>Rescale(Size, FREE_IMAGE_FILTER)</td>
<td>Rescales this specified size using the specified filter.</td>
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<tr>
<td>Rescale(Int32, Int32, FREE_IMAGE_FILTER)</td>
<td>Rescales this specified size using the specified filter.</td>
</tr>
<tr>
<td>RescaleRect</td>
<td></td>
</tr>
<tr>
<td>Rotate(Double)</td>
<td>This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image</td>
</tr>
<tr>
<td></td>
<td>by means of 3 shears. Images, rotation is limited to angles whose value is</td>
</tr>
<tr>
<td></td>
<td>an integer multiple of 90.</td>
</tr>
<tr>
<td>Rotate(Double, Double, Double, Double, Double, Double, Boolean)</td>
<td>This method performs a rotation and/or translation of an 8-bit greyscale,</td>
</tr>
<tr>
<td></td>
<td>or 32-bit image, using a 3rd order (cubic) B-Spline.</td>
</tr>
<tr>
<td>RotateT(Double, NullableT)</td>
<td>This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image</td>
</tr>
<tr>
<td></td>
<td>by means of 3 shears. Images, rotation is limited to angles whose value is</td>
</tr>
<tr>
<td></td>
<td>an integer multiple of 90.</td>
</tr>
<tr>
<td>RotateFlip</td>
<td>This method rotates, flips, or rotates and flips this image.</td>
</tr>
<tr>
<td>Save(String)</td>
<td>Saves this specified file.</td>
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<tr>
<td>Save(Stream, FREE_IMAGE_FORMAT)</td>
<td>Saves this specified stream in the specified format.</td>
</tr>
<tr>
<td>Save(String, FREE_IMAGE_FORMAT)</td>
<td>Saves this specified file in the specified format.</td>
</tr>
<tr>
<td>Method</td>
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<tr>
<td><strong>Save(Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)</strong></td>
<td>Saves this specified stream in the specified format using the specified saving flags.</td>
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<tr>
<td><strong>Save(String, FREE_IMAGE_FORMAT, FREE_IMAGESAVE_FLAGS)</strong></td>
<td>Saves this specified file in the specified format using the specified saving flags.</td>
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<tr>
<td><strong>SaveAdd</strong></td>
<td>Adds a frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td><strong>SaveAdd(Int32)</strong></td>
<td>Adds a frame to the file specified in a previous call to the method.</td>
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<tr>
<td><strong>SaveAdd(String)</strong></td>
<td>Adds a frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td><strong>SaveAdd(FreeImageBitmap)</strong></td>
<td>Adds a frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td><strong>SaveAdd(String, Int32)</strong></td>
<td>Adds a frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td><strong>SaveAdd(FreeImageBitmap, Int32)</strong></td>
<td>Adds a frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td><strong>SaveAdd(String, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</strong></td>
<td>Adds a specified frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td><strong>SaveAdd(String, FreeImageBitmap, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</strong></td>
<td>Adds a specified frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td>**SaveAdd(String, Int32, FREE_IMAGE_FORMAT, <strong>FREE_IMAGE_SAVE_FLAGS)</strong></td>
<td>Adds a specified frame to the file specified in a previous call to the method.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>SaveAdd(String, FreemageBitmap, Int32, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Adds a specified frame to the file specified using the specified parameters. Selects selected frames from an image to a multiple-frame image.</td>
</tr>
<tr>
<td>SelectActiveFrame</td>
<td>Selects the frame specified by the index.</td>
</tr>
<tr>
<td>SetChannel</td>
<td>Inserts an 8-bit dib into a 24- or 32-bit image with the same width and height.</td>
</tr>
<tr>
<td>SetComplexChannel</td>
<td>Sets the real or imaginary part of a complex image. The real and imaginary parts have to have the same size.</td>
</tr>
<tr>
<td>SetPixel</td>
<td>Sets the pixel at the specified coordinates in this FreeImageBitmap.</td>
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<tr>
<td>SetResolution</td>
<td>Sets the resolution for this FreeImageBitmap.</td>
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<tr>
<td>SwapColors</td>
<td>Swaps two specified colors on a 1-, 4-, or 8-bit palletized high color image.</td>
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<td>SwapPaletteIndices</td>
<td>Swaps two specified palette indices on a 1-, 4-, or 8-bit palletized image.</td>
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<td>TmoDrago03</td>
<td>Converts a High Dynamic Range image to a 24-bit RGB image using a global operator based on logarithmic compression of luminance values, imitating TmoFattal02.</td>
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<tr>
<td>TmoFattal02</td>
<td>Applies the Gradient Domain High</td>
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<tr>
<td>Method</td>
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</tr>
<tr>
<td>TmoReinhard05</td>
<td>Converts a High Dynamic Range image to a 24-bit RGB image using a global operator inspired by the physiology of the human visual system.</td>
</tr>
<tr>
<td>ToBitmap</td>
<td>Converts this instance to a bitmap.</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns a string that represents the current object.</td>
</tr>
<tr>
<td>UnlockBits</td>
<td>This function is not yet implemented.</td>
</tr>
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</table>

## See Also

Reference

- FreelImageBitmap Class
- FreelImageAPI Namespace

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FreeImage.BitmapAdjustBrightness Method

Adjusts the brightness of a 8-, 24- or 32-bit image by a certain amount.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public bool AdjustBrightness(
   double percentage
)
```

### Parameters

- **percentage**
  - Type: `System.Double`
  - A value 0 means no change, less than 0 will make the image darker and greater than 0 will make the image brighter.

### Return Value

- Type: `Boolean`
  - Returns true on success, false on failure.

### See Also

- Reference
  - FreeImage.Bitmap Class
  - FreeImageAPI Namespace
FreeImageBitmapAdjustColors Method

Adjusts an image's brightness, contrast and gamma as well as it may optionally invert the image within a single operation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool AdjustColors(
    double brightness,
    double contrast,
    double gamma,
    bool invert
)
```

### Parameters

- **brightness**
  - Type: `SystemDouble`
  - Percentage brightness value where -100 <= brightness <= 100. A value of 0 means no change, less than 0 will make the image darker and greater than 0 will make the image brighter.

- **contrast**
  - Type: `SystemDouble`
  - Percentage contrast value where -100 <= contrast <= 100. A value of 0 means no change, less than 0 will decrease the contrast and greater than 0 will increase the contrast of the image.

- **gamma**
Type: `SystemDouble`
Gamma value to be used for gamma correction. A value of 1.0 leaves the image alone, less than one darkens it, and greater than one lightens it.

This parameter must not be zero or smaller than zero. If so, it will be ignored and no gamma correction will be performed on the image.

`invert`
Type: `SystemBoolean`
If set to true, the image will be inverted.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

See Also

Reference

FreeImageBitmap Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapAdjustContrast Method

Adjusts the contrast of a 8-, 24- or 32-bit image by a certain amount.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool AdjustContrast(
    double percentage
)
```

### Parameters

*percentage*
- Type: SystemDouble
  - A value 0 means no change, less than 0 will decrease the contrast and greater than 0 will increase the contrast of the image.

### Return Value
- Type: Boolean
  - Returns true on success, false on failure.

### See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace
FreeImageBitmapAdjustCurve Method

Performs an histogram transformation on a 8-, 24- or 32-bit image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C# code:

```csharp
public bool AdjustCurve(byte[] lookUpTable, FREE_IMAGE_COLOR_CHANNEL channel)
```

### Parameters

- **lookUpTable**
  - Type: **System.Byte**
  - The lookup table (LUT). It's size is assumed to be 256 in length.

- **channel**
  - Type: **FreeImageAPIFREE_IMAGE_COLOR_CHANNEL**
  - The color channel to be transformed.

### Return Value

- Type: **Boolean**
  - Returns true on success, false on failure.

### See Also

- **Reference**
  - FreeImageBitmap Class
FreeImageBitmapAdjustGamma Method

Performs gamma correction on a 8-, 24- or 32-bit image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool AdjustGamma(double gamma)
```

**Parameters**

- **gamma**  
  Type: `System.Double`  
  The parameter represents the gamma value to use (gamma > 0). A value of 1.0 leaves the image alone, less than one darkens it, and greater than one lightens it.

**Return Value**

- **Boolean**  
  Returns true on success, false on failure.

**See Also**

- **Reference**  
  FreeImageBitmap Class  
  FreeImageAPI Namespace
FreeImageBitmapApplyColorMapping Method

Applies color mapping for one or several colors on a 1-, 4- or 8-bit palletized or a 16-, 24- or 32-bit high color image.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public uint ApplyColorMapping(
    RGBQUAD[] srccolors,
    RGBQUAD[] dstcolors,
    bool ignore_alpha,
    bool swap
)
```

Parameters

**srccolors**
Type: FreeImageAPIRGBQUAD
Array of colors to be used as the mapping source.

**dstcolors**
Type: FreeImageAPIRGBQUAD
Array of colors to be used as the mapping destination.

**ignore_alpha**
Type: SystemBoolean
If true, 32-bit images and colors are treated as 24-bit.

**swap**
Type: SystemBoolean
If true, source and destination colors are swapped, that is, each
destination color is also mapped to the corresponding source color.

Return Value
Type: UInt32
The total number of pixels changed.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>srccolors or dstcolors is a null reference.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>srccolors has a different length than dstcolors.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapApplyPaletteIndexMapping Method

Applies palette index mapping for one or several indices on a 1-, 4- or 8-bit palletized image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public uint ApplyPaletteIndexMapping(
    byte[] srcindices,
    byte[] dstindices,
    uint count,
    bool swap
)
```

**Parameters**

- **srcindices**  
  Type: System.Byte  
  Array of palette indices to be used as the mapping source.

- **dstindices**  
  Type: System.Byte  
  Array of palette indices to be used as the mapping destination.

- **count**  
  Type: System.UInt32  
  The number of palette indices to be mapped. This is the size of both srcindices and dstindices

- **swap**  
  Type: System.Boolean
If true, source and destination palette indices are swapped, that is, each destination index is also mapped to the corresponding source index.

Return Value
Type: UInt32
The total number of pixels changed.

## Exceptions

<table>
<thead>
<tr>
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<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
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<tr>
<td>ArgumentException</td>
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</tbody>
</table>

## See Also

Reference
FreelimageBitmap Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapClone Method

Creates a deep copy of this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public Object Clone()
```

### Return Value

Type: **Object**  
A deep copy of this FreeImageBitmap.

Implements  
IClonableClone

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmapCloneMetadataFrom Method

Overload List

<table>
<thead>
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<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CloneMetadataFrom(FreeImageBitmap)</td>
<td>Copies the metadata from another FreeImageBitmap</td>
</tr>
<tr>
<td>CloneMetadataFrom(FreeImageBitmap, FREE_IMAGE_METADATA_COPY)</td>
<td>Copies the metadata from another FreeImageBitmap using the provided options.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap.CloneMetadataFrom Method (FreeImageBitmap)

Copies the metadata from another FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void CloneMetadataFrom(
    FreeImageBitmap bitmap
)
```

**Parameters**

- **bitmap**
  - Type: FreeImageAPI.FreeImageBitmap
  - The bitmap to read the metadata from.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><em>bitmap</em> is a null reference.</td>
</tr>
</tbody>
</table>

**See Also**

- Reference
  - FreeImageBitmap Class
  - CloneMetadataFrom Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapCloneMetadataFrom Method (FreeImageBitmap, FREE_IMAGE_METADATA_COPY)

Copies the metadata from another FreeImageBitmap using the provided options.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void CloneMetadataFrom(
    FreeImageBitmap bitmap,
    FREE_IMAGE_METADATA_COPY flags
)
```

### Parameters

**bitmap**

Type: FreeImageAPIFreeImageBitmap  
The bitmap to read the metadata from.

**flags**

Type: FreeImageAPIFREE_IMAGE_METADATA_COPY  
Specifies the way the metadata is copied.

### Exceptions

<table>
<thead>
<tr>
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<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>bitmap is a null reference.</td>
</tr>
</tbody>
</table>
FreeImageBitmapComposite Method

This method composite a transparent foreground image against a single background color or against a background image. In case useBitmapBackground is false and applicationBackground and bitmapBackGround are null, a checkerboard will be used as background.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Composite(
    bool useBitmapBackground,
    Nullable<Color> applicationBackground,
    FreeImageBitmap bitmapBackGround
)
```

### Parameters

- **useBitmapBackground**  
  Type: SystemBoolean  
  When true the background of this instance is used if it contains one.

- **applicationBackground**  
  Type: SystemNullableColor  
  Backgroundcolor used in case useBitmapBackground is false and applicationBackground is not null.

- **bitmapBackGround**  
  Type: FreeImageAPI!FreeImageBitmap
Background used in case `useBitmapBackground` is false and `applicationBackground` is a null reference.

Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
- `FreelImageBitmap Class`
- `FreelImageAPI Namespace`

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap.ConvertColorDepth Method

Converts this FreeImageBitmap into a different color depth. The parameter `bpp` specifies color depth, greyscale conversion and palette reorder. Adding the FICD_FORCE_GREYSCALE flag will first perform a conversion to greyscale. This can be done with any target color depth.

Adding the FICD_REORDER_PALETTE flag will allow the algorithm to reorder the palette. This operation will not be performed to non-greyscale images to prevent data loss by mistake.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public bool ConvertColorDepth(
    FREE_IMAGE_COLOR_DEPTH bpp
)
```

### Parameters

- **bpp**  
  Type: FreeImageAPIFREE_IMAGE_COLOR_DEPTH  
  A bitfield containing information about the conversion to perform.

### Return Value

Type: Boolean  
Returns true on success, false on failure.
See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapConvertType Method

Converts this FreeImageBitmapFREE_IMAGE_TYPE to type initializing a new instance. In case source and destination type are the same, the operation fails. An error message can be caught using the 'Message' event.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool ConvertType(
    FREE_IMAGE_TYPE type,
    bool scaleLinear
)
```

### Parameters

- **type**
  - Type: FreeImageAPIFREE_IMAGE_TYPE  
  - Destination type.
- **scaleLinear**
  - Type: SystemBoolean  
  - True to scale linear, else false.

### Return Value
- Type: Boolean  
- Returns true on success, false on failure.
See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
# FreeImageBitmap Copy Method

## Overload List

<table>
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<tr>
<th>Name</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Copy(Rectangle)</td>
<td>Copy a sub part of this FreeImageBitmap.</td>
</tr>
<tr>
<td>Copy(Int32, Int32, Int32)</td>
<td>Copy a sub part of this FreeImageBitmap.</td>
</tr>
</tbody>
</table>

## See Also

**Reference**
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimageapi.net)
Help improve this Documentation: [Join the Project](https://github.com/freeimageapi/FreeImage.NET)
FreeImageBitmap Copy Method (Rectangle)

Copy a sub part of this `FreeImageBitmap`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap Copy(  
    Rectangle rect
)
```

### Parameters

* rect  
  Type: System.Drawing.Rectangle  
  The subpart to copy.

### Return Value

Type: `FreeImageBitmap`  
The sub part in a new instance.

### See Also

- Reference
  - FreeImageBitmap Class
  - Copy Overload
  - FreeImageAPI Namespace
FreeImageBitmapCopy
Method (Int32, Int32, Int32, Int32)

Copy a sub part of this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```cs
public FreeImageBitmap Copy(
    int left,
    int top,
    int right,
    int bottom
)
```

Parameters

- **left**
  Type: SystemInt32
  Specifies the left position of the cropped rectangle.

- **top**
  Type: SystemInt32
  Specifies the top position of the cropped rectangle.

- **right**
  Type: SystemInt32
  Specifies the right position of the cropped rectangle.

- **bottom**
  Type: SystemInt32
  Specifies the bottom position of the cropped rectangle.
Specifies the bottom position of the cropped rectangle.

Return Value
Type: FreelImageBitmap
The sub part in a new instance.

See Also

Reference
FreelImageBitmap Class
Copy Overload
FreelImageAPI Namespace
FreeImageBitmapCreateICCProfile Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CreateICCProfile(Byte)</td>
<td>Creates a new ICC-Profile.</td>
</tr>
<tr>
<td>CreateICCProfile(Byte, Int32)</td>
<td>Creates a new ICC-Profile.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreImageBitmap Class
- FreImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapCreateICCPProf Method (Byte)

Creates a new ICC-Profile.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public FIICCPROFILE CreateICCPProfile(
    byte[] data
)
```

### Parameters

**data**
- Type: System.Byte  
  The data of the new ICC-Profile.

### Return Value

- Type: FIICCPROFILE  
  The new ICC-Profile of the bitmap.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>data is a null reference.</td>
</tr>
</tbody>
</table>

## See Also
Reference
FreelImageBitmap Class
CreateICCProfile Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap>CreateICCProf Method (Byte, Int32)

Creates a new ICC-Profile.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FIICCPROFILE CreateICCProfile(
    byte[] data,
    int size
)
```

**Parameters**

- **data**  
  Type: System.Byte  
  The data of the new ICC-Profile.

- **size**  
  Type: System.Int32  
  The number of bytes of `data` to use.

**Return Value**

Type: FIICCPROFILE  
The new ICC-Profile of the bitmap.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ArgumentNullException  

\[data\] is null.

See Also

Reference
- FreelImageBitmap Class
- CreateICCProfile Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageBitmap

CreateNewPropertyItem

Method

Returns a new instance of the PropertyItem class which has no public accessible constructor.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static PropertyItem CreateNewPropertyItem()
```

Return Value

Type: PropertyItem
A new instance of PropertyItem.

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapCreateView Method

Creates a dynamic read/write view into a FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public FreeImageBitmap CreateView(
    int left,
    int top,
    int right,
    int bottom
)
```

### Parameters

- **left**
  - Type: `System.Int32`
  - The left position of the view's area.

- **top**
  - Type: `System.Int32`
  - The top position of the view's area.

- **right**
  - Type: `System.Int32`
  - The right position of the view's area.

- **bottom**
  - Type: `System.Int32`
  - The bottom position of the view's area.
Return Value
Type: `FreelImageBitmap`
The newly created view or `null` if the view was not created.

Remarks
A dynamic view is a FreelImage bitmap with its own width and height, that, however, shares its bits with another FreelImage bitmap. Typically, views are used to define one or more rectangular sub-images of an existing bitmap. All FreelImage operations, like saving, displaying and all the toolkit functions, when applied to the view, only affect the view's rectangular area.

Only the backing image's pixels are shared by the view. For all other image data, notably for the resolution, background color, color palette, transparency table and for the ICC profile, the view gets a private copy of the data. By default, the backing image's metadata is NOT copied to the view.

As with all FreelImage functions that take a rectangle region, top and left positions are included, whereas right and bottom positions are excluded from the rectangle area. Since the memory block shared by the backing image and the view must start at a byte boundary, the value of parameter `left` must be a multiple of 8 for 1-bit images and a multiple of 2 for 4-bit images.

See Also
Reference
- `FreelImageBitmap Class`
- `FreelImageAPI Namespace`
- `FreelImageCreateView(FIBITMAP, Int32, Int32, Int32, Int32)`

Contact/Feedback: FreelImage.NET Homepage
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FreeImage.Bitmap.Dispose

Overload List

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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispose</td>
<td>Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.</td>
</tr>
<tr>
<td>Dispose(Boolean)</td>
<td>Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImage.Bitmap Class
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapDispose Method

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public void Dispose()
```

Implements

IDisposableDispose

See Also

Reference
- FreeImageBitmap Class
- Dispose Overload
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap Dispose Method (Boolean)

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
protected virtual void Dispose(
    bool disposing
)
```

### Parameters

*disposing*  
Type: `System.Boolean`  
If true managed resources are released.

### See Also

Reference  
FreeImageBitmap Class  
Dispose Overload  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
## FreeImageBitmapEnlargeCanvas Method

### Overload List

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<tr>
<th>Name</th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EnlargeCanvasT(Int32, Int32, Int32, Int32, NullableT)</td>
<td>Enlarges or shrinks t' FreeImageBitmap sel side and fills newly ac with the specified bac See EnlargeCanvasT Int32, Int32, Int32, Int FREE_IMAGE_COLOR_OPTIONS for further details.</td>
<td></td>
</tr>
<tr>
<td>EnlargeCanvasT(Int32, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS)</td>
<td>Enlarges or shrinks t' FreeImageBitmap sel side and fills newly ac with the specified bac See EnlargeCanvasT Int32, Int32, Int32, Int FREE_IMAGE_COLOR_OPTIONS for further details.</td>
<td></td>
</tr>
</tbody>
</table>

### See Also

- FreeImageBitmap Class
- FreeImageAPI Namespace

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FreeImageBitmapEnlargeCanvas Method (Int32, Int32, Int32, Int32, Nullable<T>)

Enlarges or shrinks this FreeImageBitmap selectively per side and fills newly added areas with the specified background color. See EnlargeCanvasT(FIBITMAP, Int32, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS) for further details.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool EnlargeCanvas<T>(
    int left,
    int top,
    int right,
    int bottom,
    Nullable<T> color
)
where T : struct, new()
```

Parameters

- **left**
  Type: SystemInt32
  The number of pixels, the image should be enlarged on its left side. Negative values shrink the image on its left side.

- **top**
  Type: SystemInt32
The number of pixels, the image should be enlarged on its top side. Negative values shrink the image on its top side.

_right_
Type: SystemInt32
The number of pixels, the image should be enlarged on its right side. Negative values shrink the image on its right side.

_bottom_
Type: SystemInt32
The number of pixels, the image should be enlarged on its bottom side. Negative values shrink the image on its bottom side.

color
Type: SystemNullable{T}
The color, the enlarged sides of the image should be filled with.

Type Parameters

T
The type of the specified color.

Return Value
Type: Boolean
true on success, false on failure.

See Also

Reference
FreImageBitmap Class
EnlargeCanvas Overload
FreImageAPI Namespace

Enlarges or shrinks this FreeImageBitmap selectively per side and fills newly added areas with the specified background color. See EnlargeCanvasT(FIBITMAP, Int32, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS) for further details.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool EnlargeCanvas<T>(
    int left,
    int top,
    int right,
    int bottom,
    Nullable<T> color,
    FREE_IMAGE_COLOR_OPTIONS options
)
where T : struct, new()
```

Parameters

*left*

Type: SystemInt32  
The number of pixels, the image should be enlarged on its left
side. Negative values shrink the image on its left side.

*top*
Type: SystemInt32
The number of pixels, the image should be enlarged on its top side. Negative values shrink the image on its top side.

*right*
Type: SystemInt32
The number of pixels, the image should be enlarged on its right side. Negative values shrink the image on its right side.

*bottom*
Type: SystemInt32
The number of pixels, the image should be enlarged on its bottom side. Negative values shrink the image on its bottom side.

*color*
Type: SystemNullable<T>
The color, the enlarged sides of the image should be filled with.

*options*
Type: FreeImageAPIFREE_IMAGE_COLOR_OPTIONS
Options that affect the color search process for palletized images.

**Type Parameters**

*T*
The type of the specified color.

**Return Value**
Type: Boolean
true on success, false on failure.

**See Also**

Reference
FreelImageBitmap Class
EnlargeCanvas Overload
FreelImageAPI Namespace
FreeImageBitmap Equals Method

Determines whether this and the specified instances are the same.

**Namespace**: FreeImageAPI

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public override bool Equals(
    Object obj
)
```

### Parameters

- **obj**
  - Type: `SystemObject`
  - The object to test.

### Return Value

- **true** if this instance is the same `obj` or if both are null references; otherwise, **false**.

### See Also

- **Reference**
  - FreeImageBitmap Class
  - FreeImageAPI Namespace
# FreeImageBitmapFillColor Background Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FillBackgroundT(T)</td>
<td>Sets all pixels of this FreeImageBitmap to the specified color. See FillBackgroundT(FIBitmap, T, FREE_IMAGE_COLOR_OPTIONS) for further details.</td>
</tr>
<tr>
<td>FillBackgroundT(T, FREE_IMAGE_COLOR_OPTIONS)</td>
<td>Sets all pixels of this FreeImageBitmap to the specified color. See FillBackgroundT(FIBitmap, T, FREE_IMAGE_COLOR_OPTIONS) for further details.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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**FreeImageBitmapFillBackground Method (T)**

Sets all pixels of this `FreeImageBitmap` to the specified color. See `FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS)` for further details.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool FillBackground<T>(
    T color
)
where T : struct, new()
```

### Parameters

**color**

Type: `T`  
The color to fill this `FreeImageBitmap` with.

### Type Parameters

**T**

The type of the specified color.

### Return Value

Type: `Boolean`  
`true` on success, `false` on failure.
See Also

Reference
- FreelImageBitmap Class
- FillBackground Overload
- FreelImageAPI Namespace

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FreeImageBitmapFillBackground

Method (T,
FREE_IMAGE_COLOR_OPTIONS)

Sets all pixels of this FreeImageBitmap to the specified color. See FillBackgroundT(FIBITMAP, T, FREE_IMAGE_COLOR_OPTIONS) for further details.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public bool FillBackground<T>(
    T color,
    FREE_IMAGE_COLOR_OPTIONS options
)

where T : struct, new()
```

Parameters

- **color**
  - Type: *T*
  - The color to fill this FreeImageBitmap with.

- **options**
  - Type: FreeImageAPIFREE_IMAGE_COLOR_OPTIONS
  - Options that affect the color search process for palletized images.

Type Parameters
$T$

The type of the specified color.

Return Value
Type: Boolean
true on success, false on failure.

See Also

Reference
FreelmageBitmap Class
FillBackground Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
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Frees all managed and unmanaged ressources.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
protected override void Finalize()
```

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapFreeHbitmap Method

Frees a bitmap handle.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool FreeHbitmap(
    IntPtr hbitmap
)
```

### Parameters

**hbitmap**  
Type: `System.IntPtr`  
Handle to a bitmap.

### Return Value

Type: `Boolean`  
`true` on success, `false` on failure.

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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FreeImageBitmapFromFile Method

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## See Also

Reference  
`FreeImageBitmap Class`  
`FreeImageAPI Namespace`
FreeImageBitmapFromFile Method (String)

Creates a FreeImageBitmap from the specified file.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FreeImageBitmap FromFile(
    string filename
)
```

Parameters

`filename`
Type: SystemString
A string that contains the name of the file from which to create the FreeImageBitmap.

Return Value
Type: FreeImageBitmap
The FreeImageBitmap this method creates.

See Also

Reference
FreeImageBitmap Class
FromFile Overload
FreeImageAPI Namespace
FreeImageBitmapFromFile Method (String, Boolean)

Creates a FreeImageBitmap from the specified file using embedded color management information in that file.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FreeImageBitmap FromFile(
    string filename,
    bool useEmbeddedColorManagement
)
```

Parameters

**filename**
Type: System.String
A string that contains the name of the file from which to create the FreeImageBitmap.

**useEmbeddedColorManagement**
Type: System.Boolean
Ignored.

Return Value
Type: FreeImageBitmap
The FreeImageBitmap this method creates.

See Also
Reference
FreelmageBitmap Class
FromFile Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
# FreeImageBitmapFromHbitmap Method

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## See Also

**Reference**
- [FreeImageBitmap Class](#)
- [FreeImageAPI Namespace](#)

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Help improve this Documentation: [Join the Project](#)
**FreeImageBitmapFromHbitmap Method (IntPtr)**

Creates a **FreeImageBitmap** from a handle to a GDI bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImageBitmap FromHbitmap(
    IntPtr hbitmap
)
```

**Parameters**

**hbitmap**  
Type: System.IntPtr  
The GDI bitmap handle from which to create the **FreeImageBitmap**.

**Return Value**

Type: **FreeImageBitmap**  
The **FreeImageBitmap** this method creates.

**See Also**

**Reference**
- **FreeImageBitmap Class**
- **FromHbitmap Overload**
- **FreeImageAPI Namespace**
FreeImageBitmapFromHbitmap Method (IntPtr, IntPtr)

Creates a FreeImageBitmap from a handle to a GDI bitmap and a handle to a GDI palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FreeImageBitmap FromHbitmap(
    IntPtr hbitmap,
    IntPtr hpalette
)
```

### Parameters

- **hbitmap**  
  Type: System IntPtr  
  The GDI bitmap handle from which to create the FreeImageBitmap.

- **hpalette**  
  Type: System IntPtr  
  Ignored.

### Return Value

Type: FreeImageBitmap  
The FreeImageBitmap this method creates.

### See Also
FreeImageBitmapFromHicon Method

Creates a FreeImageBitmap from a Windows handle to an icon.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImageBitmap FromHicon(
    IntPtr hicon
)
```

**Parameters**

**hicon**  
Type: System.IntPtr  
A handle to an icon.

**Return Value**  
Type: FreeImageBitmap  
The FreeImageBitmap that this method creates.

**See Also**

- Reference  
  FreeImageBitmap Class  
  FreeImageAPI Namespace

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FreeImageBitmapFromResource Method

Creates a FreeImageBitmap from the specified Windows resource.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImageBitmap FromResource(
    IntPtr hinstance,
    string bitmapName
)
```

### Parameters

- **hinstance**  
  Type: System.IntPtr  
  A handle to an instance of the executable file that contains the resource.

- **bitmapName**  
  Type: System.String  
  A string containing the name of the resource bitmap.

### Return Value

Type: FreeImageBitmap  
The FreeImageBitmap that this method creates.

### See Also

Reference
## FreeImageBitmapFromStream Method

### Overload List

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<td>Creates a <code>FreeImageBitmap</code> from the specified data stream.</td>
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### See Also

Reference
- `FreeImageBitmap Class`
- `FreeImageAPI Namespace`

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FreeImageBitmapFromStream Method (Stream)

Creates a FreeImageBitmap from the specified data stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImageBitmap FromStream(
    Stream stream
)
```

### Parameters

**stream**
- Type: System.IOStream
- A Stream that contains the data for this FreeImageBitmap.

### Return Value

Type: FreeImageBitmap  
The FreeImageBitmap this method creates.

### See Also

- Reference
  - FreeImageBitmap Class
  - FromStream Overload
  - FreeImageAPI Namespace
FreeImageBitmapFromStream Method (Stream, Boolean)

Creates a FreeImageBitmap from the specified data stream.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FreeImageBitmap FromStream(
    Stream stream,
    bool useEmbeddedColorManagement
)
```

Parameters

- **stream**
  Type: System.IOStream
  A Stream that contains the data for this FreeImageBitmap.

- **useEmbeddedColorManagement**
  Type: System.Boolean
  Ignored.

Return Value

Type: FreeImageBitmap
The FreeImageBitmap this method creates.

See Also

Reference
FreeImageBitmap Class
FromStream Overload
FreelimageAPI Namespace

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FreeImageBitmapFromStream Method (Stream, Boolean, Boolean)

Creates a FreeImageBitmap from the specified data stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImageBitmap FromStream(
    Stream stream,
    bool useEmbeddedColorManagement,
    bool validateImageData
)
```

**Parameters**

- `stream`  
  Type: `System.IOStream`  
  A Stream that contains the data for this FreeImageBitmap.

- `useEmbeddedColorManagement`  
  Type: `System.Boolean`  
  Ignored.

- `validateImageData`  
  Type: `System.Boolean`  
  Ignored.

**Return Value**

Type: `FreeImageBitmap`
The `FreelImageBitmap` this method creates.

### See Also

**Reference**
- FreelImageBitmap Class
- FromStream Overload
- FreelImageAPI Namespace

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**FreeImageBitmapGetAdjustColorsLookupTable Method**

Creates a lookup table to be used with AdjustCurve() which may adjusts brightness and contrast, correct gamma and invert the image with a single call to AdjustCurve().

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static int GetAdjustColorsLookupTable( 
    byte[] lookUpTable, 
    double brightness, 
    double contrast, 
    double gamma, 
    bool invert
)
```

**Parameters**

- **lookUpTable**  
  Type: SystemByte  
  Output lookup table to be used with AdjustCurve(). The size of lookUpTable is assumed to be 256.

- **brightness**  
  Type: SystemDouble  
  Percentage brightness value where -100 <= brightness <= 100. A value of 0 means no change, less than 0 will make the image darker and greater than 0 will make the image brighter.

- **contrast**
Type: **SystemDouble**
Percentage contrast value where -100 <= contrast <= 100. A value of 0 means no change, less than 0 will decrease the contrast and greater than 0 will increase the contrast of the image.

**gamma**
Type: **SystemDouble**
Gamma value to be used for gamma correction. A value of 1.0 leaves the image alone, less than one darkens it, and greater than one lightens it.

**invert**
Type: **SystemBoolean**
If set to true, the image will be inverted.

Return Value
Type: **Int32**
The number of adjustments applied to the resulting lookup table compared to a blind lookup table.

### Exceptions

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</tr>
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<td>ArgumentException</td>
<td><code>lookUpTable.Length</code> is not 256.</td>
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### See Also

**Reference**
FreedImageBitmap Class
FreedImageAPI Namespace

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FreeImageBitmap GetBounds Method

Gets the bounds of this FreeImageBitmap in the specified unit.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public RectangleF GetBounds(
    ref GraphicsUnit pageUnit
)
```

**Parameters**

*pageUnit*
- Type: `System.Drawing.GraphicsUnit`  
  One of the `GraphicsUnit` values indicating the unit of measure for the bounding rectangle.

**Return Value**
- Type: `RectangleF`  
  The `RectangleF` that represents the bounds of this `FreeImageBitmap`, in the specified unit.

**See Also**

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace
FreeImageBitmapGetChannel Method

Retrieves the red, green, blue or alpha channel of a 24- or 32-bit image.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetChannel(
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

### Parameters

*channel*
Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL
The color channel to extract.

### Return Value

Type: FreeImageBitmap
The color channel in a new instance.

### See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace
FreeImageBitmapGetColorConvertedInstance Method

Converts this FreeImageBitmap into a different color depth initializing a new instance. The parameter `bpp` specifies color depth, greyscale conversion and palette reorder. Adding the `FICD_FORCE_GREYSCALE` flag will first perform a conversion to greyscale. This can be done with any target color depth.

Adding the `FICD_REORDER_PALETTE` flag will allow the algorithm to reorder the palette. This operation will not be performed to non-greyscale images to prevent data loss by mistake.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetColorConvertedInstance(
    FREE_IMAGE_COLOR_DEPTH bpp
)
```

### Parameters

`bpp`  
Type: FreeImageAPIFREE_IMAGE_COLOR_DEPTH  
A bitfield containing information about the conversion to perform.

### Return Value

Type: FreeImageBitmap  
The converted instance.
See Also

Reference
FreelImageBitmap Class
FreelImageAPI Namespace

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FreeImage.NET Class Library Reference

FreeImageBitmap.GetComplexChannel Method

Retrieves the real part, imaginary part, magnitude or phase of a complex image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetComplexChannel(
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

### Parameters

- **channel**
  - Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL  
    The color channel to extract.

### Return Value

- Type: FreeImageBitmap  
  The color channel in a new instance.

### See Also

- Reference  
  FreeImageBitmap Class  
  FreeImageAPI Namespace
Contact/Feedback: FreelImage.NET Homepage
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FreeImageBitmap GetEnlargedInstance Method

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<td>Enlarges or shrinks the FreeImageBitmap selectively per side and fills newly added areas with the specified background color, returning a new instance.</td>
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<tr>
<td>GetEnlargedInstanceT(Int32, Int32, Int32, Int32, NullableT, FREE_IMAGE_COLOR_OPTIONS)</td>
<td>Enlarges or shrinks the FreeImageBitmap selectively per side and fills newly added areas with the specified background color, returning a new instance.</td>
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See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace
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Enlarges or shrinks this FreeImageBitmap selectively per side and fills newly added areas with the specified background color returning a new instance. See EnlargeCanvasT(FIBITMAP, Int32, Int32, Int32, Int32, Nullable<T>, FREE_IMAGE_COLOR_OPTIONS) for further details.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetEnlargedInstance<T>(
    int left,
    int top,
    int right,
    int bottom,
    Nullable<T> color
)
where T : struct, new()
```

### Parameters

**left**
Type: SystemInt32
The number of pixels, the image should be enlarged on its left side. Negative values shrink the image on its left side.

**top**
Type: SystemInt32
The number of pixels, the image should be enlarged on its top side. Negative values shrink the image on its top side.

right
Type: SystemInt32
The number of pixels, the image should be enlarged on its right side. Negative values shrink the image on its right side.

bottom
Type: SystemInt32
The number of pixels, the image should be enlarged on its bottom side. Negative values shrink the image on its bottom side.

color
Type: SystemNullable<T>
The color, the enlarged sides of the image should be filled with.

Type Parameters

T
The type of the specified color.

Return Value
Type: FreeImageBitmap
The enlarged instance.

See Also

Reference
FreeImageBitmap Class
GetEnlargedInstance Overload
FreeImageAPI Namespace

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**FreeImageBitmap** **GetEnlargedInstance**<T>(Int32, Int32, Int32, Int32, Nullable<T>, FREE_IMAGE_COLOR_OPTIONS)

Enlarges or shrinks this FreeImageBitmap selectivity per side and fills newly added areas with the specified background color returning a new instance. See EnlargeCanvasT(FIBITMAP, Int32, Int32, Int32, Int32, Nullable<T>, FREE_IMAGE_COLOR_OPTIONS) for further details.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetEnlargedInstance<T>(
    int left,
    int top,
    int right,
    int bottom,
    Nullable<T> color,
    FREE_IMAGE_COLOR_OPTIONS options
)

where T : struct, new()
```

### Parameters

- **left**
  - Type: **System.Int32**  
  - The number of pixels, the image should be enlarged on its left
side. Negative values shrink the image on its left side.

top
Type: SystemInt32
The number of pixels, the image should be enlarged on its top side. Negative values shrink the image on its top side.

right
Type: SystemInt32
The number of pixels, the image should be enlarged on its right side. Negative values shrink the image on its right side.

bottom
Type: SystemInt32
The number of pixels, the image should be enlarged on its bottom side. Negative values shrink the image on its bottom side.

color
Type: SystemNullableT
The color, the enlarged sides of the image should be filled with.

options
Type: FreeImageAPIFREE_IMAGE_COLOR_OPTIONS
Options that affect the color search process for palletized images.

Type Parameters

T
The type of the specified color.

Return Value
Type: FreeImageBitmap
The enlarged instance.

See Also

Reference
FreeImageBitmap Class
GetEnlargedInstance Overload
FreeImageAPI Namespace
**FreeImageBitmap.GetHashCode Method**

Returns a hash code for this FreeImageBitmap structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override int GetHashCode()
```

**Return Value**

*Type: Int32*

An integer value that specifies the hash code for this FreeImageBitmap.

**See Also**

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

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## FreeImageBitmap.GetHbitmap Method

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<td>Creates a GDI bitmap object from this <code>FreeImageBitmap</code>.</td>
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### See Also

- **Reference**
  - `FreeImageBitmap Class`
  - `FreeImageAPI Namespace`

---

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FreeImageBitmapGetHbitmap Method

Creates a GDI bitmap object from this `FreeImageBitmap`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public IntPtr GetHbitmap()
```

**Return Value**

Type: `IntPtr`  
A handle to the GDI bitmap object that this method creates.

## See Also

**Reference**
- `FreeImageBitmap Class`
- `GetHbitmap Overload`
- `FreeImageAPI Namespace`

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FreeImageBitmap.GetHbitmap Method (Color)

Creates a GDI bitmap object from this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public IntPtr GetHbitmap(Color background)
```

### Parameters

- **background**  
  Type: System.Drawing.Color  
  A Color structure that specifies the background color. This parameter is ignored if the bitmap is totally opaque.

### Return Value

- Type: IntPtr  
  A handle to the GDI bitmap object that this method creates.

### See Also

- Reference  
  FreeImageBitmap Class  
  GetHbitmap Overload  
  FreeImageAPI Namespace
**FreeImageBitmapClass.GetHbitmapForDevice Method**

Creates a GDI bitmap object from this `FreeImageBitmap` with the same color depth as the primary device.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public IntPtr GetHbitmapForDevice()
```

**Return Value**

Type: `IntPtr`  
A handle to the GDI bitmap object that this method creates.

## See Also

**Reference**

- `FreeImageBitmap Class`
- `FreeImageAPI Namespace`

---

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FreeImageBitmapGetMethod

Returns the handle to an icon.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public IntPtr GetHicon()
```

**Return Value**

Type: IntPtr

A Windows handle to an icon with the same image as this FreeImageBitmap.

## See Also

Reference

- FreeImageBitmap Class
- FreeImageAPI Namespace

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FreeImage.NET Class Library Reference

FreeImageBitmapGetHistogram Method

Computes the image histogram.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public bool GetHistogram(
    FREE_IMAGE_COLOR_CHANNEL channel,
    out int[] histogram
)
```

### Parameters

**channel**
- Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL  
  Channel to compute from.

**histogram**
- Type: SystemInt32  
  Array of integers containing the histogram.

### Return Value

**Type:** Boolean  
Returns true on success, false on failure.

## See Also

- Reference
  FreeImageBitmap Class
FreeImageBitmap

GetPixel Method

Gets the Color of the specified pixel in this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Color GetPixel(
    int x,
    int y
)
```

**Parameters**

- **x**
  - Type: SystemInt32
  - The x-coordinate of the pixel to retrieve.

- **y**
  - Type: SystemInt32
  - The y-coordinate of the pixel to retrieve.

**Return Value**

- Type: Color
  - A Color structure that represents the color of the specified pixel.

**Exceptions**

<table>
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<th>Exception</th>
<th>Condition</th>
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### Exception

The operation failed.

### NotSupportedException

The type of this bitmap is not supported.

#### See Also

**Reference**

- **FreelImageBitmap Class**
- **FreelImageAPI Namespace**

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FreeImageBitmapGetPixelFormatSize Method

Returns the color depth, in number of bits per pixel, of the specified pixel format.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static int GetPixelFormatSize(  
    PixelFormat pixfmt
)
```

### Parameters

**pixfmt**  
Type: `System.Drawing.Imaging.PixelFormat`  
The `PixelFormat` member that specifies the format for which to find the size.

### Return Value

Type: `Int32`  
The color depth of the specified pixel format.

### See Also

**Reference**  
FreeImageBitmap Class  
FreeImageAPI Namespace
FreeImageBitmapGetPropertyItem Method

Gets the specified property item from this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public PropertyItem GetPropertyItem(
    int propid
)
```

Parameters

`propid`
Type: SystemInt32
The ID of the property item to get.

Return Value
Type: PropertyItem
The PropertyItem this method gets.

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

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FreeImageBitmap

GetQuantizedInstance

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32)</td>
<td>Quantizes FreeImageBitmap from 24 bit, using the specified algorithm initializing a new 8 bit instance with the specified paletteSize.</td>
</tr>
<tr>
<td>GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Palette)</td>
<td>Quantizes FreeImageBitmap from 24 bit, using the specified algorithm to reservePalette initializing a new 8 bit instance with the specified palette.</td>
</tr>
<tr>
<td>GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Int32, Palette)</td>
<td>Quantizes FreeImageBitmap from 24 bit, using the specified algorithm to reserveSize initializing a new 8 bit instance with the specified palette.</td>
</tr>
</tbody>
</table>
GetQuantizedInstance(FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)

Quantizes this FreeImageBitmap from 24 bit, using the specified algorithm to reserve entries from the specified palette to initialize an 8 bit instance with the specified palette size.
FreeImageBitmapGetQuantizedInstance Method (FREE_IMAGE_QUANTIZE, Int32)

Quantizes this FreeImageBitmap from 24 bit, using the specified algorithm initializing a new 8 bit instance with the specified paletteSize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FreeImageBitmap GetQuantizedInstance(
    FREE_IMAGE_QUANTIZE algorithm,
    intpaletteSize
)
```

Parameters

algorithm
- Type: FreeImageAPIFREE_IMAGE_QUANTIZE
- The color reduction algorithm to be used.

paletteSize
- Type: SystemInt32
- Size of the desired output palette.

Return Value
- Type: FreeImageBitmap
- The quantized instance.
See Also

Reference
FreelmageBitmap Class
GetQuantizedInstance Overload
FreelmageAPI Namespace

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FreeImageBitmap GetQuantizedInstance

Method (FREE_IMAGE_QUANTIZE, Int32, Palette)

Quantizes this FreeImageBitmap from 24 bit, using the specified algorithm and reservePalette initializing a new 8 bit instance with the specified paletteSize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public FreeImageBitmap GetQuantizedInstance(
    FREE_IMAGE_QUANTIZE algorithm,
    int paletteSize,
    Palette reservePalette
)
```

Parameters

**algorithm**
Type: FreeImageAPIFREE_IMAGE_QUANTIZE
The color reduction algorithm to be used.

**paletteSize**
Type: SystemInt32
Size of the desired output palette.

**reservePalette**
Type: FreeImageAPIPalette
The provided palette.
Return Value
Type: FreeImageBitmap
The quantized instance.

See Also

Reference
FreeImageBitmap Class
GetQuantizedInstance Overload
FreeImageAPI Namespace

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FreeImageBitmap from 24 bit, using the specified algorithm and up to reserveSize entries from reservePalette initializing a new 8 bit instance with the specified paletteSize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FreeImageBitmap GetQuantizedInstance(
    FREE_IMAGE_QUANTIZE algorithm,
    int paletteSize,
    int reserveSize,
    Palette reservePalette
)
```

Parameters

- **algorithm**
  Type: FreeImageAPIFREE_IMAGE_QUANTIZE
  The color reduction algorithm to be used.

- **paletteSize**
  Type: System.Int32
  Size of the desired output palette.

- **reserveSize**
  Type: System.Int32
  Size of the provided palette.
reservePalette
Type: FreeImageAPIPalette
The provided palette.

Return Value
Type: FreeImageBitmap
The quantized instance.

See Also

Reference
FreeImageBitmap Class
GetQuantizedInstance Overload
FreeImageAPI Namespace

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FreeImageBitmapGetQuantizedInstance Method (FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)

Quantizes this FreeImageBitmap from 24 bit, using the specified algorithm and up to reserveSize entries from reservePalette initializing a new 8 bit instance with the specified paletteSize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public FreeImageBitmap GetQuantizedInstance(
    FREE_IMAGE_QUANTIZE algorithm,
    int paletteSize,
    int reserveSize,
    RGBQUAD[] reservePalette
)
```

Parameters

- **algorithm**
  - Type: FreeImageAPIFREE_IMAGE_QUANTIZE
  - The color reduction algorithm to be used.

- **paletteSize**
  - Type: SystemInt32
  - Size of the desired output palette.

- **reserveSize**
  - Type: SystemInt32
  - Size of the provided palette.
reservePalette
Type: FreeImageAPIRGBQUAD
The provided palette.

Return Value
Type: FreeImageBitmap
The quantized instance.

See Also

Reference
FreeImageBitmap Class
GetQuantizedInstance Overload
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
## FreeImageBitmap.GetRotatedInstance Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetRotatedInstance(Double)</td>
<td>Rotates this FreeImageBitmap by the specified angle initializing a new instance. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.</td>
</tr>
<tr>
<td>GetRotatedInstanceT(Double, NullableT)</td>
<td>Rotates this FreeImageBitmap by the specified angle initializing a new instance. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.</td>
</tr>
<tr>
<td>GetRotatedInstance(Double, Double, Double, Double, Boolean)</td>
<td>This method performs a rotation and / or</td>
</tr>
</tbody>
</table>
translation of an 8-bit greyscale, 24- or 32-bit image, using a 3rd order (cubic) B-Spline initializing a new instance.

See Also

Reference
- FreelImageBitmap Class
- FreelImageAPI Namespace

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FreeImageBitmap.GetRotatedInstance (Double)

Rotates this FreeImageBitmap by the specified angle initializing a new instance. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetRotatedInstance(
    double angle
)
```

### Parameters

- **angle**
  - Type: SystemDouble  
  - The angle of rotation.

### Return Value

- Type: FreeImageBitmap  
- The rotated instance.

### See Also

- Reference  
  - FreeImageBitmap Class  
  - GetRotatedInstance Overload  
  - FreeImageAPI Namespace
FreeImage.Bitmap

GetRotatedInstance Method (Double, Nullable<T>)

Rotates this FreeImageBitmap by the specified angle initializing a new instance. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FreeImageBitmap GetRotatedInstance<T>(
    double angle,
    Nullable<T> backgroundColor
)
where T : struct, new()
```

**Parameters**

*angle*
- Type: System.Double
- The angle of rotation.

*backgroundColor*
- Type: System.Nullable<T>
- The color used used to fill the bitmap's background.

**Type Parameters**

*T*
- The type of the color to use as background.
Return Value
Type: FreeImageBitmap
The rotated instance.

See Also

Reference
FreeImageBitmap Class
GetRotatedInstance Overload
FreeImageAPI Namespace

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FreeImageBitmap GetRotatedInstance Method (Double, Double, Double, Double, Double, Boolean)

This method performs a rotation and / or translation of an 8-bit greyscale, 24- or 32-bit image, using a 3rd order (cubic) B-Spline initializing a new instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetRotatedInstance(
    double angle,
    double xShift,
    double yShift,
    double xOrigin,  
    double yOrigin,  
    bool useMask
)
```

### Parameters

- **angle**
  - Type: System.Double
  - The angle of rotation.

- **xShift**
  - Type: System.Double
  - Horizontal image translation.

- **yShift**
**Type:** SystemDouble
Vertical image translation.

**xOrigin**
Type: SystemDouble
Rotation center x-coordinate.

**yOrigin**
Type: SystemDouble
Rotation center y-coordinate.

**useMask**
Type: SystemBoolean
When true the irrelevant part of the image is set to a black color, otherwise, a mirroring technique is used to fill irrelevant pixels.

**Return Value**
Type: FreelImageBitmap
The rotated instance.

**See Also**

**Reference**
FreelImageBitmap Class
GetRotatedInstance Overload
FreelImageAPI Namespace

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## FreeImageBitmap.GetScaledInstance Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetScaledInstance(Size, FREE_IMAGE_FILTER)</td>
<td>Rescales this FreeImageBitmap to the specified size using the specified filter initializing a new instance.</td>
</tr>
<tr>
<td>GetScaledInstance(Int32, Int32, FREE_IMAGE_FILTER)</td>
<td>Rescales this FreeImageBitmap to the specified size using the specified filter initializing a new instance.</td>
</tr>
</tbody>
</table>

## See Also

### Reference

- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
Rescales this FreeImageBitmap to the specified size using the specified filter initializing a new instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetScaledInstance(
    Size newSize,
    FREE_IMAGE_FILTER filter
)
```

### Parameters

- **newSize**  
  Type: System.DrawingSize  
  The Size structure that represent the size of the new FreeImageBitmap.

- **filter**  
  Type: FreeImageAPIFREE_IMAGE_FILTER  
  Filter to use for resizing.

### Return Value

Type: FreeImageBitmap  
The rescaled instance.
See Also

Reference
FreelmageBitmap Class
GetScaledInstance Overload
FreelmageAPI Namespace

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FreeImageBitmap

GetScaledInstance Method (Int32, Int32, FREE_IMAGE_FILTER)

Rescales this FreeImageBitmap to the specified size using the specified filter initializing a new instance.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public FreeImageBitmap GetScaledInstance(
    int width,
    int height,
    FREE_IMAGE_FILTER filter
)
```

Parameters

- **width**
  Type: System.Int32
  Width of the new FreeImageBitmap.

- **height**
  Type: System.Int32
  Height of the new FreeImageBitmap.

- **filter**
  Type: FreeImageAPIFREE_IMAGE_FILTER
  Filter to use for resizing.

Return Value
Type: `FreeImageBitmap`
The rescaled instance.

## See Also

### Reference

- `FreeImageBitmap Class`
- `GetScaledInstance Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: [FreImage.NET Homepage](https://freimage.net)
Help improve this Documentation: [Join the Project](https://github.com/FreImage/FreImage.NET)
# FreeImageBitmap GetScanline Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetScanlineT(Int32)</td>
<td>Returns an instance of Scanline&lt;sup&gt;T&lt;/sup&gt;, representing the scanline specified by scanline of this FreeImageBitmap. Since FreeImage bitmaps are always bottom up aligned, keep in mind that scanline 0 is the bottom-most line of the image.</td>
</tr>
<tr>
<td>GetScanline(Int32)</td>
<td>Returns an instance of Scanline&lt;sup&gt;T&lt;/sup&gt;, representing the scanline specified by scanline of this FreeImageBitmap. Since FreeImage bitmaps are always bottom up aligned, keep in mind that scanline 0 is the bottom-most line of the image.</td>
</tr>
</tbody>
</table>

## See Also

Reference
FreedImageBitmap Class
FreedImageAPI Namespace

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FreeImageBitmap.GetScanline<T> Method (Int32)

Returns an instance of Scanline<T>, representing the scanline specified by scanline of this FreeImageBitmap. Since FreeImage bitmaps are always bottom up aligned, keep in mind that scanline 0 is the bottom-most line of the image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Scanline<T> GetScanline<T>(
    int scanline
)
where T : struct, new()
```

### Parameters

- **scanline**  
  Type: System.Int32  
  Number of the scanline to retrieve.

### Type Parameters

- **T**  

### Return Value

Type: Scanline<T>
An instance of `ScanlineT` representing the `scanline`th scanline.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>The bitmap's type or color depth are not supported.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td><code>scanline</code> is no valid value.</td>
</tr>
</tbody>
</table>

## Remarks

List of return-types of `T`:

<table>
<thead>
<tr>
<th>Color Depth / Type</th>
<th>Result Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (FIT_BITMAP)</td>
<td>FI1BIT</td>
</tr>
<tr>
<td>4 (FIT_BITMAP)</td>
<td>FI4BIT</td>
</tr>
<tr>
<td>8 (FIT_BITMAP)</td>
<td>Byte</td>
</tr>
<tr>
<td>16 (FIT_BITMAP)</td>
<td>UInt16</td>
</tr>
<tr>
<td>16 - 555 (FIT_BITMAP)</td>
<td>FI16RGB555</td>
</tr>
<tr>
<td>16 - 565 (FIT_BITMAP)</td>
<td>FI16RGB565</td>
</tr>
<tr>
<td>24 (FIT_BITMAP)</td>
<td>RGBTRIPLE</td>
</tr>
<tr>
<td>32 (FIT_BITMAP)</td>
<td>RGBQUAD</td>
</tr>
<tr>
<td>FIT_COMPLEX</td>
<td>FICOMPLEX</td>
</tr>
<tr>
<td>FIT_DOUBLE</td>
<td>Double</td>
</tr>
<tr>
<td>FIT_FLOAT</td>
<td>Single</td>
</tr>
</tbody>
</table>
FreeImageBitmap bitmap = new FreeImageBitmap(@"C:\Pictures\picture.bmp" if (bitmap.ColorDepth == 32) {
    Scanline<RGBQUAD> scanline = bitmap.GetScanline;
    foreach (RGBQUAD pixel in scanline) {
        Console.WriteLine(pixel);
    }
}}
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FreeImageBitmap.GetScanline Method (Int32)

Returns an instance of `ScanlineT`, representing the scanline specified by `scanline` of this `FreeImageBitmap`. Since FreeImage bitmaps are always bottom up aligned, keep in mind that scanline 0 is the bottom-most line of the image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Object GetScanline(
    int scanline
)
```

### Parameters

- **scanline**
  - Type: `SystemInt32`
  - Number of the scanline to retrieve.

### Return Value

- Type: `Object`  
  An instance of `ScanlineT` representing the `scanline`th scanline.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>The type of the bitmap or</td>
</tr>
</tbody>
</table>
color depth are not supported.

**ArgumentOutOfRangeException** scanline is no valid value.

### Remarks

List of return-types of T:

<table>
<thead>
<tr>
<th>Color Depth / Type</th>
<th>Result Type</th>
</tr>
</thead>
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<td>FI4BIT</td>
</tr>
<tr>
<td>8 (FIT_BITMAP)</td>
<td>Byte</td>
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<tr>
<td>16 (FIT_BITMAP)</td>
<td>UInt16</td>
</tr>
<tr>
<td>16 - 555 (FIT_BITMAP)</td>
<td>FI16RGB555</td>
</tr>
<tr>
<td>16 - 565 (FIT_BITMAP)</td>
<td>FI16RGB565</td>
</tr>
<tr>
<td>24 (FIT_BITMAP)</td>
<td>RGBTRIPLE</td>
</tr>
<tr>
<td>32 (FIT_BITMAP)</td>
<td>RGBQUAD</td>
</tr>
<tr>
<td>FIT_COMPLEX</td>
<td>FICOMPLEX</td>
</tr>
<tr>
<td>FIT_DOUBLE</td>
<td>Double</td>
</tr>
<tr>
<td>FIT_FLOAT</td>
<td>Single</td>
</tr>
<tr>
<td>FIT_INT16</td>
<td>Int16</td>
</tr>
<tr>
<td>FIT_INT32</td>
<td>Int32</td>
</tr>
<tr>
<td>FIT_RGB16</td>
<td>FIRGB16</td>
</tr>
</tbody>
</table>
## Examples

FreeImageBitmap bitmap = new FreeImageBitmap(@"C:\#
if (bitmap.ColorDepth == 32)
{
    Scanline<RGBQUAD> scanline = (Scanline<RGBQUAD>
    foreach (RGBQUAD pixel in scanline)
    {
        Console.WriteLine(pixel);
    }
}

## See Also

Reference
- FreeImageBitmap Class
- GetScanline Overload
- FreeImageAPI Namespace

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FreeImageBitmap::GetScanlinePointer Method

Returns a pointer to the specified scanline. Due to FreeImage bitmaps are bottom up, scanline 0 is the most bottom line of the image.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public IntPtr GetScanlinePointer(int scanline)
```

Parameters

- `scanline`
  Type: System.Int32
  Number of the scanline.

Return Value

Type: IntPtr
Pointer to the scanline.

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace
FreeImageBitmap.GetScanlines Method

Returns a list of structures, representing the scanlines of this FreeImageBitmap. Due to FreeImage bitmaps are bottom up, scanline 0 is the bottom-most line of the image. Each color depth has a different representing structure due to different memory layouts.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public IList GetScanlines()
```

### Return Value

Type: `IList`


## Remarks

List of return-types of T:

<table>
<thead>
<tr>
<th>Color Depth / Type</th>
<th>Result Type of <code>IEnumerable&lt;Scanline&lt;T&gt;&gt;</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (FIT_BITMAP)</td>
<td>FI1BIT</td>
</tr>
<tr>
<td>4 (FIT_BITMAP)</td>
<td>FI4BIT</td>
</tr>
<tr>
<td>8 (FIT_BITMAP)</td>
<td>Byte</td>
</tr>
<tr>
<td>Bits</td>
<td>Format</td>
</tr>
<tr>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td>16</td>
<td>FIT_BITMAP</td>
</tr>
<tr>
<td>16 - 555</td>
<td>FI16RGB555</td>
</tr>
<tr>
<td>16 - 565</td>
<td>FI16RGB565</td>
</tr>
<tr>
<td>24</td>
<td>FIT_BITMAP</td>
</tr>
<tr>
<td>32</td>
<td>FIT_BITMAP</td>
</tr>
<tr>
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<td>FICOMPLEX</td>
</tr>
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<td>FIT_DOUBLE</td>
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<tr>
<td>FIT_FLOAT</td>
<td>Single</td>
</tr>
<tr>
<td>FIT_INT16</td>
<td>Int16</td>
</tr>
<tr>
<td>FIT_INT32</td>
<td>Int32</td>
</tr>
<tr>
<td>FIT_RGB16</td>
<td>FIRGB16</td>
</tr>
<tr>
<td>FIT_RGBA16</td>
<td>FIRGBA16</td>
</tr>
<tr>
<td>FIT_RGBAF</td>
<td>FIRGBAF</td>
</tr>
<tr>
<td>FIT_RGBF</td>
<td>FIRGBF</td>
</tr>
<tr>
<td>FIT_UINT16</td>
<td>UInt16</td>
</tr>
<tr>
<td>FIT_UINT32</td>
<td>UInt32</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreImageBitmap Class
## FreeImageBitmap::GetThumbnail Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetThumbnailImage(Int32, Boolean)</td>
<td>Obsolete. Returns a thumbnail for this FreeImageBitmap, keeping aspect ratio. maxPixelSize defines the maximum width or height of the thumbnail.</td>
</tr>
<tr>
<td>GetThumbnailImage(Int32, Int32, ImageGetThumbnailImageAbort, IntPtr)</td>
<td>Returns a thumbnail for this FreeImageBitmap.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - FreeImageBitmap Class
  - FreeImageAPI Namespace

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FreeImageBitmap GetThumbnailImage Method (Int32, Boolean)

**Note:** This API is now obsolete.

Returns a thumbnail for this FreeImageBitmap, keeping aspect ratio. *maxPixelSize* defines the maximum width or height of the thumbnail.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
[ObsoleteAttribute("Replaced by FreeImageBitmap.MakeThumbnail")]
public FreeImageBitmap GetThumbnailImage(
    int maxPixelSize,
    bool convert
)
```

**Parameters**

- **maxPixelSize**
  - Type: `SystemInt32`  
  - Thumbnail square size.

- **convert**
  - Type: `SystemBoolean`  
  - When true HDR images are transperantly converted to standard images.

**Return Value**
- Type: `FreeImageBitmap`  
  - The thumbnail in a new instance.
See Also

Reference
FreelmageBitmap Class
GetThumbnailImage Overload
FreelmageAPI Namespace

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Returns a thumbnail for this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetThumbnailImage(
    int thumbWidth,
    int thumbHeight,
    ImageGetThumbnailImageAbort callback,
    IntPtr callBackData
)
```

### Parameters

- **thumbWidth**  
  Type: System.Int32  
  The width, in pixels, of the requested thumbnail image.

- **thumbHeight**  
  Type: System.Int32  
  The height, in pixels, of the requested thumbnail image.

- **callback**  
  Type: System.Drawing.ImageGetThumbnailImageAbort  
  Ignored.
**callBackData**

Type: `System.IntPtr`

Ignored.

**Return Value**

Type: `FreeImageBitmap`

A `FreeImageBitmap` that represents the thumbnail.

**See Also**

**Reference**

- `FreeImageBitmap Class`
- `GetThumbnailImage Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: [FreelImage.NET Homepage](#)

Help improve this Documentation: [Join the Project](#)
FreeImageBitmapGetTypeConvertedInstance Method

Converts this `FreeImageBitmap` to `type`. In case source and destination type are the same, the operation fails. An error message can be caught using the 'Message' event.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FreeImageBitmap GetTypeConvertedInstance(
    FREE_IMAGE_TYPE type,
    bool scaleLinear
)
```

### Parameters

**type**
- Type: `FreeImageAPIFREE_IMAGE_TYPE`  
  Destination type.

**scaleLinear**
- Type: `SystemBoolean`  
  True to scale linear, else false.

### Return Value
- Type: `FreeImageBitmap`  
  The converted instance.

### See Also
FreeImageBitmapGetWICMetadataHandler Method

Gets a WICMetadataHandler (Windows Imaging Component Metadata Handler) for this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public WICMetadataHandler GetWICMetadataHandler()
```

**Return Value**  
Type: WICMetadataHandler  

**Remarks**

Doesn't work with Mono.

**See Also**

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmapInvert Method

Inverts each pixel data.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public bool Invert()
```

**Return Value**

Type: **Boolean**  
Returns true on success, false on failure.

### See Also

**Reference**

FreeImageBitmap Class  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmap IsAlphaPixelFormat Method

Returns a value that indicates whether the pixel format for this FreeImageBitmap contains alpha information.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool IsAlphaPixelFormat(
   PixelFormat pixfmt
)
```

### Parameters

* **pixfmt**  
  Type: System.Drawing.ImagingPixelFormat  
  ThePixelFormat to test.

### Return Value

Type: Boolean
  * true if pixfmt contains alpha information; otherwise, false.

### See Also

Reference
FreeImageBitmap Class  
FreeImageAPI Namespace
FreeImageBitmap_IsCanonicalPixelFormat Method

Returns a value that indicates whether the pixel format is 32 bits per pixel.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool IsCanonicalPixelFormat(  
    PixelFormat pixfmt  
)
```

### Parameters

- **pixfmt**
  - Type: System.Drawing.Imaging.PixelFormat  
  - The `PixelFormat` to test.

### Return Value

- Type: Boolean  
  - true if `pixfmt` is canonical; otherwise, false.

### See Also

- Reference
  - FreeImageBitmap Class  
  - FreeImageAPI Namespace
FreeImageBitmapIsExtendedPixelFormat Method

Returns a value that indicates whether the pixel format is 64 bits per pixel.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public static bool IsExtendedPixelFormat(
    PixelFormat pixfmt
)
```

### Parameters

- **pixfmt**  
  Type: System.Drawing.ImagingPixelFormat  
  The `PixelFormat` enumeration to test.

### Return Value

Type: Boolean  
true if `pixfmt` is extended; otherwise, false.

## See Also

Reference  
FreeImageBitmap Class  
FreeImageAPI Namespace
## FreeImageBitmapJPEGCrop Method

### Overload List

<table>
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<th>Description</th>
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<td>JPEGCrop(String, String, Rectangle)</td>
<td>Performs a lossless crop on a JPEG file.</td>
</tr>
<tr>
<td>JPEGCrop(String, String, Int32, Int32, Int32, Int32)</td>
<td>Performs a lossless crop on a JPEG file.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
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FreeImage.NET Class Library Reference

FreeImageBitmap

JPEGCrop Method (String, String, Rectangle)

Performs a lossless crop on a JPEG file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool JPEGCrop(
    string source,
    string destination,
    Rectangle rect
)
```

### Parameters

**source**  
Type: System.String  
Source filename.

**destination**  
Type: System.String  
Destination filename.

**rect**  
Type: System.Drawing.Rectangle  
Specifies the cropped rectangle.

### Return Value

Type: Boolean
Returns true on success, false on failure.

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><em>source</em> or <em>destination</em> is null.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td><em>source</em> does not exist.</td>
</tr>
</tbody>
</table>

## See Also

**Reference**
- FreelImageBitmap Class
- JPEGCrop Overload
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapJPEGCrop

Method (String, String, Int32, Int32, Int32, Int32)

Performs a lossless crop on a JPEG file.

**Namespace**: FreeImageAPI

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public static bool JPEGCrop(
    string source,
    string destination,
    int left,
    int top,
    int right,
    int bottom
)
```

**Parameters**

- **source**
  - Type: SystemString
  - Source filename.

- **destination**
  - Type: SystemString
  - Destination filename.

- **left**
  - Type: SystemInt32
  - Specifies the left position of the cropped rectangle.
*top*  
Type: `SystemInt32`  
Specifies the top position of the cropped rectangle.

*right*  
Type: `SystemInt32`  
Specifies the right position of the cropped rectangle.

*bottom*  
Type: `SystemInt32`  
Specifies the bottom position of the cropped rectangle.

**Return Value**  
Type: `Boolean`  
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
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<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
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<td><code>source</code> does not exist.</td>
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</tbody>
</table>

### See Also

**Reference**  
- `FreelImageBitmap Class`  
- `JPEGCrop Overload`  
- `FreelImageAPI Namespace`
FreeImageBitmapJPEGTransform Method

Performs a lossless rotation or flipping on a JPEG file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool JPEGTransform(
    string source,
    string destination,
    FREE_IMAGE_JPEG_OPERATION operation,
    bool perfect
)
```

**Parameters**

- **source**  
  Type: System.String  
  Source file.

- **destination**  
  Type: System.String  
  Destination file; can be the source file; will be overwritten.

- **operation**  
  Type: FreeImageAPIFREE_IMAGE_JPEG_OPERATION  
  The operation to apply.

- **perfect**  
  Type: System.Boolean  
  To avoid lossy transformation, you can set the perfect parameter to true.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapLockBits Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>LockBits(Rectangle, ImageLockMode, PixelFormat)</code></td>
<td>This function is not yet implemented.</td>
</tr>
<tr>
<td><code>LockBits(Rectangle, ImageLockMode, PixelFormat, BitmapData)</code></td>
<td>This function is not yet implemented.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapLockBits
Method (Rectangle, ImageLockMode, PixelFormat)

This function is not yet implemented.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public BitmapData LockBits(
    Rectangle rect,
    ImageLockMode flags,
    PixelFormat format
)
```

Parameters

**rect**

Type: System.DrawingRectangle

**flags**

Type: System.Drawing.ImagingImageLockMode

**format**
Type: `System.Drawing.Imaging.PixelPixelFormat`

[Missing `<param name="format"/>` documentation for

Return Value
Type: `BitmapData`

[Missing `<returns>` documentation for

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NotImplementedException</td>
<td>This method is not implemented.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- `FreeImageBitmap Class`
- `LockBits Overload`
- `FreeImageAPI Namespace`

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Help improve this Documentation: [Join the Project](#)
FreeImage.NET Class Library Reference

FreeImageBitmap LockBits Method (Rectangle, ImageLockMode, PixelFormat, BitmapData)

This function is not yet implemented.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public BitmapData LockBits(  
    Rectangle rect,  
    ImageLockMode flags,  
    PixelFormat format,  
    BitmapData bitmapData  
)
```

### Parameters

**rect**  
Type: System.Drawing.Rectangle  

**flags**  
Type: System.Drawing.Imaging.ImageLockMode  
format
Type: System.Drawing.Imaging.PixelFormat

bitmapData
Type: System.Drawing.Imaging.BitmapData

Return Value
Type: BitmapData

Exceptions

<table>
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<tr>
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</tr>
</thead>
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</table>

See Also

Reference
FreImageBitmap Class
LockBits Overload
FreImageAPI Namespace

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Help improve this Documentation: Join the Project
**FreeImageBitmapLookupSVGColor Method**

Converts a SVG color name into a corresponding RGB value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool LookupSVGColor(
    string color,
    out byte red,
    out byte green,
    out byte blue
)
```

### Parameters

- **color**
  - Type: SystemString  
  - Name of the color to convert.

- **red**
  - Type: SystemByte  
  - Red component.

- **green**
  - Type: SystemByte  
  - Green component.

- **blue**
  - Type: SystemByte  
  - Blue component.
Return Value
Type: Boolean
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>color is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImageBitmap Class
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapLookupX11Color Method

Converts a X11 color name into a corresponding RGB value.

**Namespace**: FreeImageAPI  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool LookupX11Color(
    string color,
    out byte red,
    out byte green,
    out byte blue
)
```

### Parameters

- **color**  
  Type: System.String  
  Name of the color to convert.

- **red**  
  Type: System.Byte  
  Red component.

- **green**  
  Type: System.Byte  
  Green component.

- **blue**  
  Type: System.Byte  
  Blue component.
Return Value
Type: Boolean
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>color is null.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImageBitmap Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapMakeThumbnail Method

Returns a thumbnail for this FreeImageBitmap, keeping aspect ratio. maxPixelSize defines the maximum width or height of the thumbnail.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#  

```csharp
public FreeImageBitmap MakeThumbnail(
    int maxPixelSize,
    bool convert
)
```

Parameters

- `maxPixelSize`  
  Type: System.Int32  
  Thumbnail square size.
- `convert`  
  Type: System.Boolean  
  When true HDR images are transperantly converted to standard images.

Return Value

Type: FreeImageBitmap  
The thumbnail in a new instance.

See Also
Reference
FreelImageBitmap Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
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FreeImageBitmap MakeTransparent Method

Overload List

<table>
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<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MakeTransparent</td>
<td>Makes the default transparent color transparent for this FreeImageBitmap.</td>
</tr>
<tr>
<td>MakeTransparent(Color)</td>
<td>Makes the specified color transparent for this FreeImageBitmap.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace
FreeImageBitmapMakeTransparent Method

Makes the default transparent color transparent for this FreeImageBitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

public void MakeTransparent()
FreeImageBitmap

MakeTransparent (Color)

Makes the specified color transparent for this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void MakeTransparent(Color transparentColor)
```

### Parameters

`transparentColor`  
Type: System.Drawing.Color  
The Color structure that represents the color to make transparent.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NotImplementedException</td>
<td>This method is not implemented.</td>
</tr>
</tbody>
</table>

### See Also

Reference  
FreeImageBitmap Class
MakeTransparent Overload
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapMultigridPoissonSolver Method

Solves a Poisson equation, remap result pixels to [0..1] and returns the solution.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public bool MultigridPoissonSolver(
    int ncycle
)
```

Parameters

`ncycle`

Type: `SystemInt32`
Number of cycles in the multigrid algorithm (usually 2 or 3)

Return Value

Type: `Boolean`
Returns true on success, false on failure.

See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace
# FreeImageBitmapPaste Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Paste(FreeImageBitmap, Point, Int32)</td>
<td>Alpha blend or combine a sub part image with this FreeImageBitmap. The bit depth of bitmap must be greater than or equal to the bit depth this instance.</td>
</tr>
<tr>
<td>Paste(FreeImageBitmap, Int32, Int32, Int32)</td>
<td>Alpha blend or combine a sub part image with this FreeImageBitmap. The bit depth of bitmap must be greater than or equal to the bit depth this instance.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmapPaste Method (FreeImageBitmap, Point, Int32)

Alpha blend or combine a sub part image with this FreeImageBitmap. The bit depth of bitmap must be greater than or equal to the bit depth this instance.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#  

```csharp
public bool Paste(FreeImageBitmap bitmap, Point point, int alpha)
```

Parameters

- **bitmap**  
  Type: FreeImageAPIFreeImageBitmap  
  The FreeImageBitmap to paste into this instance.

- **point**  
  Type: System.Drawing.Point  
  Specifies the position of the sub image.

- **alpha**  
  Type: SystemInt32  
  alpha blend factor. The source and destination images are alpha blended if alpha=0..255. If alpha > 255, then the source image
is combined to the destination image.

Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
FreelImageBitmap Class
Paste Overload
FreelImageAPI Namespace

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Alpha blend or combine a sub part image with this FreeImageBitmap. The bit depth of bitmap must be greater than or equal to the bit depth this instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool Paste(
    FreeImageBitmap bitmap,
    int left,
    int top,
    int alpha
)
```

**Parameters**

- **bitmap**
  Type: FreeImageAPI!FreeImageBitmap
  The FreeImageBitmap to paste into this instance.

- **left**
  Type: System.Int32
  Specifies the left position of the sub image.

- **top**
  Type: System.Int32
  Specifies the top position of the sub image.
**alpha**

Type: **SystemInt32**

alpha blend factor. The source and destination images are alpha blended if alpha=0..255. If alpha > 255, then the source image is combined to the destination image.

**Return Value**

Type: **Boolean**

Returns true on success, false on failure.

**See Also**

**Reference**

- FreelmageBitmap Class
- Paste Overload
- FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
**FreeImageBitmapPreMultiplyWithAlpha Method**

Applies the alpha value of each pixel to its color components. The alpha value stays unchanged. Only works with 32-bits color depth.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool PreMultiplyWithAlpha()
```

**Return Value**

Type: Boolean  
Returns true on success, false on failure.

**See Also**

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
# FreeImage.BitmapQuantize Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantize(FREE_IMAGE_QUANTIZE, Int32)</td>
<td>Quantizes this FreeImageBitmap from 24 bit to 8bit creating a new palette with the specified <code>paletteSize</code> using the specified <code>algorithm</code>.</td>
</tr>
<tr>
<td>Quantize(FREE_IMAGE_QUANTIZE, Int32, Palette)</td>
<td>Quantizes this FreeImageBitmap from 24 bit to 8bit creating a new palette with the specified <code>paletteSize</code> using the specified <code>algorithm</code> and the specified <code>reservePalette</code> up to the specified <code>paletteSize</code>.</td>
</tr>
<tr>
<td>Quantize(FREE_IMAGE_QUANTIZE, Int32, Int32, Palette)</td>
<td>Quantizes this FreeImageBitmap from 24 bit to 8bit</td>
</tr>
</tbody>
</table>
creating a new palette with the specified `paletteSize` using the specified `algorithm` and the specified `reservePalette` up to the specified `paletteSize`.

```csharp
Quantize(FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)
```

Quantizes this `FreeImageBitmap` from 24 bit to 8bit creating a new palette with the specified `paletteSize` using the specified `algorithm` and the specified `reservePalette` up to the specified `paletteSize`.

---

**See Also**

Reference
- `FreeImageBitmap Class`
- `FreeImageAPI Namespace`

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Help improve this Documentation: Join the Project
FreeImageBitmapQuantize Method
(FREE_IMAGE_QUANTIZE, Int32)

Quantizes this FreeImageBitmap from 24 bit to 8bit creating a new palette with the specified paletteSize using the specified algorithm.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public bool Quantize(
    FREE_IMAGE_QUANTIZE algorithm,
    int paletteSize
)
```

Parameters

- **algorithm**
  - Type: FreeImageAPIFREE_IMAGE_QUANTIZE
  - The color reduction algorithm to be used.

- **paletteSize**
  - Type: SystemInt32
  - Size of the desired output palette.

Return Value

- Type: Boolean
  - Returns true on success, false on failure.
See Also

Reference

FreelImageBitmap Class
Quantize Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap Quantize Method
(FREE_IMAGE_QUANTIZE, Int32, Palette)

Quantizes this FreeImageBitmap from 24 bit to 8bit creating a new palette with the specified paletteSize using the specified algorithm and the specified reservePalette up to the specified paletteSize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#  

```csharp
public bool Quantize(
    FREE_IMAGE_QUANTIZE algorithm,
    int paletteSize,
    Palette reservePalette
)
```

Parameters

- **algorithm**
  Type: FreeImageAPIFREE_IMAGE_QUANTIZE
  The color reduction algorithm to be used.

- **paletteSize**
  Type: SystemInt32
  Size of the desired output palette.

- **reservePalette**
  Type: FreeImageAPIPalette
The provided palette.

Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
FreelImageBitmap Class
Quantize Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap Quantize Method 
(FREE_IMAGE_QUANTIZE, Int32, Int32, Palette)

Quantizes this FreeImageBitmap from 24 bit to 8bit creating a new palette with the specified paletteSize using the specified algorithm and the specified reservePalette up to the specified paletteSize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public bool Quantize(
    FREE_IMAGE_QUANTIZE algorithm,
    int paletteSize,
    int reserveSize,
    Palette reservePalette
)
```

Parameters

- **algorithm**
  - Type: FreeImageAPIFREE_IMAGE_QUANTIZE
  - The color reduction algorithm to be used.
- **paletteSize**
  - Type: System.Int32
  - Size of the desired output palette.
- **reserveSize**
Type: SystemInt32
Size of the provided palette of ReservePalette.

reservePalette
Type: FreeImageAPIPalette
The provided palette.

Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
FreeImageBitmap Class
Quantize Overload
FreeImageAPI Namespace

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FreeImageBitmapQuantize Method
(FREE_IMAGE_QUANTIZE, Int32, Int32, RGBQUAD)

Quantizes this FreeImageBitmap from 24 bit to 8bit creating a new palette with the specified paletteSize using the specified algorithm and the specified reservePalette up to the specified paletteSize.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public bool Quantize(
    FREE_IMAGE_QUANTIZE algorithm,
    int paletteSize,
    int reserveSize,
    RGBQUAD[] reservePalette
)
```

Parameters

algorithm
Type: FreeImageAPI.FREE_IMAGE_QUANTIZE
The color reduction algorithm to be used.

paletteSize
Type: System.Int32
Size of the desired output palette.

reserveSize
Type: `SystemInt32`
Size of the provided palette of ReservePalette.

`reservePalette`
Type: `FreeImageAPIRGBQUAD`
The provided palette.

Return Value
Type: `Boolean`
Returns true on success, false on failure.

See Also

Reference
- `FreelImageBitmap Class`
- Quantize Overload
- `FreeImageAPI Namespace`

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap.RemovePropertyItem Method

Removes the specified property item from this FreeImageBitmap.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void RemovePropertyItem(
    int propid
)
```

**Parameters**

`propid`
- Type: `System.Int32`
- The ID of the property item to remove.

**See Also**

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap Rescale Method

**Overload List**

<table>
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<th>Description</th>
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</thead>
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<td>Rescales this FreeImageBitmap to the specified size using the specified filter.</td>
</tr>
<tr>
<td>Rescale(Int32, Int32, FREE_IMAGE_FILTER)</td>
<td>Rescales this FreeImageBitmap to the specified size using the specified filter.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- FreeImageBitmap Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapRescale Method (Size, FREE_IMAGE_FILTER)

Rescales this FreeImageBitmap to the specified size using the specified filter.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Rescale(
    Size newSize,
    FREE_IMAGE_FILTER filter
)
```

### Parameters

**newSize**  
Type: System.DrawingSize  
The Size structure that represent the size of the new FreeImageBitmap.

**filter**  
Type: FreeImageAPIFREE_IMAGE_FILTER  
Filter to use for resizing.

### Return Value

Type: Boolean  
Returns true on success, false on failure.
See Also

Reference
FreelImageBitmap Class
Rescale Overload
FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmap Rescale Method (Int32, Int32, FREE_IMAGE_FILTER)

Rescales this FreeImageBitmap to the specified size using the specified filter.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool Rescale(
    int width,
    int height,
    FREE_IMAGE_FILTER filter
)
```

**Parameters**

- **width**
  - Type: `System.Int32`
  - Width of the new FreeImageBitmap.

- **height**
  - Type: `System.Int32`
  - Height of the new FreeImageBitmap.

- **filter**
  - Type: `FreeImageAPI.FREE_IMAGE_FILTER`
  - Filter to use for resizing.

**Return Value**
Type: **Boolean**
Returns true on success, false on failure.

### See Also

Reference
- **FreeImageBitmap Class**
- **Rescale Overload**
- **FreeImageAPI Namespace**

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Help improve this Documentation: [Join the Project](#)
FreeImageBitmapRescaleRect Method


Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#
public FreeImageBitmap RescaleRect(
    int dstWidth,
    int dstHeight,
    int left,
    int top,
    int right,
    int bottom,
    FREE_IMAGE_FILTER filter = FREE_IMAGE_FILTER
    FREE_IMAGE_RESCALE_FLAGS flags = FREE_IMAGE_RESCALE_FLAGS
)

Parameters

- **dstWidth**
  Type: System.Int32
  Width of the rescaled image.

- **dstHeight**
  Type: System.Int32
  Height of the rescaled image.

- **left**
  Offset of the rescaled image.
Type: `SystemInt32`  
Left side of the rectangle which will be rescaled.

`top`  
Type: `SystemInt32`  
Top side of the rectangle which will be rescaled.

`right`  
Type: `SystemInt32`  
Right side of the rectangle which will be rescaled.

`bottom`  
Type: `SystemInt32`  
Bottom side of the rectangle which will be rescaled.

`filter (Optional)`  
Type: `FreeImageAPIFREE_IMAGE_FILTER`  
The filter used for rescaling.

`flags (Optional)`  
Type: `FreeImageAPIFREE_IMAGE_RESCALE_FLAGS`  
Rescaling options

Return Value  
Type: `FreeImageBitmap`  
A new image containing the rescaled version of the selected rectangle on success, otherwise `null`.

## See Also

<table>
<thead>
<tr>
<th>Reference</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FreeImageBitmap Class</td>
<td></td>
</tr>
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</tr>
</tbody>
</table>

Contact/Feedback:  [FreeImage.NET Homepage](http://www.freeimage.net)  
Help improve this Documentation:  [Join the Project](http://www.freeimage.net)
# FreeImage.Bitmap.Rotate Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotate(Double)</td>
<td>This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.</td>
</tr>
<tr>
<td>RotateT(Double, Nullable{T})</td>
<td>This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.</td>
</tr>
<tr>
<td>Rotate(Double, Double, Double, Double, Double, Boolean)</td>
<td>This method performs a rotation and / or translation of an 8-bit greyscale, 24- or 32-bit image, using a 3rd order (cubic) B-Spline.</td>
</tr>
</tbody>
</table>

[Top](#)

## See Also

Reference
FreeImage.Bitmap.Rotate Method (Double)

This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public bool Rotate(
    double angle
)
```

### Parameters

- **angle**
  - Type: `System.Double`
  - The angle of rotation.

### Return Value

- **Type:** `Boolean`
  - Returns true on success, false on failure.

### See Also

- **Reference**
  - FreeImage.Bitmap Class
  - Rotate Overload
  - FreeImageAPI Namespace
FreeImageNET Class Library Reference

FreeImageBitmapRotate<T> Method (Double, Nullable<T>)

This method rotates a 1-, 4-, 8-bit greyscale or a 24-, 32-bit color image by means of 3 shears. For 1- and 4-bit images, rotation is limited to angles whose value is an integer multiple of 90.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public bool Rotate<T>(
    double angle,
    Nullable<T> backgroundColor
)
where T : struct, new()
```

Parameters

angle
Type: SystemDouble
The angle of rotation.

backgroundColor
Type: SystemNullable<T>
The color used used to fill the bitmap's background.

Type Parameters

T
The type of the color to use as background.
Return Value
Type: Boolean
Returns true on success, false on failure.

See Also

Reference
FreelmageBitmap Class
Rotate Overload
FreelmageAPI Namespace

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FreeImageBitmapRotate
Method (Double, Double, Double, Double, Double, Boolean)

This method performs a rotation and / or translation of an 8-bit
greyscale, 24- or 32-bit image, using a 3rd order (cubic) B-Spline.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```csharp
public bool Rotate(
    double angle,
    double xShift,
    double yShift,
    double xOrigin,
    double yOrigin,
    bool useMask
)
```

**Parameters**

- **angle**
  - Type: System.Double
  - The angle of rotation.

- **xShift**
  - Type: System.Double
  - Horizontal image translation.
**yShift**
- Type: SystemDouble
- Vertical image translation.

**xOrigin**
- Type: SystemDouble
- Rotation center x-coordinate.

**yOrigin**
- Type: SystemDouble
- Rotation center y-coordinate.

**useMask**
- Type: SystemBoolean
- When true the irrelevant part of the image is set to a black color, otherwise, a mirroring technique is used to fill irrelevant pixels.

**Return Value**
- Type: Boolean
- Returns true on success, false on failure.

**See Also**

**Reference**
- FreelImageBitmap Class
- Rotate Overload
- FreelImageAPI Namespace

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FreeImage.Bitmap.RotateFlip Method

This method rotates, flips, or rotates and flips this FreeImage.Bitmap.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void RotateFlip(
    RotateFlipType rotateFlipType
)
```

Parameters

`rotateFlipType`
- Type: System.Drawing.RotateFlipType
- A RotateFlipType member that specifies the type of rotation and flip to apply to this FreeImage.Bitmap.

See Also

Reference
- FreeImage.Bitmap Class
- FreeImageAPI Namespace

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# FreeImageBitmap Save Method

## Overload List

<table>
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<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![save_image] Save(String)</td>
<td>Saves this <code>FreeImageBitmap</code> to the specified file.</td>
</tr>
<tr>
<td>![save_image] Save(Stream, <code>FREE_IMAGE_FORMAT</code>)</td>
<td>Saves this <code>FreeImageBitmap</code> to the specified stream in the specified format.</td>
</tr>
<tr>
<td>![save_image] Save(String, <code>FREE_IMAGE_FORMAT</code>)</td>
<td>Saves this <code>FreeImageBitmap</code> to the specified file in the specified format.</td>
</tr>
<tr>
<td>![save_image] Save(Stream, <code>FREE_IMAGE_FORMAT</code>, <code>FREE_IMAGE_SAVE_FLAGS</code>)</td>
<td>Saves this <code>FreeImageBitmap</code> to the specified stream in the specified format using the specified saving flags.</td>
</tr>
<tr>
<td>![save_image] Save(String, <code>FREE_IMAGE_FORMAT</code>, ...)</td>
<td>Saves this <code>FreeImageBitmap</code></td>
</tr>
</tbody>
</table>
FREE_IMAGE_SAVE_FLAGS) to the specified file in the specified format using the specified saving flags.

See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

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FreeImageBitmap Save Method (String)

Saves this FreeImageBitmap to the specified file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Save(
    string filename
)
```

### Parameters

- **filename**
  - Type: System.String
  - A string that contains the name of the file to which to save this FreeImageBitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>filename</code> is null or empty.</td>
</tr>
<tr>
<td>Exception</td>
<td>Saving the image failed.</td>
</tr>
</tbody>
</table>

### See Also
Reference
FreelImageBitmap Class
Save Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
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FreeImageBitmapSave Method (Stream, FREE_IMAGE_FORMAT)

Saves this FreeImageBitmap to the specified stream in the specified format.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void Save(
    Stream stream,
    FREE_IMAGE_FORMAT format
)
```

**Parameters**

- **stream**
  - Type: System.IOStream  
  - The stream where this FreeImageBitmap will be saved.

- **format**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT  
  - An FREE_IMAGE_FORMAT that specifies the format of the saved image.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

ArgumentNullException

stream is a null reference.

Exception

Saving the image failed.

See Also

Reference
FreelImageBitmap Class
Save Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
**FreeImageBitmapSave**

Method (String, FREE_IMAGE_FORMAT)

Saves this `FreeImageBitmap` to the specified file in the specified format.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void Save(
    string filename,
    FREE_IMAGE_FORMAT format
)
```

**Parameters**

- `filename`
  - Type: `System.String`
  - A string that contains the name of the file to which to save this `FreeImageBitmap`.

- `format`
  - Type: `FreeImageAPIFREE_IMAGE_FORMAT`
  - An `FREE_IMAGE_FORMAT` that specifies the format of the saved image.

**Exceptions**
<table>
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<tr>
<th>Exception</th>
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</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>filename is null or empty.</td>
</tr>
<tr>
<td>Exception</td>
<td>Saving the image failed.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- FreelImageBitmap Class
- Save Overload
- FreelImageAPI Namespace

**Contact/Feedback:** FreelImage.NET Homepage
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FreeImage.NET Class Library Reference

FreeImageBitmapSave Method (Stream, FREE_IMAGE_FORMAT, FREE_IMAGE_SAVE_FLAGS)

Saves this FreeImageBitmap to the specified stream in the specified format using the specified saving flags.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Save(
    Stream stream,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

### Parameters

- **stream**
  - Type: `System.IO.Stream`  
The stream where this FreeImageBitmap will be saved.

- **format**
  - Type: `FreeImageAPIFREE_IMAGE_FORMAT`  
  An `FREE_IMAGE_FORMAT` that specifies the format of the saved image.

- **flags**
  - Type: `FreeImageAPIFREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

## Exceptions

<table>
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<th>Exception</th>
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<tr>
<td>ArgumentNullException</td>
<td><code>stream</code> is a null reference.</td>
</tr>
<tr>
<td>Exception</td>
<td>Saving the image failed.</td>
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</tbody>
</table>

## See Also

Reference

- `FreelImageBitmap Class`
- `Save Overload`
- `FreelImageAPI Namespace`

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Help improve this Documentation: Join the Project
FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void Save(
    string filename,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_SAVE_FLAGS flags
)
```

Parameters

`filename`
Type: `System.String`
A string that contains the name of the file to which to save this `FreeImageBitmap`.

`format`
Type: `FreeImageAPI.FREE_IMAGE_FORMAT`
An `FREE_IMAGE_FORMAT` that specifies the format of the saved image.

`flags`
Type: FreeImageAPIFREE_IMAGE_SAVE_FLAGS
Flags to enable or disable plugin-features.

⚠️ Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>filename</code> is null or empty.</td>
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<tr>
<td>Exception</td>
<td>Saving the image failed.</td>
</tr>
</tbody>
</table>

⚠️ See Also

Reference
- FreeImageBitmap Class
- Save Overload
- FreeImageAPI Namespace

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# FreeImageBitmap\SaveAdd Method

## Overload List

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<td>Adds a frame to the file specified in a previous call to the Save(String) method.</td>
</tr>
<tr>
<td>SaveAdd(Int32)</td>
<td>Adds a frame to the file specified in a previous call to the Save(String) method.</td>
</tr>
<tr>
<td>SaveAdd(String)</td>
<td>Adds a frame to the file specified.</td>
</tr>
<tr>
<td>SaveAdd(FreeImageBitmap)</td>
<td>Adds a frame to the file specified in a previous call to the Save(String) method.</td>
</tr>
<tr>
<td>SaveAdd(String, Int32)</td>
<td>Adds a frame to the file specified.</td>
</tr>
<tr>
<td>SaveAdd(FreeImageBitmap,)</td>
<td>Adds a frame to the file specified.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>SaveAdd(String, Int32, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Adds a frame to the file specified in a previous call to the <code>Save(String)</code> method.</td>
</tr>
<tr>
<td>SaveAdd(String, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Adds a frame to the file specified using the specified parameters.</td>
</tr>
<tr>
<td>SaveAdd(String, FreeImageBitmap, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Adds a specified frame to the file specified using the specified parameters. Use this method to save selected frames from an image to a multiple-frame image.</td>
</tr>
<tr>
<td>SaveAdd(String, Int32, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Adds a frame to the file specified using the specified parameters.</td>
</tr>
<tr>
<td>SaveAdd(String, FreeImageBitmap, Int32, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)</td>
<td>Adds a specified frame to the file specified using the specified parameters. Use this method to save selected frames from an image to a multiple-frame image.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreeImageBitmap Class
FreeImageAPI Namespace

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FreeImageBitmap SaveAdd Method

Adds a frame to the file specified in a previous call to the **Save(String)** method.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SaveAdd()
```

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidOperationException</td>
<td>This instance has not been saved to a file using Save(...) before.</td>
</tr>
</tbody>
</table>

### See Also

Reference

- FreeImageBitmap Class
- SaveAdd Overload
- FreeImageAPI Namespace

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FreeImageJetBitmapSaveAdd Method (Int32)

Adds a frame to the file specified in a previous call to the `Save(String)` method.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SaveAdd(int insertPosition)
```

### Parameters

- **insertPosition**  
  Type: `System.Int32`  
  The position at which the frame should be inserted.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>InvalidOperationException</code></td>
<td>This instance has not yet been saved to a file using the Save(...) method.</td>
</tr>
<tr>
<td><code>ArgumentOutOfRangeException</code></td>
<td><code>insertPosition</code> is out of range.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelimageBitmap Class
SaveAdd Overload
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
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FreeImageBitmapSaveAdd Method (String)

Adds a frame to the file specified.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SaveAdd(
    string filename
)
```

### Parameters

- **filename**
  - Type: System.String
  - File to add this frame to.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>filename is a null reference.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td>filename does not exist.</td>
</tr>
<tr>
<td>Exception</td>
<td>Saving the image has failed.</td>
</tr>
</tbody>
</table>

### See Also
FreeImageBitmapSaveAdd Method (FreeImageBitmap)

Adds a frame to the file specified in a previous call to the Save(String) method.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SaveAdd(
    FreeImageBitmap bitmap
)
```

### Parameters

- **bitmap**  
  Type: FreeImageAPIFreeImageBitmap  
  A FreeImageBitmap that contains the frame to add.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidOperationException</td>
<td>This instance has not yet been saved to a file using the Save(...) method.</td>
</tr>
</tbody>
</table>

### See Also
FreeImageBitmapSaveAdd Method (String, Int32)

Adds a frame to the file specified.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

```csharp
public void SaveAdd(
    string filename,
    int insertPosition
)
```

**Parameters**

filename  
Type: SystemString  
File to add this frame to.

insertPosition  
Type: SystemInt32  
The position at which the frame should be inserted.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>filename</code> is a null reference.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td><code>filename</code> does not exist.</td>
</tr>
</tbody>
</table>
Exception

Saving the image has failed.

ArgumentOutOfRangeException  

`insertPosition` is out of range.

See Also

Reference

- FreelImage.Bitmap Class
- SaveAdd Overload
- FreelImageAPI Namespace

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FreeImageBitmapSaveAdd Method (FreeImageBitmap, Int32)

Adds a frame to the file specified in a previous call to the `Save(String)` method.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SaveAdd(
    FreeImageBitmap bitmap,
    int insertPosition
)
```

### Parameters

- **bitmap**
  - Type: FreeImageAPI.FreeImageBitmap
  - A `FreeImageBitmap` that contains the frame to add.

- **insertPosition**
  - Type: System.Int32
  - The position at which the frame should be inserted.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidOperationException</td>
<td>This instance has not yet</td>
</tr>
</tbody>
</table>
been saved to a file using the Save(...) method.

**ArgumentOutOfRangeException**  \textit{insertPosition} is out of range.

See Also

Reference
- [FreeImageBitmap Class](#)
- [SaveAdd Overload](#)
- [FreeImageAPI Namespace](#)

Contact/Feedback: [FreeImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
FreeImageBitmap SaveAdd Method (String,
FREE_IMAGE_FORMAT,
FREE_IMAGE_LOAD_FLAGS,
FREE_IMAGE_SAVE_FLAGS)

Adds a frame to the file specified using the specified parameters.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void SaveAdd(
    string filename,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS loadFlags,
    FREE_IMAGE_SAVE_FLAGS saveFlags
)
```

Parameters

filename
Type: SystemString
File to add this frame to.

format
Type: FreeImageAPIFREE_IMAGE_FORMAT
Format of the image.

loadFlags
Type: `FreeImageAPIFREE_IMAGE_LOAD_FLAGS`
Flags to enable or disable plugin-features.

`saveFlags`
Type: `FreeImageAPIFREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

 Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>filename</code> is a null reference.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td><code>filename</code> does not exist.</td>
</tr>
<tr>
<td>Exception</td>
<td>Saving the image has failed.</td>
</tr>
</tbody>
</table>

 See Also

Reference
- `FreelImageBitmap Class`
- `SaveAdd Overload`
- `FreeImageAPI Namespace`

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapSaveAdd Method (String, FreeImageBitmap, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)

Adds a specified frame to the file specified using the specified parameters. Use this method to save selected frames from an to a multiple-frame image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static void SaveAdd(
    string filename,
    FreeImageBitmap bitmap,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS loadFlags,
    FREE_IMAGE_SAVE_FLAGS saveFlags
)
```

### Parameters

- **filename**
Type: `System.String`
File to add this frame to.

`bitmap`
Type: `FreeImageAPI.FreeImageBitmap`
A `FreeImageBitmap` that contains the frame to add.

`format`
Type: `FreeImageAPI.FREE_IMAGE_FORMAT`
Format of the image.

`loadFlags`
Type: `FreeImageAPI.FREE_IMAGE_LOAD_FLAGS`
Flags to enable or disable plugin-features.

`saveFlags`
Type: `FreeImageAPI.FREE_IMAGE_SAVE_FLAGS`
Flags to enable or disable plugin-features.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ArgumentNullException</code></td>
<td><code>filename</code> or <code>bitmap</code> is null.</td>
</tr>
<tr>
<td><code>FileNotFoundException</code></td>
<td><code>filename</code> does not exist.</td>
</tr>
<tr>
<td><code>Exception</code></td>
<td>Saving the image failed.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - `FreeImageBitmap Class`
  - `SaveAdd Overload`
  - `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
FreeImageBitmapSaveAdd Method (String, Int32, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)

Adds a frame to the file specified using the specified parameters.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void SaveAdd(
    string filename,
    int insertPosition,
    FREE_IMAGE_FORMAT format,
    FREE_IMAGE_LOAD_FLAGS loadFlags,
    FREE_IMAGE_SAVE_FLAGS saveFlags
)
```

Parameters

- **filename**
  Type: SystemString
  File to add this frame to.

- **insertPosition**
  Type: SystemInt32
  The position at which the frame should be inserted.
format
Type: FreelImageAPIFREE_IMAGE_FORMAT
Format of the image.

loadFlags
Type: FreelImageAPIFREE_IMAGE_LOAD_FLAGS
Flags to enable or disable plugin-features.

saveFlags
Type: FreelImageAPIFREE_IMAGE_SAVE_FLAGS
Flags to enable or disable plugin-features.

Exceptions

<table>
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<tbody>
<tr>
<td>ArgumentNullException</td>
<td>filename is a null reference.</td>
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<tr>
<td>FileNotFoundException</td>
<td>filename does not exist.</td>
</tr>
<tr>
<td>Exception</td>
<td>Saving the image has failed.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>insertPosition is out of range.</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImageBitmap Class
SaveAdd Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapSaveAdd Method (String, FreeImageBitmap, Int32, FREE_IMAGE_FORMAT, FREE_IMAGE_LOAD_FLAGS, FREE_IMAGE_SAVE_FLAGS)

Adds a specified frame to the file specified using the specified parameters. Use this method to save selected frames from an image to a multiple-frame image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static void SaveAdd(  
    string filename,  
    FreeImageBitmap bitmap,  
    int insertPosition,  
    FREE_IMAGE_FORMAT format,  
    FREE_IMAGE_LOAD_FLAGS loadFlags,  
    FREE_IMAGE_SAVE_FLAGS saveFlags  
)
```
**filename**
Type: SystemString
File to add this frame to.

**bitmap**
Type: FreelImageAPIFreeImageBitmap
A FreeImageBitmap that contains the frame to add.

**insertPosition**
Type: SystemInt32
The position of the inserted frame.

**format**
Type: FreelImageAPIFREE_IMAGE_FORMAT
Format of the image.

**loadFlags**
Type: FreelImageAPIFREE_IMAGE_LOAD_FLAGS
Flags to enable or disable plugin-features.

**saveFlags**
Type: FreelImageAPIFREE_IMAGE_SAVE_FLAGS
Flags to enable or disable plugin-features.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>filename or bitmap is null.</td>
</tr>
<tr>
<td>FileNotFoundException</td>
<td>filename does not exist.</td>
</tr>
<tr>
<td>Exception</td>
<td>Saving the image failed.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>insertPosition is out of range.</td>
</tr>
</tbody>
</table>

### See Also

Reference
FreelImageBitmap Class
SaveAdd Overload
FreelImageAPI Namespace
FreeImageBitmap.SelectActiveFrame Method

Selects the frame specified by the index.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SelectActiveFrame(
    int frameIndex
)
```

### Parameters

- `frameIndex`  
  Type: `System.Int32`  
  The index of the active frame.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>frameIndex</code> is out of range.</td>
</tr>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>InvalidOperationException</td>
<td>The source of the bitmap is not available.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.NET Class Library Reference

FreeImageBitmapSetChannel Method

Insert a 8-bit dib into a 24- or 32-bit image. Both images must have the same width and height.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public bool SetChannel(
    FreeImageBitmap bitmap,
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

### Parameters

- **bitmap**  
  Type: FreeImageAPIFreeImageBitmap  
  The FreeImageBitmap to insert.

- **channel**  
  Type: FreeImageAPIFREE_IMAGE_COLOR_CHANNEL  
  The color channel to replace.

### Return Value

Type: Boolean  
Returns true on success, false on failure.

## See Also

Reference
FreeImageBitmapSetComplexChannel Method

Set the real or imaginary part of a complex image. Both images must have to same width and height.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```
public bool SetComplexChannel(
    FreeImageBitmap bitmap,
    FREE_IMAGE_COLOR_CHANNEL channel
)
```

**Parameters**

- **bitmap**  
  Type: `FreeImageAPIFreeImageBitmap`  
  The `FreeImageBitmap` to insert.

- **channel**  
  Type: `FreeImageAPIFREE_IMAGE_COLOR_CHANNEL`  
  The color channel to replace.

**Return Value**  
Type: `Boolean`  
Returns true on success, false on failure.

**See Also**

Reference
FreeImageBitmap Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImage.BitmapSetPixel Method

Sets the Color of the specified pixel in this FreeImageBitmap.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void SetPixel(
    int x,
    int y,
    Color color
)
```

Parameters

- **x**
  - Type: System.Int32
  - The x-coordinate of the pixel to set.

- **y**
  - Type: System.Int32
  - The y-coordinate of the pixel to set.

- **color**
  - Type: System.Drawing.Color
  - A Color structure that represents the color to assign to the specified pixel.

Exceptions
<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception</td>
<td>The operation failed.</td>
</tr>
<tr>
<td>NotSupportedException</td>
<td>The type of this bitmap is not supported.</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
- FreelImageBitmap Class
- FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap.SetResolution Method

Sets the resolution for this FreeImageBitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public void SetResolution(
    float xDpi,
    float yDpi
)
```

### Parameters

- **xDpi**
  - Type: System.Single
  - The horizontal resolution, in dots per inch, of this FreeImageBitmap.

- **yDpi**
  - Type: System.Single
  - The vertical resolution, in dots per inch, of this FreeImageBitmap.

### See Also

- Reference
  - FreeImageBitmap Class
  - FreeImageAPI Namespace
FreeImage.NET Class Library Reference

FreeImageBitmapSwapColors Method

Swaps two specified colors on a 1-, 4- or 8-bit palletized or a 16-, 24- or 32-bit high color image.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#  

```csharp
public uint SwapColors(
    RGBQUAD color_a,
    RGBQUAD color_b,
    bool ignore_alpha
)
```

Parameters

- **color_a**
  - Type: FreeImageAPIRGBQUAD
  - One of the two colors to be swapped.

- **color_b**
  - Type: FreeImageAPIRGBQUAD
  - The other of the two colors to be swapped.

- **ignore_alpha**
  - Type: SystemBoolean
  - If true, 32-bit images and colors are treated as 24-bit.

Return Value

- Type: UInt32
  - The total number of pixels changed.
See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapSwapPaletteIndices Method

Swaps two specified palette indices on a 1-, 4- or 8-bit palletized image.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public uint SwapPaletteIndices(
    byte index_a,
    byte index_b
)
```

### Parameters

- **index_a**  
  Type: SystemByte  
  One of the two palette indices to be swapped.

- **index_b**  
  Type: SystemByte  
  The other of the two palette indices to be swapped.

### Return Value

Type: UInt32  
The total number of pixels changed.

### See Also

Reference
FreeImageBitmapTmoDrago03 Method

Converts a High Dynamic Range image to a 24-bit RGB image using a global operator based on logarithmic compression of luminance values, imitating the human response to light.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool TmoDrago03(
    double gamma,
    double exposure
)
```

### Parameters

**gamma**
- Type: System.Double
- A gamma correction that is applied after the tone mapping. A value of 1 means no correction.

**exposure**
- Type: System.Double
- Scale factor allowing to adjust the brightness of the output image.

### Return Value
- Type: Boolean
- Returns true on success, false on failure.
FreeImageBitmapTmoFattal02 Method

Apply the Gradient Domain High Dynamic Range Compression to a RGBF image and convert to 24-bit RGB.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool TmoFattal02(
    double color_saturation,
    double attenuation
)
```

Parameters

- **color_saturation**
  - Type: SystemDouble
  - Color saturation (s parameter in the paper) in [0.4..0.6]

- **attenuation**
  - Type: SystemDouble
  - Atenuation factor (beta parameter in the paper) in [0.8..0.9]

Return Value

- Type: Boolean
- Returns true on success, false on failure.

See Also

Reference
FreeImageBitmapTmoReinhard05 Method

Converts a High Dynamic Range image to a 24-bit RGB image using a global operator inspired by photoreceptor physiology of the human visual system.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public bool TmoReinhard05(
    double intensity,
    double contrast
)
```

**Parameters**

- **intensity**
  - Type: SystemDouble
  - Controls the overall image intensity in the range [-8, 8].

- **contrast**
  - Type: SystemDouble
  - Controls the overall image contrast in the range [0.3, 1.0].

**Return Value**

- Type: Boolean
  - Returns true on success, false on failure.

**See Also**
Reference
FreelmageBitmap Class
FreelmageAPI Namespace

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FreeImageBitmapToBitmap Method

Converts this FreeImageBitmap instance to a Bitmap instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4  
(3.17.0)

### Syntax

```csharp
public Bitmap ToBitmap()
```

**Return Value**

**Type:** Bitmap  
A new instance of Bitmap initialized this instance.

### See Also

**Reference**
- FreeImageBitmap Class  
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageBitmapUnlockBits method

This function is not yet implemented.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void UnlockBits(
    BitmapData bitmapdata
)
```

**Parameters**

- **bitmapdata**  
  Type: System.Drawing.Imaging.BitmapData  

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NotImplementedException</td>
<td>This method is not implemented.</td>
</tr>
</tbody>
</table>

**See Also**

Reference  
FreeImageBitmap Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmap Operators and Type Conversions

The `FreeImageBitmap` type exposes the following members.

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="%E5%B9%B3%E7%AD%89.png" alt="Equality" /> - Equality</td>
<td>Determines whether two specified <code>FreeImageBitmap</code> objects have the same value.</td>
</tr>
<tr>
<td><img src="%E8%BD%AC%E6%8D%A2.png" alt="Bitmap to FreeImageBitmap" /> - (Bitmap to FreeImageBitmap)</td>
<td>Converts a <code>Bitmap</code> instance to a <code>FreeImageBitmap</code> instance.</td>
</tr>
<tr>
<td><img src="%E8%BD%AC%E6%8D%A2.png" alt="FreeImageBitmap to Bitmap" /> - (FreeImageBitmap to Bitmap)</td>
<td>Converts a <code>FreeImageBitmap</code> instance to a <code>Bitmap</code> instance.</td>
</tr>
<tr>
<td><img src="%E4%B8%8D%E5%B9%B3%E7%AD%89.png" alt="Inequality" /> - Inequality</td>
<td>Determines whether two specified <code>FreeImageBitmap</code> objects have different values.</td>
</tr>
</tbody>
</table>

See Also

Reference
- `FreeImageBitmap Class`
- `FreeImageAPI Namespace`

Contact/Feedback: [FreeImage.NET Homepage](http://freewarelibrary.com)
Help improve this Documentation: Join the Project
FreeImageBitmapEquality Operator

Determines whether two specified FreeImageBitmap objects have the same value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(FreeImageBitmap left, FreeImageBitmap right)
```

### Parameters

**left**  
Type: FreeImageAPIFreeImageBitmap  
A FreeImageBitmap or a null reference (**Nothing** in Visual Basic).

**right**  
Type: FreeImageAPIFreeImageBitmap  
A FreeImageBitmap or a null reference (**Nothing** in Visual Basic).

### Return Value

Type: Boolean  
true if the value of left is the same as the value of right; otherwise, false.
See Also

Reference
FreelImageBitmap Class
FreelmageAPI Namespace

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# Conversion Operators

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>(Bitmap to FreeImageBitmap)</code></td>
<td>Converts a <code>Bitmap</code> instance to a <code>FreeImageBitmap</code> instance.</td>
</tr>
<tr>
<td><code>((FreeImageBitmap to Bitmap)</code></td>
<td>Converts a <code>FreeImageBitmap</code> instance to a <code>Bitmap</code> instance.</td>
</tr>
</tbody>
</table>

See Also

Reference

- `FreeImageBitmap Class`
- `FreeImageAPI Namespace`

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Help improve this Documentation: [Join the Project](#)
FreeImageBitmap Conversion (Bitmap to FreeImageBitmap)

Converts a Bitmap instance to a FreeImageBitmap instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator FreeImageBitmap (Bitmap value)
```

### Parameters

- **value**
  - Type: System.Drawing.Bitmap  
  - A Bitmap instance.

### Return Value

- Type: FreeImageBitmap  
- A new instance of FreeImageBitmap initialized to value.

### Remarks

The explicit conversion from Bitmap into FreeImageBitmap allows to create an instance on the fly to perform image processing operations and converting it back.
See Also

Reference
FreelimageBitmap Class
Overload
FreelimageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageBitmap Conversion (FreeImageBitmap to Bitmap)

Converts a FreeImageBitmap instance to a Bitmap instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static explicit operator Bitmap (FreeImageBitmap value)
```

### Parameters

`value`  
Type: FreeImageAPI\FreeImageBitmap  
A FreeImageBitmap instance.

### Return Value

Type: Bitmap  
A new instance of Bitmap initialized to `value`.

### Remarks

The explicit conversion from FreeImageBitmap into Bitmap allows to create an instance on the fly and use it as if was a Bitmap. This way it can be directly used with a PictureBox for example without having to call any conversion operations.
See Also

Reference
FreeImageBitmap Class
Overload
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImageBitmapInequality Operator

Determines whether two specified FreeImageBitmap objects have different values.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static bool operator !=(
    FreeImageBitmap left,
    FreeImageBitmap right
)
```

Parameters

**left**
Type: FreeImageAPIFreeImageBitmap
A FreeImageBitmap or a null reference (Nothing in Visual Basic).

**right**
Type: FreeImageAPIFreeImageBitmap
A FreeImageBitmap or a null reference (Nothing in Visual Basic).

Return Value
Type: Boolean
true if the value of left is different from the value of right; otherwise, false.
See Also

Reference
FreelmageBitmap Class
FreelmageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageEngine Class

Class handling non-bitmap related functions.

Inheritance Hierarchy

- System
  - Object
  - FreeImageAPI
  - FreeImageEngine

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static class FreeImageEngine
```

The FreeImageEngine type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CopyrightMessage</td>
<td>Gets a string containing a standard copyright message.</td>
</tr>
<tr>
<td>IsAvailable</td>
<td>Gets a value indicating if the Freelmage DLL is available or not.</td>
</tr>
<tr>
<td>IsLittleEndian</td>
<td>Gets whether the platform is using Little Endian.</td>
</tr>
<tr>
<td>Version</td>
<td>Gets a string containing the current version of the library.</td>
</tr>
</tbody>
</table>
## Events

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message</td>
<td>Internal errors in Frelimege generate a logstring that can be captured by this event.</td>
</tr>
</tbody>
</table>

## See Also

Reference

FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
The FreeImageEngine type exposes the following members.

## Properties

<table>
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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CopyrightMessage</td>
<td>Gets a string containing a standard copyright message.</td>
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<tr>
<td>IsAvailable</td>
<td>Gets a value indicating if the FreeImage DLL is available or not.</td>
</tr>
<tr>
<td>IsLittleEndian</td>
<td>Gets whether the platform is using Little Endian.</td>
</tr>
<tr>
<td>Version</td>
<td>Gets a string containing the current version of the library.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreeImageEngine Class
- FreeImageAPI Namespace

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FreeImageEngineCopyrightMessage Property

Gets a string containing a standard copyright message.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```
public static string CopyrightMessage { get; }
```

**Property Value**  
Type: String

**See Also**

Reference  
FreeImageEngine Class  
FreeImageAPI Namespace

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FreeImageEngine.IsAvailable Property

 Gets a value indicating if the FreeImage DLL is available or not.

 **Namespace:** FreeImageAPI  
 **Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool IsAvailable { get; }
```

**Property Value**

Type: Boolean

**See Also**

Reference
- FreeImageEngine Class
- FreeImageAPI Namespace

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FreeImageEngine.IsLittleEndian Property

Gets whether the platform is using Little Endian.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```
public static bool IsLittleEndian { get; }
```

**Property Value**  
Type: Boolean

**See Also**

Reference  
FreeImageEngine Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImageEngineVersion Property

Gets a string containing the current version of the library.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static string Version { get; }
```

**Property Value**  
**Type:** String

### See Also

- Reference  
  - FreeImageEngine Class  
  - FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
FreeImageEngine Events

The **FreeImageEngine** type exposes the following members.

### Events

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🞙️ <strong>Message</strong></td>
<td>Internal errors in FreeImage generate a logstring that can be captured by this event.</td>
</tr>
</tbody>
</table>

Top

### See Also

Reference
- **FreeImageEngine Class**
- **FreeImageAPI Namespace**

Contact/Feedback: **FreeImage.NET Homepage**
Help improve this Documentation: **Join the Project**
FreeImageEngineMessage Event

Internal errors in FreeImage generate a logstring that can be captured by this event.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static event OutputMessageFunction Message
```

**Value**

Type: FreeImageAPIOutputMessageFunction

### See Also

**Reference**

FreeImageEngine Class
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
ICC_FLAGS Enumeration

Flags for ICC profiles.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
[FlagsAttribute]
public enum ICC_FLAGS
```

Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIICC_DEFAULT</td>
<td>0</td>
<td>Default value.</td>
</tr>
<tr>
<td>FIICC_COLOR_IS_CMYK</td>
<td>1</td>
<td>The color is CMYK.</td>
</tr>
</tbody>
</table>

See Also

Reference  
FreeImageAPI Namespace

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FreeImage.NET Homepage  
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Join the Project
MD_SEARCH_FLAGS
Enumeration

List different search modes.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```csharp
[FlagsAttribute]
public enum MD_SEARCH_FLAGS
```

▲ Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEY</td>
<td>1</td>
<td>The key of the metadata.</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>2</td>
<td>The description of the metadata</td>
</tr>
<tr>
<td>TOSTRING</td>
<td>4</td>
<td>The ToString value of the metadata</td>
</tr>
</tbody>
</table>

▲ See Also

Reference  
FreeImageAPI Namespace
MemoryArrayT Class

Represents unmanaged memory, containing an array of a given structure.

Inheritance Hierarchy

System
  Object
  FreeImageAPI
  MemoryArrayT
  Palette
  ScanlineT

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public class MemoryArray<T> : IDisposable,
    ICloneable, ICollection, IEnumerable<T>,
where T : struct, new()
```

Type Parameters

T

Structure type represented by the instance.

The MemoryArrayT type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎧 MemoryArrayT</td>
<td>Initializes a new instance.</td>
</tr>
</tbody>
</table>
MemoryArrayT(IntPtr, Int32) Initializes a new instance of the MemoryArrayT class.

MemoryArrayT(Void*, Int32) Initializes a new instance of the MemoryArrayT class.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaseAddress</td>
<td>Gets the base address of the represented memory block.</td>
</tr>
<tr>
<td>Count</td>
<td>Gets a 32-bit integer that represents the total number of elements in the MemoryArrayT.</td>
</tr>
<tr>
<td>Data</td>
<td>Gets or sets the values of the unmanaged array.</td>
</tr>
<tr>
<td>IsSynchronized</td>
<td>Gets a value indicating whether access to the MemoryArrayT is synchronized (thread safe).</td>
</tr>
<tr>
<td>Item</td>
<td>Gets or sets the value at the specified position in the array.</td>
</tr>
<tr>
<td>Length</td>
<td>Gets the length of the unmanaged array.</td>
</tr>
<tr>
<td>SyncRoot</td>
<td>Gets an object that can be used to synchronize access to the MemoryArrayT.</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clone</td>
<td>Creates a shallow copy of the <code>MemoryArrayT</code>.</td>
</tr>
<tr>
<td>CopyFrom</td>
<td>Copies a range of elements from the array starting at the specified <code>sourceIndex</code> and pastes them to the unmanaged array starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers.</td>
</tr>
<tr>
<td>CopyMemory</td>
<td>Copies a block of memory from one location to another.</td>
</tr>
<tr>
<td>CopyTo(Array, Int32)</td>
<td>Copies the entire array to a compatible one-dimensional <code>Array</code>, starting at the specified index of the target array.</td>
</tr>
<tr>
<td>CopyTo(T, Int32, Int32, Int32)</td>
<td>Copies a range of elements from the unmanaged array starting at the specified <code>sourceIndex</code> and pastes them to <code>array</code> starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers.</td>
</tr>
</tbody>
</table>
are specified as 32-bit integers.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispose</td>
<td>Releases all resources.</td>
</tr>
<tr>
<td>Dispose(Boolean)</td>
<td>Releases allocated handles associated with this instance.</td>
</tr>
<tr>
<td>EnsureNotDisposed</td>
<td>Throws an <code>ObjectDisposedException</code> if this instance is disposed.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified <code>MemoryArrayT</code> structure is equivalent to this <code>MemoryArrayT</code> structure. (Overrides <code>Object.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(MemoryArrayT)</td>
<td>Tests whether the specified <code>MemoryArrayT</code> structure is equivalent to this <code>MemoryArrayT</code> structure.</td>
</tr>
<tr>
<td>Finalize</td>
<td>Frees the allocated <code>GCHandle</code>. (Overrides <code>Object_Finalize</code>.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual elements in this <code>MemoryArrayT</code>.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash.</td>
</tr>
</tbody>
</table>
- **GetType**
  Gets the `Type` of the current instance. (Inherited from `Object`.)

- **GetValue**
  Gets the value at the specified position.

- **GetValues**
  Gets the values at the specified position and length.

- **MemberwiseClone**
  Creates a shallow copy of the current `Object`. (Inherited from `Object`.)

- **SetValue**
  Sets a value to the element at the specified position.

- **SetValues**
  Sets the values at the specified position.

- **ToArray**
  Returns the represented block of memory as an array of `Byte`.

- **ToString**
  Returns a string that represents the current object. (Inherited from `Object`.)

---

### Operators

---

Top
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔥 Equality</td>
<td>Tests whether two specified MemoryArrayT structures are equivalent.</td>
</tr>
<tr>
<td>🔥 Inequality</td>
<td>Tests whether two specified MemoryArrayT structures are different.</td>
</tr>
</tbody>
</table>

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>baseAddress</td>
<td>Baseaddress of the wrapped memory.</td>
</tr>
<tr>
<td>buffer</td>
<td>Array of T containing a single element. The array is used as a workaround, because there are no pointer for generic types.</td>
</tr>
<tr>
<td>handle</td>
<td>Handle for pinning buffer.</td>
</tr>
<tr>
<td>isFourBit</td>
<td>Indicates whether the wrapped memory is handled like 4-bit blocks.</td>
</tr>
<tr>
<td>isOneBit</td>
<td>Indicates whether the wrapped memory is handled like a bitfield.</td>
</tr>
<tr>
<td>length</td>
<td>Number of elements being wrapped.</td>
</tr>
<tr>
<td>ptr</td>
<td>Pointer to the element of buffer.</td>
</tr>
</tbody>
</table>
| syncRoot | An object that can be used to synchronize access to the
Remarks

Boolean and Char can not be marshalled. Use Int32 instead of Boolean and Byte instead of Char.

See Also

Reference
FreelImageAPI Namespace

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## MemoryArrayT Constructor

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MemoryArrayT</td>
<td>Initializes a new instance.</td>
</tr>
<tr>
<td>MemoryArrayT(IntPtr, Int32)</td>
<td>Initializes a new instance of the MemoryArrayT class.</td>
</tr>
<tr>
<td>MemoryArrayT(Void*, Int32)</td>
<td>Initializes a new instance of the MemoryArrayT class.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - MemoryArrayT Class
  - FreelImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArrayT Constructor

Initializes a new instance.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
protected MemoryArray()
```

See Also

Reference
- MemoryArrayT Class
- MemoryArrayT Overload
- FreeImageAPI Namespace
MemoryArray<T> Constructor (IntPtr, Int32)

Initializes a new instance of the MemoryArray<T> class.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MemoryArray(
    IntPtr baseAddress,
    int length
)
```

### Parameters

- **baseAddress**
  - Type: System.IntPtr
  - Address of the memory block.

- **length**
  - Type: System.Int32
  - Length of the array.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>baseAddress is null.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>length is less or equal zero.</td>
</tr>
</tbody>
</table>
NotSupportedException

The type is not supported.

See Also

Reference
MemoryArrayT Class
MemoryArrayT Overload
FreeImageAPI Namespace

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MemoryArrayT Constructor (Void, Int32)

Initializes a new instance of the MemoryArrayT class.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MemoryArray(
    void* baseAddress,
    int length
)
```

### Parameters

**baseAddress**
- Type: **SystemVoid**
- Address of the memory block.

**length**
- Type: **SystemInt32**
- Length of the array.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>baseAddress is null.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>length is less or equal zero.</td>
</tr>
</tbody>
</table>
NotSupportedException

The type is not supported.

See Also

Reference

MemoryArrayT Class
MemoryArrayT Overload
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArray<T> Properties

The MemoryArray<T> generic type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaseAddress</td>
<td>Gets the base address of the represented memory block.</td>
</tr>
<tr>
<td>Count</td>
<td>Gets a 32-bit integer that represents the total number of elements in the MemoryArray&lt;T&gt;.</td>
</tr>
<tr>
<td>Data</td>
<td>Gets or sets the values of the unmanaged array.</td>
</tr>
<tr>
<td>IsSynchronized</td>
<td>Gets a value indicating whether access to the MemoryArray&lt;T&gt; is synchronized (thread safe).</td>
</tr>
<tr>
<td>Item</td>
<td>Gets or sets the value at the specified position in the array.</td>
</tr>
<tr>
<td>Length</td>
<td>Gets the length of the unmanaged array.</td>
</tr>
<tr>
<td>SyncRoot</td>
<td>Gets an object that can be used to synchronize access to the MemoryArray&lt;T&gt;.</td>
</tr>
</tbody>
</table>

See Also

Top
Reference

MemoryArrayT Class
FreeImageAPI Namespace

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MemoryArrayT.BaseAddress Property

Gets the base address of the represented memory block.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public IntPtr BaseAddress { get; }
```

### Property Value

Type: **IntPtr**

### See Also

Reference  
MemoryArrayT Class  
FreeImageAPI Namespace

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MemoryArrayType

Property

Gets a 32-bit integer that represents the total number of elements in the MemoryArrayType.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public int Count { get; }
```

Property Value

Type: Int32
Implements ICollectionCount

See Also

Reference
MemoryArrayType Class
FreeImageAPI Namespace

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MemoryArray<T> Data Property

Gets or sets the values of the unmanaged array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

[C#]
```csharp
public T[] Data { get; set; }
```

## Property Value

Type: `T`

## See Also

Reference
- MemoryArrayT Class  
- FreeImageAPI Namespace

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MemoryArrayT.IsSynchronized Property

Gets a value indicating whether access to the MemoryArrayT is synchronized (thread safe).

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
**Version:** 3.17.0.4 (3.17.0)

▶ Syntax

```csharp
public bool IsSynchronized { get; }
```

**Property Value**  
**Type:** Boolean  
**Implements**  
**ICollectionIsSynchronized**

▶ See Also  

Reference  
*MemoryArrayT Class*  
*FreeImageAPI Namespace*

**Contact/Feedback:**  
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MemoryArray<T>Item Property

Gets or sets the value at the specified position in the array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public T this[int index] { get; set; }
```

### Parameters

**index**
Type: System.Int32  
A 32-bit integer that represents the position of the array element to get.

### Return Value

Type: T  
The value at the specified position in the array.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><em>index</em> is outside the range of valid indexes for the unmanaged array.</td>
</tr>
</tbody>
</table>
See Also

Reference
MemoryArrayT Class
FreelmageAPI Namespace

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MemoryArrayT.Length Property

Gets the length of the unmanaged array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int Length { get; }
```

**Property Value**

Type: Int32

**See Also**

Reference
- MemoryArrayT Class
- FreeImageAPI Namespace

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MemoryArrayT.SyncRoot Property

Gets an object that can be used to synchronize access to the MemoryArrayT.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Object SyncRoot { get; }
```

Property Value
Type: Object
Implements ICollection.SyncRoot

See Also

Reference
MemoryArrayT Class
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
The `MemoryArray<T>` generic type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clone</td>
<td>Creates a shallow copy of the <code>MemoryArray&lt;T&gt;</code>.</td>
</tr>
<tr>
<td>CopyFrom</td>
<td>Copies a range of elements from the array starting at the specified <code>sourceIndex</code> and pastes them to the unmanaged array starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers.</td>
</tr>
<tr>
<td>CopyMemory</td>
<td>Copies a block of memory from one location to another.</td>
</tr>
<tr>
<td>CopyTo(Array, Int32)</td>
<td>Copies the entire array to a compatible one-dimensional <code>Array</code>, starting at the specified index of the target array.</td>
</tr>
<tr>
<td>CopyTo(T, Int32, Int32, Int32)</td>
<td>Copies a range of elements from the unmanaged array starting</td>
</tr>
</tbody>
</table>
at the specified `sourceIndex` and pastes them to `array` starting at the specified `destinationIndex`. The length and the indexes are specified as 32-bit integers.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Dispose</code></td>
<td>Releases all resources.</td>
</tr>
<tr>
<td><code>Dispose(Boolean)</code></td>
<td>Releases allocated handles associated with this instance.</td>
</tr>
<tr>
<td><code>EnsureNotDisposed</code></td>
<td>Throws an <code>ObjectDisposedException</code> if this instance is disposed.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified <code>MemoryArrayT</code> structure is equivalent to this <code>MemoryArrayT</code> structure. (Overrides <code>ObjectEquals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(MemoryArrayT)</code></td>
<td>Tests whether the specified <code>MemoryArrayT</code> structure is equivalent to this <code>MemoryArrayT</code> structure.</td>
</tr>
<tr>
<td><code>Finalize</code></td>
<td>Frees the allocated <code>GCHandle</code>.                                             (Overizes <code>ObjectFinalize</code>.)</td>
</tr>
</tbody>
</table>

Frees the allocated `GCHandle`. (Overizes `ObjectFinalize`.)
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual elements in this <code>MemoryArray&lt;T&gt;</code></td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Overrides <code>Object.GetHashCode</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>GetValue</td>
<td>Gets the value at the specified position.</td>
</tr>
<tr>
<td>GetValues</td>
<td>Gets the values at the specified position and length.</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>SetValue</td>
<td>Sets a value to the element at the specified position.</td>
</tr>
<tr>
<td>SetValues</td>
<td>Sets the values at the specified position.</td>
</tr>
<tr>
<td>ToByteArray</td>
<td>Returns the represented block of memory as an array of <code>Byte</code>.</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns a string that represents the current</td>
</tr>
</tbody>
</table>
See Also

Reference
MemoryArrayT Class
FreelImageAPI Namespace

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MemoryArrayTClone Method

Creates a shallow copy of the MemoryArrayT.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Object Clone()
```

### Return Value

Type: **Object**  
A shallow copy of the MemoryArrayT.

Implements  
ICloneableClone

### See Also

Reference  
MemoryArrayT Class  
FreeImageAPI Namespace

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MemoryArrayCopyFrom Method

Copies a range of elements from the array starting at the specified sourceIndex and pastes them to the unmanaged array starting at the specified destinationIndex. The length and the indexes are specified as 32-bit integers.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void CopyFrom(
    T[] array,
    int sourceIndex,
    int destinationIndex,
    int length
)
```

### Parameters

- **array**
  - Type: *T*
  - The array that holds the data.
- **sourceIndex**
  - Type: System.Int32
  - A 32-bit integer that represents the index in the array at which copying begins.
- **destinationIndex**
  - Type: System.Int32
  - A 32-bit integer that represents the index in the unmanaged
array at which storing begins.

**length**
Type: SystemInt32
A 32-bit integer that represents the number of elements to copy.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>array is a null reference (Nothing in Visual Basic).</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>sourceIndex is outside the range of valid indexes for the array or length is greater than the number of elements from index to the end of the array -or- destinationIndex is outside the range of valid indexes for the unmanaged array or length is greater than the number of elements from index to the end of the unmanaged array.</td>
</tr>
</tbody>
</table>

### See Also

Reference
MemoryArrayT Class
FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArrayT::CopyMemory

Copies a block of memory from one location to another.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
protected static void CopyMemory(
    byte* dest,
    byte* src,
    int len
);
```

### Parameters

- **dest**
  - Type: `System.Byte`
  - Pointer to the starting address of the copy destination.

- **src**
  - Type: `System.Byte`
  - Pointer to the starting address of the block of memory to be copied.

- **len**
  - Type: `System.Int32`
  - Size of the block of memory to copy, in bytes.

## See Also
MemoryArray<T> CopyTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CopyTo(Array, Int32)</td>
<td>Copies the entire array to a compatible one-dimensional Array, starting at the specified index of the target array.</td>
</tr>
<tr>
<td>CopyTo(T, Int32, Int32, Int32)</td>
<td>Copies a range of elements from the unmanaged array starting at the specified sourceIndex and pastes them to array starting at the specified destinationIndex. The length and the indexes are specified as 32-bit integers.</td>
</tr>
</tbody>
</table>

See Also

Reference
MemoryArrayT Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArray<T>CopyTo Method (Array, Int32)

Copies the entire array to a compatible one-dimensional Array, starting at the specified index of the target array.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void CopyTo(
    Array array,
    int index
)
```

### Parameters

- **array**  
  Type: SystemArray  
  The one-dimensional Array that is the destination of the elements copied from MemoryArray<T>. The Array must have zero-based indexing.

- **index**  
  Type: SystemInt32  
  The zero-based index in array at which copying begins.

### Implements

ICollectionCopyTo(Array, Int32)

### See Also
Reference
MemoryArrayT Class
CopyTo Overload
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArray<T>CopyTo Method (T, Int32, Int32, Int32)

Copies a range of elements from the unmanaged array starting at the specified `sourceIndex` and pastes them to `array` starting at the specified `destinationIndex`. The length and the indexes are specified as 32-bit integers.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public void CopyTo(
    T[] array,
    int sourceIndex,
    int destinationIndex,
    int length
)
```

### Parameters

- **array**  
  Type: `T`  
  The array that receives the data.

- **sourceIndex**  
  Type: `SystemInt32`  
  A 32-bit integer that represents the index in the unmanaged array at which copying begins.

- **destinationIndex**  
  Type: `SystemInt32`  
  A 32-bit integer that represents the index in the destination array.
at which storing begins.

length
Type: System.Int32
A 32-bit integer that represents the number of elements to copy.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>array is a null reference (Nothing in Visual Basic).</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>sourceIndex is outside the range of valid indexes for the unmanaged array or length is greater than the number of elements from index to the end of the unmanaged array -or- destinationIndex is outside the range of valid indexes for the array or length is greater than the number of elements from index to the end of the array.</td>
</tr>
</tbody>
</table>

See Also

- Reference
  - MemoryArrayT Class
  - CopyTo Overload
  - FreeImageAPI Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArrayTDDispose Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispose</td>
<td>Releases all resources.</td>
</tr>
<tr>
<td>Dispose(Boolean)</td>
<td>Releases allocated handles associated with this instance.</td>
</tr>
</tbody>
</table>

See Also

Reference
MemoryArrayT Class
FreelimageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArray<T>Dispose Method

Releases all resources.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void Dispose()
```

Implements

IDisposableDispose

**See Also**

Reference  
MemoryArrayT Class  
Dispose Overload  
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArrayTDispose Method (Boolean)

Releases allocated handles associated with this instance.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

#### Syntax

```csharp
protected virtual void Dispose(
    bool disposing
)
```

#### Parameters

- **disposing**
  - Type: SystemBoolean
  - `true` to release managed resources.

#### See Also

- Reference  
  - MemoryArrayT Class  
  - Dispose Overload  
  - FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
MemoryArrayT.EnsureNotDisposed Method

Throws an ObjectDisposedException if this instance is disposed.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
protected virtual void EnsureNotDisposed()
```

See Also

Reference

- MemoryArrayT Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArrayTEquals Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified MemoryArrayT structure is equivalent to this MemoryArrayT structure. (Overrides Object.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(MemoryArrayT)</td>
<td>Tests whether the specified MemoryArrayT structure is equivalent to this MemoryArrayT structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
MemoryArrayT Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
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MemoryArray<T> Equals Method (Object)

Tests whether the specified MemoryArray<T> structure is equivalent to this MemoryArray<T> structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

- **obj**  
  Type: SystemObject  
  The structure to test.

### Return Value

Type: Boolean  
**true** if *obj* is a MemoryArray<T> instance equivalent to this MemoryArray<T> structure; otherwise, **false**.

### See Also

- Reference  
  MemoryArray<T> Class  
  Equals Overload  
  FreeImageAPI Namespace
MemoryArrayTTEquals Method (MemoryArrayT)

Tests whether the specified MemoryArrayT structure is equivalent to this MemoryArrayT structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool Equals(MemoryArray<T> other)
```

Parameters

other
Type: FreeImageAPI.MemoryArray<T>
The structure to test.

Return Value
Type: Boolean
true if other is equivalent to this MemoryArrayT structure; otherwise, false.

Implements
IEquatable<T>Equals(T)

See Also

Reference
MemoryArrayT Class
Equals Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArrayT::Finalize Method

Frees the allocated GCHandle.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
protected override void Finalize()
```

### See Also

Reference
- MemoryArrayT Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArrayTGetEnumerator Method

Retrieves an object that can iterate through the individual elements in this MemoryArrayT.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public IEnumerator GetEnumerator()
```

Return Value
Type: IEnumerator
An IEnumerator for the MemoryArrayT.

Implements
IEnumerableGetEnumerator

See Also

Reference
MemoryArrayT Class
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArrayT GetHashCode Method

Serves as a hash function for a particular type.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public override int GetHashCode()
```

Return Value

Type: Int32
A hash code for the current MemoryArrayT.

See Also

Reference
- MemoryArrayT Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArray<T>GetValue Method

Gets the value at the specified position.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public T GetValue(
    int index
)
```

### Parameters

**index**  
Type: System.Int32  
A 32-bit integer that represents the position of the array element to get.

### Return Value

Type: T  
The value at the specified position.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>index is outside the range of valid indexes for the unmanaged array.</td>
</tr>
</tbody>
</table>
See Also

Reference
MemoryArrayT Class
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
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MemoryArrayT.GetValues Method

Gets the values at the specified position and length.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public T[] GetValues(
    int index,
    int length
)
```

### Parameters

**index**  
Type: `System.Int32`  
A 32-bit integer that represents the position of the array elements to get.

**length**  
Type: `System.Int32`  
A 32-bit integer that represents the length of the array elements to get.

### Return Value

Type: `T`  
The values at the specified position and length.

### Exceptions
<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentOutOfRangeException</td>
<td><em>index</em> is outside the range of valid indexes for the unmanaged array or <em>length</em> is greater than the number of elements from <em>index</em> to the end of the unmanaged array.</td>
</tr>
</tbody>
</table>

**See Also**

Reference  
MemoryArrayT Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
MemoryArrayTSetValue Method

Sets a value to the element at the specified position.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```csharp
public void SetValue(
    T value,
    int index
)
```

**Parameters**

- `value`  
  Type: `T`  
  The new value for the specified element.

- `index`  
  Type: `System.Int32`  
  A 32-bit integer that represents the position of the array element to set.

▲ Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ArgumentOutOfRangeException</code></td>
<td><code>index</code> is outside the range of valid indexes for the unmanaged array.</td>
</tr>
</tbody>
</table>
See Also

Reference

MemoryArrayT Class
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArray<T> SetValues Method

Sets the values at the specified position.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void SetValues(
    T[] values,
    int index
)
```

**Parameters**

- **values**  
  Type: $T$  
  An array containing the new values for the specified elements.

- **index**  
  Type: System.Int32  
  A 32-bit integer that represents the position of the array elements to set.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>$values$ is a null reference (Nothing in Visual Basic).</td>
</tr>
</tbody>
</table>
ArgumentOutOfRangeException

`index` is outside the range of valid indexes for the unmanaged array or `values.Length` is greater than the number of elements from `index` to the end of the array.

See Also

Reference

- MemoryArrayT Class
- FreelImageAPI Namespace

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MemoryArray<T>ToArray

Method

Returns the represented block of memory as an array of `Byte`.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] ToByteArray()
```

**Return Value**

Type: `Byte`

The represented block of memory.

### See Also

**Reference**

- MemoryArray<T> Class
- FreeImageAPI Namespace

Contact/Feedback: [Freelmage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
The `MemoryArrayT` generic type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <code>MemoryArrayT</code> structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <code>MemoryArrayT</code> structures are different.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - `MemoryArrayT` Class
  - `FreeImageAPI` Namespace

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MemoryArray<T> Equality Operator

Tests whether two specified MemoryArray<T> structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(MemoryArray<T> left, MemoryArray<T> right)
```

### Parameters

**left**
- Type: FreeImageAPIMemoryArray<T>  
  The MemoryArray<T> that is to the left of the equality operator.

**right**
- Type: FreeImageAPIMemoryArray<T>  
  The MemoryArray<T> that is to the right of the equality operator.

### Return Value
- Type: Boolean  
  **true** if the two MemoryArray<T> structures are equal; otherwise, **false**.

### See Also
- Reference  
  MemoryArray<T> Class
MemoryArray<T>Inequality Operator

Tests whether two specified MemoryArray<T> structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(  
    MemoryArray<T> left,  
    MemoryArray<T> right
)
```

### Parameters

**left**  
Type: FreeImageAPIMemoryArray<T>  
The MemoryArray<T> that is to the left of the inequality operator.

**right**  
Type: FreeImageAPIMemoryArray<T>  
The MemoryArray<T> that is to the right of the inequality operator.

### Return Value

Type: Boolean  
**true** if the two MemoryArray<T> structures are different; otherwise, **false**.

### See Also

Reference
MemoryArrayT Fields

The MemoryArrayT generic type exposes the following members.

**Fields**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>baseAddress</td>
<td>Baseaddress of the wrapped memory.</td>
</tr>
<tr>
<td>buffer</td>
<td>Array of T containing a single element. The array is used as a workaround, because there are no pointer for generic types.</td>
</tr>
<tr>
<td>handle</td>
<td>Handle for pinning buffer.</td>
</tr>
<tr>
<td>isFourBit</td>
<td>Indicates whether the wrapped memory is handles like 4-bit blocks.</td>
</tr>
<tr>
<td>isOneBit</td>
<td>Indicates whether the wrapped memory is handled like a bitfield.</td>
</tr>
<tr>
<td>length</td>
<td>Number of elements being wrapped.</td>
</tr>
<tr>
<td>ptr</td>
<td>Pointer to the element of buffer.</td>
</tr>
<tr>
<td>syncRoot</td>
<td>An object that can be used to synchronize access to the MemoryArrayT.</td>
</tr>
</tbody>
</table>
See Also

Reference
MemoryArrayT Class
FreelmageAPI Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
MemoryArrayT::baseAddress

Field

Baseaddress of the wrapped memory.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4 (3.17.0)

Syntax

```c#
protected byte* baseAddress
```

Field Value

Type: **Byte**

See Also

Reference

- MemoryArrayT Class
- FreeImageAPI Namespace

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Help improve this Documentation: [Join the Project](https://www.freeimage.net/project)
MemoryArrayT buffer Field

Array of T containing a single element. The array is used as a workaround, because there are no pointer for generic types.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected T[] buffer
```

Field Value  
Type: T

### See Also

Reference  
*MemoryArrayT Class*  
*FreeImageAPI Namespace*

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Help improve this Documentation: [Join the Project](http://www.freeimage.net/join)
MemoryArrayTHandle Field

Handle for pinning buffer.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
protected GCHandle handle
```

Field Value
Type: GCHandle

See Also

Reference
MemoryArrayT Class
FreeImageAPI Namespace

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MemoryArrayTypeIsFourBit Field

Indicates whether the wrapped memory is handled like 4-bit blocks.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected readonly bool isFourBit
```

**Field Value**  
**Type:** Boolean

### See Also

**Reference**  
- MemoryArrayType Class  
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArray<T>isOneBit Field

Indicates whether the wrapped memory is handled like a bitfield.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
protected readonly bool isOneBit
```

**Field Value**  
**Type:** Boolean

## See Also

**Reference**  
- MemoryArrayT Class  
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArrayT::length Field

Number of elements being wrapped.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
protected int length
```

**Field Value**

Type: **Int32**

### See Also

**Reference**
- MemoryArrayT Class
- FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
MemoryArray<T>ptr Field

Pointer to the element of `buffer`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4  
(3.17.0)

### Syntax

```c#
protected byte* ptr
```

**Field Value**

Type: `Byte*`

### See Also

Reference
- MemoryArrayT Class
- FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
MemoryArrayT syncRoot Field

An object that can be used to synchronize access to the MemoryArrayT.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
protected Object syncRoot
```

### Field Value

**Type:** Object

## See Also

Reference  
MemoryArrayT Class  
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
OutputMessageFunction Delegate

Delegate for capturing FreeImage error messages.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public delegate void OutputMessageFunction(
    FREE_IMAGE_FORMAT fif,
    string message
)
```

### Parameters

- **fif**
  - Type: FreeImageAPIFREE_IMAGE_FORMAT
  - The format of the image.

- **message**
  - Type: System.String
  - The error message.

### See Also

- Reference  
  FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage  
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Palette Class

Provides methods for working with the standard bitmap palette.

Inheritance Hierarchy

System
  Object
  FreeImageAPI
  MemoryArray
  RGBQUAD
  FreeImageAPI
  Palette

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public sealed class Palette : MemoryArray<RGBQUAD>
```

The Palette type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palette(Color)</td>
<td>Initializes a new instance for the given array of Color that contains a palette.</td>
</tr>
<tr>
<td>Palette(Int32)</td>
<td>Initializes a new instance with the specified size.</td>
</tr>
<tr>
<td>Palette(FIBITMAP)</td>
<td>Initializes a new instance for the given FreeImage bitmap.</td>
</tr>
</tbody>
</table>
Palette(FITAG)  Initializes a new instance for the given FITAG that contains a palette.

Palette(MetadataTag)  Initializes a new instance for the given MetadataTag that contains a palette.

Palette(RGBQUAD)  Initializes a new instance for the given array of RGBQUAD that contains a palette.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AsArray</td>
<td>Gets or sets the palette through an array of RGBQUAD.</td>
</tr>
<tr>
<td>BaseAddress</td>
<td>Gets the base address of the represented memory block. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Count</td>
<td>Gets a 32-bit integer that represents the total number of elements in the MemoryArrayT. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Data</td>
<td>Gets or sets the values of the unmanaged array. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>IsSynchronized</td>
<td>Gets a value indicating whether access to the MemoryArrayT is synchronized (thread safe).</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Gets or sets the value at the specified position in the array.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>Gets the length of the unmanaged array.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td><strong>SyncRoot</strong></td>
<td>Gets an object that can be used to synchronize access to the MemoryArrayT.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MemoryArrayT.)</td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clone</strong></td>
<td>Creates a shallow copy of the MemoryArrayT.</td>
</tr>
<tr>
<td>(Inherited from MemoryArrayT.)</td>
<td>(Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td><strong>Colorize(Color)</strong></td>
<td>Creates a linear palette based on the provided color.</td>
</tr>
<tr>
<td><strong>Colorize(Color, Double)</strong></td>
<td>Creates a linear palette based on the provided color.</td>
</tr>
<tr>
<td><strong>Colorize(Color, Int32)</strong></td>
<td>Creates a linear</td>
</tr>
<tr>
<td><strong>Colorize(Color, Double)</strong></td>
<td></td>
</tr>
</tbody>
</table>
palette based on the provided color.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CopyFrom(Palette)</td>
<td>Copies the values from the specified <code>Palette</code> to this instance.</td>
</tr>
<tr>
<td>CopyFrom(Palette, Int32)</td>
<td>Copies the values from the specified <code>Palette</code> to this instance, starting at the specified offset.</td>
</tr>
<tr>
<td>CopyFrom(T, Int32, Int32, Int32)</td>
<td>Copies a range of elements from the array starting at the specified <code>sourceIndex</code> and pastes them to the unmanaged array starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td>CopyTo(Array, Int32)</td>
<td>Copies the entire array to a compatible one-dimensional <code>Array</code>, starting at the specified</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CopyTo(T, Int32, Int32, Int32)</td>
<td>Copies a range of elements from the unmanaged array starting at the specified <code>sourceIndex</code> and pastes them to <code>array</code> starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td>CreateGrayscalePalette</td>
<td>Creates a linear grayscale palette.</td>
</tr>
<tr>
<td>CreateGrayscalePalette(Boolean)</td>
<td>Creates a linear grayscale palette.</td>
</tr>
<tr>
<td>CreateGrayscalePalette(Color, Boolean)</td>
<td>Creates a linear palette with the specified <code>Color</code>.</td>
</tr>
<tr>
<td>Dispose</td>
<td>Releases all resources. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified MemoryArrayT structure is equivalent to this MemoryArrayT structure. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Equals(MemoryArrayT)</td>
<td>Tests whether the specified MemoryArrayT structure is equivalent to this MemoryArrayT structure. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual elements in this MemoryArrayT. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetValue</td>
<td>Gets the value at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetValues</td>
<td>Gets the values at the specified position and length. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Load(BinaryReader)</td>
<td>Loads a palette from the reader.</td>
</tr>
<tr>
<td>Load(Stream)</td>
<td>Loads a palette from the specified stream.</td>
</tr>
<tr>
<td>Load(String)</td>
<td>Loads a palette from the specified file.</td>
</tr>
<tr>
<td>Reverse</td>
<td>Reverses the palette.</td>
</tr>
<tr>
<td>Save(BinaryWriter)</td>
<td>Saves this Palette using the specified writer.</td>
</tr>
<tr>
<td>Save(Stream)</td>
<td>Saves this Palette to the specified stream.</td>
</tr>
<tr>
<td>Save(String)</td>
<td>Saves this</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Palette</strong></td>
<td>to the specified file.</td>
</tr>
<tr>
<td><strong>SetValue</strong></td>
<td>Sets a value to the element at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td><strong>SetValues</strong></td>
<td>Sets the values at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td><strong>ToArray</strong></td>
<td>Returns the palette as an array of RGBQUAD.</td>
</tr>
<tr>
<td><strong>ToArray</strong></td>
<td>Returns the represented block of memory as an array of Byte. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Returns a string that represents the current object. (Inherited from Object.)</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
Palette Constructor

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palette(Color)</td>
<td>Initializes a new instance for the given array of Color that contains a palette.</td>
</tr>
<tr>
<td>Palette(Int32)</td>
<td>Initializes a new instance with the specified size.</td>
</tr>
<tr>
<td>Palette(FIBITMAP)</td>
<td>Initializes a new instance for the given FreelImage bitmap.</td>
</tr>
<tr>
<td>Palette(FITAG)</td>
<td>Initializes a new instance for the given FITAG that contains a palette.</td>
</tr>
<tr>
<td>Palette(MetadataTag)</td>
<td>Initializes a new instance for the given MetadataTag that contains a palette.</td>
</tr>
<tr>
<td>Palette(RGBQUAD)</td>
<td>Initializes a new instance for the given array of RGBQUAD that contains a palette.</td>
</tr>
</tbody>
</table>

See Also

Reference
Palette Class  
FreelImageAPI Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
Palette Constructor (Color)

Initializes a new instance for the given array of Color that contains a palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Palette(Color[] palette)
```

### Parameters

- **palette**
  - Type: System.DrawingColor
  - A Color array containing the palette data to initialize this instance.

### See Also

- Reference
  - Palette Class
  - Palette Overload
  - FreeImageAPI Namespace

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Palette Constructor (Int32)

Initializes a new instance with the specified size.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Palette(
    int size
)
```

Parameters

size
Type: System.Int32
The size of the palette.

See Also

Reference

Palette Class
Palette Overload
FreeImageAPI Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
Palette Constructor (FIBITMAP)

Initializes a new instance for the given FreeImage bitmap.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Palette(FIBITMAP dib)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><code>dib</code> is not FIT_BITMAP -or- <code>dib</code> has more than 8bpp.</td>
</tr>
</tbody>
</table>

### See Also
Reference
Palette Class
Palette Overload
FreelmageAPI Namespace

Contact/Feedback: Freelmage.NET Homepage
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Palette Constructor (FITAG)

Initializes a new instance for the given FITAG that contains a palette.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Palette(FITAG tag)
```

### Parameters

- **tag**
  - Type: FreeImageAPI.FITAG
  - The tag containing the palette.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>tag is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>tag is not FIDT_PALETTE.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- Palette Class
- Palette Overload
Palette Constructor (MetadataTag)

Initializes a new instance for the given MetadataTag that contains a palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Palette(
    MetadataTag tag
)
```

### Parameters

**tag**

Type: `FreeImageAPI.MetadataMetadataTag`

The tag containing the palette.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td><code>tag</code> is not <code>FIDT_PALETTE</code></td>
</tr>
</tbody>
</table>

### See Also
Reference
Palette Class
Palette Overload
FreelImageAPI Namespace

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Palette Constructor (RGBQUAD)

Initializes a new instance for the given array of RGBQUAD that contains a palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Palette(
    RGBQUAD[] palette
)
```

### Parameters

- **palette**  
  Type: FreeImageAPIRGBQUAD  
  A RGBQUAD array containing the palette data to initialize this instance.

### See Also

- Reference  
  - Palette Class  
  - Palette Overload  
  - FreeImageAPI Namespace
Palette Properties

The **Palette** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AsArray</td>
<td>Gets or sets the palette through an array of RGBQUAD.</td>
</tr>
<tr>
<td>BaseAddress</td>
<td>Gets the base address of the represented memory block. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Count</td>
<td>Gets a 32-bit integer that represents the total number of elements in the MemoryArrayT. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Data</td>
<td>Gets or sets the values of the unmanaged array. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>IsSynchronized</td>
<td>Gets a value indicating whether access to the MemoryArrayT is synchronized (thread safe). (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Item</td>
<td>Gets or sets the value at the specified position in the array. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Length</td>
<td>Gets the length of the unmanaged array. (Inherited from MemoryArrayT.)</td>
</tr>
</tbody>
</table>
SyncRoot

Gets an object that can be used to synchronize access to the MemoryArrayT.
(Inherited from MemoryArrayT.)

Top

See Also

Reference
Palette Class
FreImageAPI Namespace

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PaletteAsArray Property

Gets or sets the palette through an array of RGBQUAD.

Namespace: FreeImageAPI  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public RGBQUAD[] AsArray { get; set; }
```

Property Value
Type: RGBQUAD

See Also

Reference
Palette Class
FreeImageAPI Namespace
Palette Methods

The `Palette` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clone</strong></td>
<td>Creates a shallow copy of the <code>MemoryArrayT</code>. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td><strong>Colorize(Color)</strong></td>
<td>Creates a linear palette based on the provided color.</td>
</tr>
<tr>
<td><strong>Colorize(Color, Double)</strong></td>
<td>Creates a linear palette based on the provided color.</td>
</tr>
<tr>
<td><strong>Colorize(Color, Int32)</strong></td>
<td>Creates a linear palette based on the provided color.</td>
</tr>
<tr>
<td><strong>CopyFrom(Palette)</strong></td>
<td>Copies the values from the specified <code>Palette</code> to this instance.</td>
</tr>
<tr>
<td><strong>CopyFrom(Palette, Int32)</strong></td>
<td>Copies the</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>CopyFrom(T, Int32, Int32, Int32)</strong></td>
<td>Copies a range of elements from the array starting at the specified <code>sourceIndex</code> and pastes them to the unmanaged array starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td><strong>CopyTo(Array, Int32)</strong></td>
<td>Copies the entire array to a compatible one-dimensional <code>Array</code>, starting at the specified index of the target array. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td><strong>CopyTo(T, Int32, Int32, Int32)</strong></td>
<td>Copies a range of elements from the unmanaged array starting at the specified offset.</td>
</tr>
</tbody>
</table>
sourceIndex and pastes them to array starting at the specified destinationIndex. The length and the indexes are specified as 32-bit integers. (Inherited from MemoryArrayT.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CreateGrayscalePalette</td>
<td>Creates a linear grayscale palette.</td>
</tr>
<tr>
<td>CreateGrayscalePalette(Boolean)</td>
<td>Creates a linear grayscale palette.</td>
</tr>
<tr>
<td>CreateGrayscalePalette(Color, Boolean)</td>
<td>Creates a linear palette with the specified Color.</td>
</tr>
<tr>
<td>Dispose</td>
<td>Releases all resources. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified MemoryArrayT structure is equivalent to this MemoryArrayT structure. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Equals(MemoryArrayT)</td>
<td>Tests whether the specified MemoryArrayT structure is equivalent to this MemoryArrayT structure. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual elements in this MemoryArrayT. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetValue</td>
<td>Gets the value at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetValues</td>
<td>Gets the values at the specified position.</td>
</tr>
</tbody>
</table>
position and length. (Inherited from MemoryArrayT.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load(BinaryReader)</td>
<td>Loads a palette from the reader.</td>
</tr>
<tr>
<td>Load(Stream)</td>
<td>Loads a palette from the specified stream.</td>
</tr>
<tr>
<td>Load(String)</td>
<td>Loads a palette from the specified file.</td>
</tr>
<tr>
<td>Reverse</td>
<td>Reverses the palette.</td>
</tr>
<tr>
<td>Save(BinaryWriter)</td>
<td>Saves this Palette using the specified writer.</td>
</tr>
<tr>
<td>Save(Stream)</td>
<td>Saves this Palette to the specified stream.</td>
</tr>
<tr>
<td>Save(String)</td>
<td>Saves this Palette to the specified file.</td>
</tr>
<tr>
<td>SetValue</td>
<td>Sets a value to the element at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>SetValues</td>
<td>Sets the values</td>
</tr>
</tbody>
</table>
at the specified position. *(Inherited from *MemoryArrayT*.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ToArray</strong></td>
<td>Returns the palette as an array of RGBQUAD.</td>
</tr>
<tr>
<td><strong>ToByteArray</strong></td>
<td>Returns the represented block of memory as an array of Byte. *(Inherited from <em>MemoryArrayT</em>.)</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Returns a string that represents the current object. *(Inherited from <em>Object</em>.)</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
Palette Class
FreelImageAPI Namespace

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## Palette Colorize Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Colorize(Color)</code></td>
<td>Creates a linear palette based on the provided <code>color</code>.</td>
</tr>
<tr>
<td><code>Colorize(Color, Double)</code></td>
<td>Creates a linear palette based on the provided <code>color</code>.</td>
</tr>
<tr>
<td><code>Colorize(Color, Int32)</code></td>
<td>Creates a linear palette based on the provided <code>color</code>.</td>
</tr>
</tbody>
</table>

### See Also

- **Reference**
  - [Palette Class](#)
  - [FreeImageAPI Namespace](#)

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PaletteColorize Method
(Color)

Creates a linear palette based on the provided color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Colorize(
    Color color
)
```

### Parameters

- **color**
  
  Type: System.DrawingColor
  
  The Color used to colorize the palette.

### Remarks

Only call this method on linear palettes.

### See Also

- Reference
- Palette Class
- Colorize Overload
- FreeImageAPI Namespace
PaletteColorize Method
(Color, Double)

Creates a linear palette based on the provided color.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

Public void Colorize(Color color, double splitSize)

Parameters

<table>
<thead>
<tr>
<th>color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: System.DrawingColor</td>
</tr>
<tr>
<td>The Color used to colorize the palette.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>splitSize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: SystemDouble</td>
</tr>
<tr>
<td>The position of the color within the new palette. 0 &lt; splitSize &lt; 1.</td>
</tr>
</tbody>
</table>

Remarks

Only call this method on linear palettes.

See Also
Reference
Palette Class
Colorize Overload
FreelImageAPI Namespace

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PaletteColorize Method (Color, Int32)

Creates a linear palette based on the provided color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Colorize(
    Color color,
    int splitSize
)
```

### Parameters

- **color**  
  Type: System.DrawingColor  
  The Color used to colorize the palette.

- **splitSize**  
  Type: SystemInt32  
  The position of the color within the new palette. $0 < splitSize < Length$.

### Remarks

Only call this method on linear palettes.

### See Also
Reference
Palette Class
Colorize Overload
FreelImageAPI Namespace

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## PaletteCopyFrom Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CopyFrom(Palette)</td>
<td>Copies the values from the specified Palette to this instance.</td>
</tr>
<tr>
<td>CopyFrom(Palette, Int32)</td>
<td>Copies the values from the specified Palette to this instance, starting at the specified offset.</td>
</tr>
<tr>
<td>CopyFrom(T, Int32, Int32, Int32)</td>
<td>Copies a range of elements from the array starting at the specified sourceIndex and pastes them to the unmanaged array starting at the specified destinationIndex. The length and the indexes are specified as 32-bit integers. (Inherited from MemoryArrayT.)</td>
</tr>
</tbody>
</table>

### See Also

- Reference
- Palette Class
- FreelImageAPI Namespace
PaletteCopyFrom Method (Palette)

Copies the values from the specified Palette to this instance.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void CopyFrom(
    Palette palette
)
```

Parameters

`palette`
Type: FreeImageAPI.Palette
The palette to copy from.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td><code>palette</code> is a null reference.</td>
</tr>
</tbody>
</table>

See Also

Reference
Palette Class
CopyFrom Overload
FreeImageAPI Namespace

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PaletteCopyFrom Method  
(Palette, Int32)

Copies the values from the specified Palette to this instance, starting at the specified offset.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void CopyFrom(Palette palette, int offset)
```

### Parameters

**palette**  
Type: FreeImageAPIPalette  
The palette to copy from.

**offset**  
Type: SystemInt32  
The position in this instance where the values will be copied to.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>palette is a null reference.</td>
</tr>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>offset is outside the range of</td>
</tr>
</tbody>
</table>
valid indexes.

See Also

Reference
Palette Class
CopyFrom Overload
FreeImageAPI Namespace

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PaletteCreateGrayscalePalette Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CreateGrayscalePalette</td>
<td>Creates a linear grayscale palette.</td>
</tr>
<tr>
<td>CreateGrayscalePalette(Boolean)</td>
<td>Creates a linear grayscale palette.</td>
</tr>
<tr>
<td>CreateGrayscalePalette(Color, Boolean)</td>
<td>Creates a linear palette with the specified Color.</td>
</tr>
</tbody>
</table>

See Also

Reference
Palette Class
FreelImageAPI Namespace

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Palette

CreateGrayscalePalette Method

Creates a linear grayscale palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public void CreateGrayscalePalette()
```

## See Also

Reference

- Palette Class
- CreateGrayscalePalette Overload
- FreeImageAPI Namespace

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PaletteCreateGrayscalePalette Method (Boolean)

Creates a linear grayscale palette.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void CreateGrayscalePalette(
    bool inverse
)
```

### Parameters

- **inverse**  
  Type: System.Boolean  
  **true** to create an inverse grayscale palette.

### See Also

- Reference  
  Palette Class  
  CreateGrayscalePalette Overload  
  FreeImageAPI Namespace

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PaletteCreateGrayscalePalette Method (Color, Boolean)

Creates a linear palette with the specified Color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void CreateGrayscalePalette(
    Color color,
    bool inverse
)
```

### Parameters

- **color**  
  Type: System.Drawing.Color  
  The Color used to create the palette.

- **inverse**  
  Type: System.Boolean  
  true to create an inverse palette.

### Remarks

A linear grayscale palette contains all shades of colors from black to white. This method creates a similar palette with the white color being replaced by the specified color.

### See Also
Reference
Palette Class
CreateGrayscalePalette Overload
FreeImageAPI Namespace

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Palette Load Method

- **Overload List**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load(BinaryReader)</td>
<td>Loads a palette from the reader.</td>
</tr>
<tr>
<td>Load(Stream)</td>
<td>Loads a palette from the specified stream.</td>
</tr>
<tr>
<td>Load(String)</td>
<td>Loads a palette from the specified file.</td>
</tr>
</tbody>
</table>

See Also

- **Reference**
  - Palette Class
  - FreelImageAPI Namespace

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PaletteLoad Method
(BinaryReader)

Loads a palette from the reader.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Load(
    BinaryReader reader
)
```

### Parameters

- **reader**
  - Type: System.IO.BinaryReader
  - The reader to load the palette from.

### See Also

- Reference
- Palette Class
- Load Overload
- FreeImageAPI Namespace

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PaletteLoad Method (Stream)

Loads a palette from the specified stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void Load(
    Stream stream
)
```

**Parameters**

*stream*

Type: System.IOStream  
The stream to load the palette from.

**See Also**

Reference
- Palette Class  
- Load Overload  
- FreeImageAPI Namespace

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PaletteLoad Method (String)

Loads a palette from the specified file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Load(
    string filename
)
```

### Parameters

**filename**  
Type: System.String  
The name of the palette file.

### See Also

Reference  
Palette Class  
Load Overload  
FreeImageAPI Namespace

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PaletteReverse Method

Reverses the palette.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void Reverse()
```

See Also

Reference
Palette Class
FreeImageAPI Namespace

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Help improve this Documentation: Join the Project
# Palette Save Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Save(BinaryWriter)</code></td>
<td>Saves this Palette using the specified writer.</td>
</tr>
<tr>
<td><code>Save(Stream)</code></td>
<td>Saves this Palette to the specified stream.</td>
</tr>
<tr>
<td><code>Save(String)</code></td>
<td>Saves this Palette to the specified file.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - [Palette Class](#)
  - [FreelImageAPI Namespace](#)

---

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PaletteSave Method (BinaryWriter)

Saves this Palette using the specified writer.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public void Save(  
    BinaryWriter writer
)
```

### Parameters

**writer**

Type: System.IO.BinaryWriter  
The BinaryWriter used to save the image.

### See Also

**Reference**
- Palette Class
- Save Overload
- FreeImageAPI Namespace

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PaletteSave Method (Stream)

Saves this Palette to the specified stream.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Save(
    Stream stream
)
```

### Parameters

**stream**  
Type: System.IOStream  
The Stream where the image will be saved.

### See Also

Reference  
Palette Class  
Save Overload  
FreeImageAPI Namespace

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PaletteSave Method (String)

Saves this Palette to the specified file.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Save(
    string filename
)
```

### Parameters

- **filename**
  
  Type: System.String  
  A string that contains the name of the file to which to save this Palette.

### See Also

Reference  
Palette Class  
Save Overload  
FreeImageAPI Namespace

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PaletteToArray Method

Returns the palette as an array of RGBQUAD.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public RGBQUAD[] ToArray()
```

Return Value
Type: RGBQUAD
The palette as an array of RGBQUAD.

See Also

Reference
Palette Class
FreeImageAPI Namespace

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The `RGBQUAD` structure describes a color consisting of relative intensities of red, green, blue and alpha value. Each single color component consumes 8 bits and so, takes values in the range from 0 to 255.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
[SerializableAttribute]
public struct RGBQUAD : IComparable, IComparable<RGBQUAD>, IEquatable<RGBQUAD>
```

The `RGBQUAD` type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RGBQUAD</strong></td>
<td>Initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color</strong></td>
<td>Gets or sets the <strong>Color</strong> of the structure.</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(RGBQUAD)</code></td>
<td>Compares this instance with a specified <code>RGBQUAD</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>RGBQUAD</code> structure and is equivalent to this <code>RGBQUAD</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(RGBQUAD)</code></td>
<td>Tests whether the specified <code>RGBQUAD</code> structure is equivalent to this <code>RGBQUAD</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>RGBQUAD</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>ToColor</code></td>
<td>Converts an array of <code>RGBQUAD</code> into an array of <code>Color</code>.</td>
</tr>
</tbody>
</table>
### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equality</strong></td>
<td>Tests whether two specified RGBQUAD structures are equivalent.</td>
</tr>
<tr>
<td><strong>(Color to RGBQUAD)</strong></td>
<td>Converts the value of a Color structure to a RGBQUAD structure.</td>
</tr>
<tr>
<td><strong>(UInt32 to RGBQUAD)</strong></td>
<td>Converts the value of an UInt32 structure to a RGBQUAD structure.</td>
</tr>
<tr>
<td><strong>(RGBQUAD to Color)</strong></td>
<td>Converts the value of a RGBQUAD structure to a Color structure.</td>
</tr>
<tr>
<td><strong>(RGBQUAD to UInt32)</strong></td>
<td>Converts the value of a RGBQUAD structure to an UInt32 structure.</td>
</tr>
<tr>
<td><strong>Inequality</strong></td>
<td>Tests whether two specified RGBQUAD structures are different.</td>
</tr>
</tbody>
</table>
### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rgbBlue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>rgbGreen</td>
<td>The green color component.</td>
</tr>
<tr>
<td>rgbRed</td>
<td>The red color component.</td>
</tr>
<tr>
<td>rgbReserved</td>
<td>The alpha color component.</td>
</tr>
<tr>
<td>uintValue</td>
<td>The color's value.</td>
</tr>
</tbody>
</table>

### Remarks

The **RGBQUAD** structure provides access to an underlying Win32 **RGBQUAD** structure. To determine the alpha, red, green or blue component of a color, use the rgbReserved, rgbRed, rgbGreen or rgbBlue fields, respectively.

For easy integration of the underlying structure into the .NET framework, the **RGBQUAD** structure implements implicit conversion operators to convert the represented color to and from the **Color** type. This makes the **Color** type a real replacement for the **RGBQUAD** structure and may be used in all situations which require an **RGBQUAD** type.

Each color component rgbReserved, rgbRed, rgbGreen or rgbBlue of **RGBQUAD** is translated into its corresponding color component A, R, G or B of **Color** by an one-to-one manner and vice versa.

**Conversion from System.Drawing.Color to RGBQUAD**

```csharp
RGBQUAD.component = Color.component
```

**Conversion from RGBQUAD to System.Drawing.Color**

```csharp
Color.component = RGBQUAD.component
```

The same conversion is also applied when the **Color** property or the **RGBQUAD(Color)** constructor is invoked.
Examples

The following code example demonstrates the various conversions between the **RGBQUAD** structure and the **Color** structure.

```csharp
RGBQUAD rgbq;
// Initialize the structure using a native .NET (rgbq = new RGBQUAD(Color.Indigo);
// Initialize the structure using the implicit operator.
rgbq = Color.DarkSeaGreen;
// Convert the RGBQUAD instance into a native .NET using its implicit operator.
Color color = rgbq;
// Using the structure's Color property for converting it into a native .NET Color.
Color another = rgbq.Color;
```

See Also

Reference

FreImageAPI Namespace

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RGBQUAD Constructor

Initializes a new instance based on the specified Color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public RGBQUAD(
    Color color
)
```

### Parameters

**color**
- Type: System.DrawingColor
- Color to initialize with.

### See Also

**Reference**
- RGBQUAD Structure
- FreeImageAPI Namespace
RGBQUAD Properties

The RGBQUAD type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
RGBQUAD Structure  
FreeImageAPI Namespace

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RGBQUAD Color Property

Gets or sets the Color of the structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Color Color { get; set; }
```

Property Value
Type: Color

See Also

Reference
- RGBQUAD Structure
- FreeImageAPI Namespace

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# RGBQUAD Methods

The **RGBQUAD** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(RGBQUAD)</code></td>
<td>Compares this instance with a specified <code>RGBQUAD</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>RGBQUAD</code> structure and is equivalent to this <code>RGBQUAD</code> structure. (Overrides <code>ValueType_Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(RGBQUAD)</code></td>
<td>Tests whether the specified <code>RGBQUAD</code> structure is equivalent to this <code>RGBQUAD</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>RGBQUAD</code> structure. (Overrides <code>ValueType_GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ToColor</td>
<td>Converts an array of RGBQUAD into an array of Color.</td>
</tr>
<tr>
<td>ToRGBQUAD</td>
<td>Converts an array of Color into an array of RGBQUAD.</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the RGBQUAD object to its equivalent string representation. (Overrides ValueType.ToString.)</td>
</tr>
</tbody>
</table>

See Also

Reference
- RGBQUAD Structure
- FreelImageAPI Namespace

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# RGBQUADCompareTo Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(RGBQUAD)</td>
<td>Compares this instance with a specified RGBQUAD object.</td>
</tr>
</tbody>
</table>

## See Also

**Reference**
- RGBQUAD Structure
- FreelImageAPI Namespace

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RGBQUAD.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public int CompareTo(
    Object obj
)
```

### Parameters

*obj*
Type: SystemObject  
An object to compare with this instance.

### Return Value

Type: Int32  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

IComparable.CompareTo(Object)

### Exceptions
ArgumentException

obj is not a RGBQUAD.

See Also

Reference
RGBQUAD Structure
CompareTo Overload
FreImageAPI Namespace

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RGBQUAD.CompareTo Method (RGBQUAD)

Compares this instance with a specified RGBQUAD object.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

C#<br>
```csharp
public int CompareTo(RGBQUAD other)
```

## Parameters

- **other**<br>
  Type: FreeImageAPIRGBQUAD  
  A RGBQUAD to compare.

## Return Value

- Type: Int32  
  A signed number indicating the relative values of this instance and other.

- Implements IComparable.CompareTo(T)

## See Also

- Reference RGBQUAD Structure
### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <code>RGBQUAD</code> structure and is equivalent to this <code>RGBQUAD</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(RGBQUAD)</td>
<td>Tests whether the specified <code>RGBQUAD</code> structure is equivalent to this <code>RGBQUAD</code> structure.</td>
</tr>
</tbody>
</table>

**See Also**

- Reference
  - `RGBQUAD` Structure
  - `FreeImageAPI` Namespace

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Help improve this Documentation: [Join the Project](https://github.com/FreeImageNET/FreeImage.NET)
RGBQUAD Equals Method (Object)

Tests whether the specified object is a RGBQUAD structure and is equivalent to this RGBQUAD structure.

**Namespace:** FreelImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

**obj**
- Type: SystemObject
- The object to test.

### Return Value

- Type: Boolean
- **true** if **obj** is a RGBQUAD structure equivalent to this RGBQUAD structure; otherwise, **false**.

### See Also

- Reference
  - RGBQUAD Structure
  - Equals Overload
  - FreelImageAPI Namespace
RGBQUADEquals Method (RGBQUAD)

Tests whether the specified RGBQUAD structure is equivalent to this RGBQUAD structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(
    RGBQUAD other
)
```

### Parameters

- **other**  
  Type: FreeImageAPIRGBQUAD  
  A RGBQUAD structure to compare to this instance.

### Return Value

Type: Boolean  
**true** if **obj** is a RGBQUAD structure equivalent to this RGBQUAD structure; otherwise, **false**.

Implements  
IEquatable<TEquals(T)

### See Also

Reference
RGBQUAD Structure
Equals Overload
FreeImageAPI Namespace
RGBQUAD GetHashCode Method

Returns a hash code for this RGBQUAD structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

**Return Value**

**Type:** Int32  
An integer value that specifies the hash code for this RGBQUAD.

### See Also

- Reference
  - RGBQUAD Structure
  - FreeImageAPI Namespace

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RGBQUADToColor Method

Converts an array of RGBQUAD into an array of Color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static Color[] ToColor(  
    RGBQUAD[] array
)
```

### Parameters

**array**  
Type: FreeImageAPIRGBQUAD  
The array to convert.

### Return Value

Type: Color  
An array of RGBQUAD.

### See Also

**Reference**  
RGBQUAD Structure  
FreeImageAPI Namespace

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RGBQUADToRGBQUAD

Method

Converts an array of Color into an array of RGBQUAD.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static RGBQUAD[] ToRGBQUAD(
    Color[] array
)
```

Parameters

array
Type: System.DrawingColor
The array to convert.

Return Value

Type: RGBQUAD
An array of RGBQUAD.

See Also

Reference
RGBQUAD Structure
FreeImageAPI Namespace

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RGBQUADToString Method

Converts the numeric value of the RGBQUAD object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public override string ToString()
```

### Return Value

Type: String  
The string representation of the value of this instance.

### See Also

**Reference**  
RGBQUAD Structure  
FreeImageAPI Namespace

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The `RGBQUAD` type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <code>RGBQUAD</code> structures are equivalent.</td>
</tr>
<tr>
<td>(Color to RGBQUAD)</td>
<td>Converts the value of a <code>Color</code> structure to a <code>RGBQUAD</code> structure.</td>
</tr>
<tr>
<td>(UInt32 to RGBQUAD)</td>
<td>Converts the value of an <code>UInt32</code> structure to a <code>RGBQUAD</code> structure.</td>
</tr>
<tr>
<td>(RGBQUAD to Color)</td>
<td>Converts the value of a <code>RGBQUAD</code> structure to a <code>Color</code> structure.</td>
</tr>
<tr>
<td>(RGBQUAD to UInt32)</td>
<td>Converts the value of a <code>RGBQUAD</code> structure to an <code>UInt32</code> structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <code>RGBQUAD</code> structures are different.</td>
</tr>
</tbody>
</table>

### See Also

Reference

`RGBQUAD` Structure
FreelmageAPI Namespace

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**RGBQUAD Equality Operator**

Tests whether two specified `RGBQUAD` structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(RGBQUAD left, RGBQUAD right)
```

### Parameters

- **left**
  
  Type: `FreeImageAPIRGBQUAD`  
  The `RGBQUAD` that is to the left of the equality operator.

- **right**
  
  Type: `FreeImageAPIRGBQUAD`  
  The `RGBQUAD` that is to the right of the equality operator.

### Return Value

Type: `Boolean`  
**true** if the two `RGBQUAD` structures are equal; otherwise, **false**.

### See Also

- Reference  
  `RGBQUAD Structure`  
  `FreeImageAPI Namespace`
# RGBQUAD Conversion Operators

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Color to RGBQUAD)</td>
<td>Converts the value of a <code>Color</code> structure to a <code>RGBQUAD</code> structure.</td>
</tr>
<tr>
<td>(UInt32 to RGBQUAD)</td>
<td>Converts the value of an <code>UInt32</code> structure to a <code>RGBQUAD</code> structure.</td>
</tr>
<tr>
<td>(RGBQUAD to Color)</td>
<td>Converts the value of a <code>RGBQUAD</code> structure to a <code>Color</code> structure.</td>
</tr>
<tr>
<td>(RGBQUAD to UInt32)</td>
<td>Converts the value of a <code>RGBQUAD</code> structure to an <code>UInt32</code> structure.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - RGBQUAD Structure
  - FreelImageAPI Namespace

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RGBQUAD Conversion (Color to RGBQUAD)

Converts the value of a Color structure to a RGBQUAD structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static implicit operator RGBQUAD (Color value)
```

Parameters

`value`
Type: System.DrawingColor
A Color structure.

Return Value
Type: RGBQUAD
A new instance of RGBQUAD initialized to `value`.

See Also

Reference
RGBQUAD Structure
Overload
FreeImageAPI Namespace
RGBQUAD Conversion (UInt32 to RGBQUAD)

Converts the value of an UInt32 structure to a RGBQUAD structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

```csharp
public static implicit operator RGBQUAD (uint value)
```

**Parameters**

`value`

Type: System.UInt32  
An UInt32 structure.

**Return Value**

Type: RGBQUAD  
A new instance of RGBQUAD initialized to `value`.

**See Also**

Reference  
RGBQUAD Structure  
Overload  
FreeImageAPI Namespace
**RGBQUAD Conversion**  
*(RGBQUAD to Color)*

Converts the value of a *RGBQUAD* structure to a *Color* structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator Color (RGBQUAD value)
```

**Parameters**

*value*  
Type: FreeImageAPIRGBQUAD  
A *RGBQUAD* structure.

**Return Value**

Type: Color  
A new instance of *Color* initialized to *value*.

### See Also

**Reference**  
*RGBQUAD Structure*  
*Overload*  
*FreeImageAPI Namespace*
RGBQUAD Conversion (RGBQUAD to UInt32)

Converts the value of a RGBQUAD structure to an UInt32 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator uint (RGBQUAD value)
```

### Parameters

- **value**
  - Type: FreeImageAPIRGBQUAD  
  - A RGBQUAD structure.

### Return Value

- Type: UInt32  
- A new instance of RGBQUAD initialized to value.

### See Also

- Reference
- RGBQUAD Structure
- Overload
- FreeImageAPI Namespace
RGBQUADInequality Operator

Tests whether two specified RGBQUAD structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static bool operator !=(  
    RGBQUAD left,  
    RGBQUAD right
)
```

### Parameters

- **left**  
  Type: FreeImageAPIRgbQuad  
  The RGBQUAD that is to the left of the inequality operator.

- **right**  
  Type: FreeImageAPIRgbQuad  
  The RGBQUAD that is to the right of the inequality operator.

### Return Value

Type: Boolean  
**true** if the two RGBQUAD structures are different; otherwise, **false**.

### See Also

Reference  
RGBQUAD Structure
The **RGBQUAD** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rgbBlue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>rgbGreen</td>
<td>The green color component.</td>
</tr>
<tr>
<td>rgbRed</td>
<td>The red color component.</td>
</tr>
<tr>
<td>rgbReserved</td>
<td>The alpha color component.</td>
</tr>
<tr>
<td>uintValue</td>
<td>The color's value.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - RGBQUAD Structure
  - FreeImageAPI Namespace

---

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RGBQUAD rgbBlue Field

The blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte rgbBlue
```

### Field Value

**Type:** Byte

### See Also

Reference  
RGBQUAD Structure  
FreeImageAPI Namespace

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RGBQUAD.rgbGreen Field

The green color component.

**Namespace:** FreelImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public byte rgbGreen
```

### Field Value

**Type:** Byte

## See Also

Reference
- RGBQUAD Structure
- FreelImageAPI Namespace

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RGBQUAD rgbRed Field

The red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte rgbRed
```

### Field Value

Type: **Byte**

### See Also

Reference  
RGBQUAD Structure  
FreeImageAPI Namespace

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RGBQUAD.rgbReserved Field

The alpha color component.

**Namespace:** FreeImageAPI
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public byte rgbReserved
```

**Field Value**
Type: Byte

**See Also**

Reference
- RGBQUAD Structure
- FreeImageAPI Namespace

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RGBQUAD uintValue Field

The color's value.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public uint uintValue
```

## Field Value

Type: UInt32

## See Also

Reference
- RGBQUAD Structure
- FreeImageAPI Namespace

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RGBTRIPLE Structure

The **RGBTRIPLE** structure describes a color consisting of relative intensities of red, green and blue value. Each single color component consumes 8 bits and so, takes values in the range from 0 to 255.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct RGBTRIPLE : IComparable, IComparable<RGBTRIPLE>, IEquatable<RGBTRIPLE>
```

The **RGBTRIPLE** type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![image]</td>
<td><strong>RGBTRIPLE</strong> initializes a new instance based on the specified <strong>Color</strong>.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![image]</td>
<td><strong>Color</strong> gets or sets the <strong>Color</strong> of the structure.</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(RGBTRIPLE)</code></td>
<td>Compares this instance with a specified <code>RGBTRIPLE</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>RGBTRIPLE</code> structure and is equivalent to this <code>RGBTRIPLE</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(RGBTRIPLE)</code></td>
<td>Tests whether the specified <code>RGBTRIPLE</code> structure is equivalent to this <code>RGBTRIPLE</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>RGBTRIPLE</code> structure. (overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the numeric value of the <code>RGBTRIPLE</code></td>
</tr>
</tbody>
</table>
object to its equivalent string representation. (Overrides `ValueType.ToString`.)

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Equality</code></td>
<td>Tests whether two specified <code>RGBTRIPLE</code> structures are equivalent.</td>
</tr>
<tr>
<td><code>(Color to RGBTRIPLE)</code></td>
<td>Converts the value of a <code>Color</code> structure to a <code>RGBTRIPLE</code> structure.</td>
</tr>
<tr>
<td><code>(UInt32 to RGBTRIPLE)</code></td>
<td>Converts the value of an <code>UInt32</code> structure to a <code>RGBTRIPLE</code> structure.</td>
</tr>
<tr>
<td><code>(RGBTRIPLE to Color)</code></td>
<td>Converts the value of a <code>RGBTRIPLE</code> structure to a <code>Color</code> structure.</td>
</tr>
<tr>
<td><code>(RGBTRIPLE to UInt32)</code></td>
<td>Converts the value of a <code>RGBTRIPLE</code> structure to an <code>UInt32</code> structure.</td>
</tr>
<tr>
<td><code>Inequality</code></td>
<td>Tests whether two specified <code>RGBTRIPLE</code> structures are different.</td>
</tr>
</tbody>
</table>

## Fields
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rgbtBlue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>rgbtGreen</td>
<td>The green color component.</td>
</tr>
<tr>
<td>rgbtRed</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

## Remarks

The RGBTRIPLE structure provides access to an underlying Win32 RGBTRIPLE structure. To determine the red, green or blue component of a color, use the rgbtRed, rgbtGreen or rgbtBlue fields, respectively.

For easy integration of the underlying structure into the .NET framework, the RGBTRIPLE structure implements implicit conversion operators to convert the represented color to and from the Color type. This makes the Color type a real replacement for the RGBTRIPLE structure and my be used in all situations which require an RGBTRIPLE type.

Each of the color components rgbtRed, rgbtGreen or rgbtBlue of RGBTRIPLE is translated into it's corresponding color component R, G or B of Color by an one-to-one manner and vice versa. When converting from Color into RGBTRIPLE, the color's alpha value is ignored and assumed to be 255 when converting from RGBTRIPLE into Color, creating a fully opaque color.

### Conversion from System.Drawing.Color to RGBTRIPLE

```
RGBTRIPLE.component = Color.component
```

### Conversion from RGBTRIPLE to System.Drawing.Color

```
Color.component = RGBTRIPLE.component
```

The same conversion is also applied when the Color property or the RGBTRIPLE(Color) constructor is invoked.

## Examples

The following code example demonstrates the various conversions between the RGBTRIPLE structure and the Color structure.
```csharp
RGBTRIPLE rgbt;
// Initialize the structure using a native .NET (rgbt = new RGBTRIPLE(Color.Indigo);
// Initialize the structure using the implicit operator (rgbt = Color.DarkSeaGreen);
// Convert the RGBTRIPLE instance into a native .NET Color.
Color color = rgbt;
// Using the structure's Color property for converting it into a native .NET Color.
Color another = rgbt.Color;
```
RGBTRIPLE Constructor

Initializes a new instance based on the specified Color.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public RGBTRIPLE(
    Color color
)
```

### Parameters

- **color**
  - Type: System.DrawingColor  
  - Color to initialize with.

## See Also

- Reference  
  - RGBTRIPLE Structure  
  - FreeImageAPI Namespace

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RGBTRIPLE Properties

The RGBTRIPLE type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Gets or sets the Color of the structure.</td>
</tr>
</tbody>
</table>

See Also

Reference
RGBTRIPLE Structure
FreelImageAPI Namespace

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RGBTRIPLE Color Property

Gets or sets the Color of the structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Color Color { get; set; }
```

**Property Value**

Type: Color

### See Also

Reference
- RGBTRIPLE Structure
- FreeImageAPI Namespace

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# RGBTRIPLE Methods

The `RGBTRIPLE` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(RGBTRIPLE)</code></td>
<td>Compares this instance with a specified <code>RGBTRIPLE</code> object.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>RGBTRIPLE</code> structure and is equivalent to this <code>RGBTRIPLE</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(RGBTRIPLE)</code></td>
<td>Tests whether the specified <code>RGBTRIPLE</code> structure is equivalent to this <code>RGBTRIPLE</code> structure.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>RGBTRIPLE</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the...</td>
</tr>
</tbody>
</table>
ToString

Converts the numeric value of the RGBTRIPLE object to its equivalent string representation. (Overrides ValueType.ToString.)

See Also

Reference
RGBTRIPLE Structure
FreelImageAPI Namespace

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# RGBTRIPLE CompareTo Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(RGBTRIPLE)</td>
<td>Compares this instance with a specified RGBTRIPLE object.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- RGBTRIPLE Structure
- FreelImageAPI Namespace

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RGBTRIPLE.CompareTo Method (Object)

Compares this instance with a specified `Object`.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public int CompareTo(
    Object obj
)
```

### Parameters

**obj**
- Type: `SystemObject`
- An object to compare with this instance.

### Return Value

- Type: `Int32`
- A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

- `IComparable.CompareTo(Object)`

## Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>
ArgumentException

$obj$ is not a RGBTRIPLE.

See Also

Reference
RGBTRIPLE Structure
CompareTo Overload
FreeImageAPI Namespace

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RGBTRIPLE.CompareTo Method (RGBTRIPLE)

Compresses this instance with a specified RGBTRIPLE object.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

public int CompareTo(  
    RGBTRIPLE other
)

Parameters

other
Type: FreeImageAPIRGBTRIPLE
A RGBTRIPLE to compare.

Return Value
Type: Int32
A signed number indicating the relative values of this instance and other.

Implements
IComparable.CompareTo(T)

See Also

Reference
RGBTRIPLE Structure
# RGBTRIPLEEquals Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a RGBTRIPLE structure and is equivalent to this RGBTRIPLE structure. (Overrides ValueType.Equals(Object).)</td>
</tr>
<tr>
<td>Equals(RGBTRIPLE)</td>
<td>Tests whether the specified RGBTRIPLE structure is equivalent to this RGBTRIPLE structure.</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - RGBTRIPLE Structure
  - FreelImageAPI Namespace

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**RGBTRIPPLE Equals Method (Object)**

Tests whether the specified object is a **RGBTRIPPLE** structure and is equivalent to this **RGBTRIPPLE** structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

**obj**
- Type: SystemObject
- The object to test.

### Return Value

Type: Boolean
- **true** if *obj* is a **RGBTRIPPLE** structure equivalent to this **RGBTRIPPLE** structure; otherwise, **false**.

### See Also

**Reference**
- RGBTRIPPLE Structure
- Equals Overload
- FreeImageAPI Namespace
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RGBTRIPLEEquals Method (RGBTRIPLE)

Tests whether the specified RGBTRIPLE structure is equivalent to this RGBTRIPLE structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(RGBTRIPLE other)
```

### Parameters

- **other**
  - Type: FreeImageAPI.RGBTRIPLE
  - A RGBTRIPLE structure to compare to this instance.

### Return Value

- Type: Boolean
  - **true** if `obj` is a RGBTRIPLE structure equivalent to this RGBTRIPLE structure; otherwise, **false**.

### Implements

IEquatableTEquals(T)

### See Also

Reference
RGBTRIPLE Structure
Equals Overload
FreeImageAPI Namespace

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RGBTRIPLE GetHashCode Method

Returns a hash code for this RGBTRIPLE structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override int GetHashCode()
```

**Return Value**  
Type: Int32  
An integer value that specifies the hash code for this RGBTRIPLE.

**See Also**

Reference  
RGBTRIPLE Structure  
FreeImageAPI Namespace

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RGBTRIPLETToString Method

Converts the numeric value of the RGBTRIPLE object to its equivalent string representation.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

Return Value  
Type: **String**  
The string representation of the value of this instance.

### See Also

**Reference**  
RGBTRIPLE Structure  
FreeImageAPI Namespace
RGBTRIPLE Operators and Type Conversions

The RGBTRIPLE type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified RGBTRIPLE structures are equivalent.</td>
</tr>
<tr>
<td>(Color to RGBTRIPLE)</td>
<td>Converts the value of a Color structure to a RGBTRIPLE structure.</td>
</tr>
<tr>
<td>(UInt32 to RGBTRIPLE)</td>
<td>Converts the value of an UInt32 structure to a RGBTRIPLE structure.</td>
</tr>
<tr>
<td>(RGBTRIPLE to Color)</td>
<td>Converts the value of a RGBTRIPLE structure to a Color structure.</td>
</tr>
<tr>
<td>(RGBTRIPLE to UInt32)</td>
<td>Converts the value of a RGBTRIPLE structure to an UInt32 structure.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified RGBTRIPLE structures are different.</td>
</tr>
</tbody>
</table>
See Also

Reference
RGBTRIPLE Structure
FreelmageAPI Namespace

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RGBTRIPLE Equality Operator

Tests whether two specified RGBTRIPLE structures are equivalent.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

```csharp
public static bool operator ==(RGBTRIPLE left, RGBTRIPLE right)
```

**Parameters**

- **left**  
  Type: FreeImageAPIRGBTRIPLE  
  The RGBTRIPLE that is to the left of the equality operator.

- **right**  
  Type: FreeImageAPIRGBTRIPLE  
  The RGBTRIPLE that is to the right of the equality operator.

**Return Value**

Type: Boolean  
true if the two RGBTRIPLE structures are equal; otherwise, false.

**See Also**

Reference  
RGBTRIPLE Structure
FreeImageAPI Namespace

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## RGBTRIPLE Conversion Operators

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Color to RGBTRIPLE)</td>
<td>Converts the value of a Color structure to a RGBTRIPLE structure.</td>
</tr>
<tr>
<td>(UInt32 to RGBTRIPLE)</td>
<td>Converts the value of an UInt32 structure to a RGBTRIPLE structure.</td>
</tr>
<tr>
<td>(RGBTRIPLE to Color)</td>
<td>Converts the value of a RGBTRIPLE structure to a Color structure.</td>
</tr>
<tr>
<td>(RGBTRIPLE to UInt32)</td>
<td>Converts the value of a RGBTRIPLE structure to an UInt32 structure.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
- RGBTRIPLE Structure
- FreeImageAPI Namespace

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RGBTRIPLE Conversion (Color to RGBTRIPLE)

Converts the value of a Color structure to a RGBTRIPLE structure.

**Namespace:** FreelImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static implicit operator RGBTRIPLE (  
    Color value
)
```

### Parameters

**value**
- Type: System.DrawingColor
- A Color structure.

### Return Value

- Type: RGBTRIPLE
- A new instance of RGBTRIPLE initialized to value.

### See Also

- Reference
- RGBTRIPLE Structure
- Overload
- FreelImageAPI Namespace
RGBTRIPLE Conversion (UInt32 to RGBTRIPLE)

Converts the value of an UInt32 structure to a RGBTRIPLE structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static implicit operator RGBTRIPLE (uint value)
```

**Parameters**

- `value`  
  Type: System.UInt32  
  An UInt32 structure.

**Return Value**

- Type: RGBTRIPLE  
  A new instance of RGBTRIPLE initialized to `value`.

### See Also

- Reference  
  RGBTRIPLE Structure  
  Overload  
  FreImageAPI Namespace
RGBTRIPLE Conversion (RGBTRIPLE to Color)

Converts the value of a RGBTRIPLE structure to a Color structure.

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static implicit operator Color (RGBTRIPLE value)
```

Parameters

value
Type: FreeImageAPI.RGBTRIPLE
A RGBTRIPLE structure.

Return Value
Type: Color
A new instance of Color initialized to value.

See Also

Reference
RGBTRIPLE Structure
Overload
FreeImageAPI Namespace
RGBTRIPLE Conversion (RGBTRIPLE to UInt32)

Converts the value of a RGBTRIPLE structure to an UInt32 structure.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static implicit operator uint (RGBTRIPLE value)
```

### Parameters

- **value**  
  Type: FreeImageAPI.RGBTRIPLE  
  A RGBTRIPLE structure.

### Return Value

Type: UInt32  
A new instance of RGBTRIPLE initialized to value.

### See Also

- Reference  
  RGBTRIPLE Structure  
  Overload  
  FreeImageAPI Namespace
RGBTRIPLE Inequality Operator

Tests whether two specified RGBTRIPLE structures are different.

**Namespace:** FreeImageAPI  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static bool operator !=(
    RGBTRIPLE left,
    RGBTRIPLE right
)
```

### Parameters

**left**
- Type: FreelImageAPIRGBTRIPLE
  - The RGBTRIPLE that is to the left of the inequality operator.

**right**
- Type: FreelImageAPIRGBTRIPLE
  - The RGBTRIPLE that is to the right of the inequality operator.

### Return Value

- Type: **Boolean**
  - **true** if the two RGBTRIPLE structures are different; otherwise, **false**.

### See Also

- Reference
  - RGBTRIPLE Structure
RGBTRIPLE Fields

The `RGBTRIPLE` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rgbtBlue</td>
<td>The blue color component.</td>
</tr>
<tr>
<td>rgbtGreen</td>
<td>The green color component.</td>
</tr>
<tr>
<td>rgbtRed</td>
<td>The red color component.</td>
</tr>
</tbody>
</table>

See Also

Reference
- `RGBTRIPLE Structure`
- `FreelImageAPI Namespace`
RGBTRIPLE.rgbtBlue Field

The blue color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte rgbtBlue
```

### Field Value

Type: `Byte`

### See Also

Reference  
RGBTRIPLE Structure  
FreeImageAPI Namespace

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RGBTRIPLE.rgbtGreen Field

The green color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte rgbtGreen
```

### Field Value

Type: **Byte**

### See Also

Reference

- **RGBTRIPLE Structure**
- **FreeImageAPI Namespace**

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RGBTRIPLE rgbtRed Field

The red color component.

**Namespace:** FreeImageAPI  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public byte rgbtRed
```

Field Value  
Type: Byte

### See Also

- **Reference**  
  - RGBTRIPLE Structure  
  - FreeImageAPI Namespace

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Scanline<T> Class

Provides methods for working with generic bitmap scanlines.

Inheritance Hierarchy

- System
  - Object
    - FreeImageAPI
      - MemoryArray<T>
        - FreeImageAPI.ScanlineT

Namespace: FreeImageAPI
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public sealed class Scanline<T> : MemoryArray<T>
where T : struct, new()
```

Type Parameters

- T
  - Type of the bitmaps' scanlines.

The ScanlineT type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScanlineT(FIBITMAP)</td>
<td>Initializes a new instance based on the specified FreeImage bitmap.</td>
</tr>
<tr>
<td>ScanlineT(FIBITMAP,</td>
<td>Initializes a new instance</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
based on the specified FreeImage bitmap.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaseAddress</td>
<td>Gets the base address of the represented memory block. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Count</td>
<td>Gets a 32-bit integer that represents the total number of elements in the MemoryArrayT. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Data</td>
<td>Gets or sets the values of the unmanaged array. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>IsSynchronized</td>
<td>Gets a value indicating whether access to the MemoryArrayT is synchronized (thread safe). (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Item</td>
<td>Gets or sets the value at the specified position in the array. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Length</td>
<td>Gets the length of the unmanaged array. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>SyncRoot</td>
<td>Gets an object that can be used to synchronize access to the MemoryArrayT. (Inherited from MemoryArrayT.)</td>
</tr>
</tbody>
</table>
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clone</td>
<td>Creates a shallow copy of the <code>MemoryArray&lt;T&gt;</code>. (Inherited from <code>MemoryArray&lt;T&gt;</code>)</td>
</tr>
<tr>
<td>CopyFrom</td>
<td>Copies a range of elements from the array starting at the specified <code>sourceIndex</code> and pastes them to the unmanaged array starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers. (Inherited from <code>MemoryArray&lt;T&gt;</code>)</td>
</tr>
<tr>
<td>CopyTo(Array, Int32)</td>
<td>Copies the entire array to a compatible one-dimensional <code>Array</code>, starting at the specified index of the target array. (Inherited from <code>MemoryArray&lt;T&gt;</code>)</td>
</tr>
<tr>
<td>CopyTo(T, Int32, Int32, Int32)</td>
<td>Copies a range of elements from the unmanaged array starting at the specified <code>sourceIndex</code> and pastes them to <code>array</code> starting at</td>
</tr>
</tbody>
</table>
the specified *destinationIndex*. The length and the indexes are specified as 32-bit integers. (Inherited from *MemoryArrayT*.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispose</td>
<td>Releases all resources. (Inherited from <em>MemoryArrayT</em>.)</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified <em>MemoryArrayT</em> structure is equivalent to this <em>MemoryArrayT</em> structure. (Inherited from <em>MemoryArrayT</em>.)</td>
</tr>
<tr>
<td>Equals(MemoryArrayT)</td>
<td>Tests whether the specified <em>MemoryArrayT</em> structure is equivalent to this <em>MemoryArrayT</em> structure. (Inherited from <em>MemoryArrayT</em>.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual elements in this <em>MemoryArrayT</em>. (Inherited from <em>MemoryArrayT</em>.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td>GetValue</td>
<td>Gets the value at the specified position.</td>
</tr>
<tr>
<td>GetValues</td>
<td>Gets the values at the specified position and length.</td>
</tr>
<tr>
<td>SetValue</td>
<td>Sets a value to the element at the specified position.</td>
</tr>
<tr>
<td>SetValues</td>
<td>Sets the values at the specified position.</td>
</tr>
<tr>
<td>ToByteArray</td>
<td>Returns the represented block of memory as an array of Byte.</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns a string that represents the current object.</td>
</tr>
</tbody>
</table>
ScanlineT Constructor

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚪️ ScanlineT(FIBITMAP)</td>
<td>Initializes a new instance based on the specified FreeImage bitmap.</td>
</tr>
<tr>
<td>⚪️ ScanlineT(FIBITMAP, Int32)</td>
<td>Initializes a new instance based on the specified FreeImage bitmap.</td>
</tr>
</tbody>
</table>

Top

See Also

Reference
ScanlineT Class
FreeImageAPI Namespace

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Scanline\text{T} Constructor
(FIBITMAP)

Initializes a new instance based on the specified FreeImage bitmap.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Scanline(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP
Handle to a FreeImage bitmap.

### See Also

- Reference
  - Scanline\text{T} Class
  - Scanline\text{T} Overload
  - FreeImageAPI Namespace

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Scanline<T> Constructor
(FIBITMAP, Int32)

Initializes a new instance based on the specified FreeImage bitmap.

**Namespace:** FreeImageAPI

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Scanline(
    FIBITMAP dib,
    int scanline
)
```

### Parameters

**dib**
- **Type:** FreeImageAPI.FIBITMAP
- Handle to a FreeImage bitmap.

**scanline**
- **Type:** System.Int32
- Index of the zero based scanline.

### See Also

Reference
- Scanline<T> Class
- Scanline<T> Overload
- FreeImageAPI Namespace
The `ScanlineT` generic type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
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<tbody>
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</tr>
<tr>
<td>SyncRoot</td>
<td>Gets an object that can be used to synchronize access to the</td>
</tr>
</tbody>
</table>
MemoryArray<T>
(Inherited from MemoryArray<T>.)

See Also

Reference
ScanlineT Class
FreelImageAPI Namespace

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ScanlineT Methods

The ScanlineT generic type exposes the following members.

### Methods

<table>
<thead>
<tr>
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<th>Description</th>
</tr>
</thead>
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<td>Clone</td>
<td>Creates a shallow copy of the MemoryArrayT. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>CopyFrom</td>
<td>Copies a range of elements from the array starting at the specified sourceIndex and pastes them to the unmanaged array starting at the specified destinationIndex. The length and the indexes are specified as 32-bit integers. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>CopyTo(Array, Int32)</td>
<td>Copies the entire array to a compatible one-dimensional Array, starting at the specified index of the target array. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>Method</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td><strong>CopyTo(T, Int32, Int32, Int32)</strong></td>
<td>Copies a range of elements from the unmanaged array starting at the specified <code>sourceIndex</code> and pastes them to <code>array</code> starting at the specified <code>destinationIndex</code>. The length and the indexes are specified as 32-bit integers. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td><strong>Dispose</strong></td>
<td>Releases all resources. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td><strong>Equals(Object)</strong></td>
<td>Tests whether the specified <code>MemoryArrayT</code> structure is equivalent to this <code>MemoryArrayT</code> structure. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td><strong>Equals(MemoryArrayT)</strong></td>
<td>Tests whether the specified <code>MemoryArrayT</code> structure is equivalent to this <code>MemoryArrayT</code> structure. (Inherited from <code>MemoryArrayT</code>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual elements in this <code>MemoryArrayT</code>. (Inherited from</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetValue</td>
<td>Gets the value at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>GetValues</td>
<td>Gets the values at the specified position and length. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>SetValue</td>
<td>Sets a value to the element at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>SetValues</td>
<td>Sets the values at the specified position. (Inherited from MemoryArrayT.)</td>
</tr>
<tr>
<td>ToByteArray</td>
<td>Returns the represented block of memory as an array of Byte. (Inherited from MemoryArrayT.)</td>
</tr>
</tbody>
</table>
ToString

Returns a string that represents the current object.
(Inherited from Object.)

See Also

Reference

ScanlineT Class
FreelImageAPI Namespace

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## Structures

<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>fi_handle</code></td>
<td>Wrapper for a custom handle.</td>
</tr>
<tr>
<td><code>FreedImageIO</code></td>
<td>Structure for implementing access to custom handles.</td>
</tr>
</tbody>
</table>

## Delegates

<table>
<thead>
<tr>
<th>Delegate</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ReadProc</code></td>
<td>Delegate to the C++ function <code>fread</code>.</td>
</tr>
<tr>
<td><code>SeekProc</code></td>
<td>Delegate to the C++ function <code>fseek</code>.</td>
</tr>
<tr>
<td><code>TellProc</code></td>
<td>Delegate to the C++ function <code>ftell</code>.</td>
</tr>
<tr>
<td><code>WriteProc</code></td>
<td>Delegate to the C++ function <code>fwrite</code>.</td>
</tr>
</tbody>
</table>

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FreeImage.NET Class Library Reference

fi_handle Structure

Wrapper for a custom handle.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]  
public struct fi_handle : IComparable, IComparable<fi_handle>, IEquatable<fi_handle>, IDisposable
```

The `fi_handle` type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![fi_handle]</td>
<td>Initializes a new instance wrapping a managed object.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![IsNull]</td>
<td>Gets whether the pointer is a null pointer.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------------------------------------------</td>
</tr>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td>CompareTo(fi_handle)</td>
<td>Compares this instance with a specified <code>fi_handle</code> object.</td>
</tr>
<tr>
<td>Dispose</td>
<td>Releases all resources used by the instance.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <code>fi_handle</code> structure and is equivalent to this <code>fi_handle</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(fi_handle)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <code>fi_handle</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the numeric value of the <code>fi_handle</code> structure.</td>
</tr>
</tbody>
</table>
object to its equivalent string representation. (Overrides ValueTypeToString.)

## Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified fi_handle structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified fi_handle structures are different.</td>
</tr>
</tbody>
</table>

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>handle</td>
<td>The handle to wrap.</td>
</tr>
</tbody>
</table>

## Remarks

The fi_handle of FreeImage in C++ is a simple pointer, but in .NET it's not that simple. This wrapper uses fi_handle in two different ways. We implement a new plugin and FreeImage gives us a handle (pointer) that we can simply pass through to the given functions in a 'FreeImageIO' structure. But when we want to use LoadFromHandle or SaveToHandle we need a fi_handle (that we receive again in our own functions). This handle is for example a stream (see LoadFromStream / SaveToStream) that we want to work with. To know which stream a read/write is meant for we could use a hash value that the wrapper itself handles or we can go the unmanaged
way of using a handle. Therefor we use a GCHandle to receive a unique pointer that we can convert back into a .NET object. When the fi_handle instance is no longer needed the instance must be disposed by the creator manually! It is recommended to use the using statement to be sure the instance is always disposed:

```csharp
using (fi_handle handle = new fi_handle(object))
{
    callSomeFunctions(handle);
}
```

What does that mean? If we get a fi_handle from unmanaged code we get a pointer to unmanaged memory that we do not have to care about, and just pass ist back to Freimage. If we have to create a handle our own we use the standard constructor that fills the IntPtr with an pointer that represents the given object. With calling GetObject the IntPtr is used to retrieve the original object we passed through the constructor. This way we can implement a fi_handle that works with managed an unmanaged code.

See Also

Reference
FreeImageAPI.IO Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
fi_handle Constructor

Initializes a new instance wrapping a managed object.

Namespace: FreeImageAPI.IO
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

#### C#

```csharp
public fi_handle(
    Object obj
)
```

### Parameters

**obj**

Type: System.Object

The object to wrap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>obj is null.</td>
</tr>
</tbody>
</table>

### See Also

Reference

- fi_handle Structure
- FreeImageAPI.IO Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
The `fi_handle` type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://via.placeholder.com/15" alt="image" /></td>
<td>IsNull</td>
</tr>
</tbody>
</table>

### See Also

Reference
- `fi_handle Structure`
- `FreelImageAPI.IO Namespace`

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Help improve this Documentation: Join the Project
**fi_handleIsNull Property**

Gets whether the pointer is a null pointer.

**Namespace:** FreeImageAPI.IO

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool IsNull { get; }
```

**Property Value**

Type: **Boolean**

### See Also

Reference
- `fi_handle Structure`
- `FreeImageAPI.IO Namespace`

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimageapi.io)

Help improve this Documentation: [Join the Project](https://github.com/FreeImageNET/FreeImageNET)
The `fi_handle` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(fi_handle)</code></td>
<td>Compares this instance with a specified <code>fi_handle</code> object.</td>
</tr>
<tr>
<td><code>Dispose</code></td>
<td>Releases all resources used by the instance.</td>
</tr>
<tr>
<td><code>Equals(Object)</code></td>
<td>Tests whether the specified object is a <code>fi_handle</code> structure and is equivalent to this <code>fi_handle</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td><code>Equals(fi_handle)</code></td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Returns a hash code for this <code>fi_handle</code> structure. (Overrides <code>ValueType.GetHashCode</code>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Get Type</strong></td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the numeric value of the <code>fi_handle</code> object to its equivalent string representation. (Overrides <code>Value Type ToString</code>.)</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- `fi_handle` Structure
- `FreeImageAPI.IO` Namespace

Contact/Feedback: [FreeImage.NET Homepage](#)
Help improve this Documentation: [Join the Project](#)
## fi_handleCompareTo Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(fi_handle)</td>
<td>Compares this instance with a specified fi_handle object.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- fi_handle Structure
- FreelImageAPI.IO Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
fi_handle.CompareTo Method (Object)

Compares this instance with a specified Object.

Namespace: FreeImageAPI.IO
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public int CompareTo(
    Object obj
)
```

Parameters

- **obj**
  - Type: System.Object
  - An object to compare with this instance.

Return Value

- Type: Int32
- A 32-bit signed integer indicating the lexical relationship between the two comparands.

Implements

IComparable.CompareTo(Object)

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>

ArgumentNullException  

$obj$ is not a $fi_handle$.

See Also

Reference

$fi_handle$ Structure
CompareTo Overload
FreelmageAPI.IO Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
fi_handle CompareTo Method (fi_handle)

Compares this instance with a specified fi_handle object.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public int CompareTo(
    fi_handle other
)
```

**Parameters**

*other*  
Type: FreeImageAPI.IOfi_handle  
A fi_handle to compare.

**Return Value**

Type: Int32  
A signed number indicating the relative values of this instance and *other*.

Implements IComparableTCompareTo(T)

**See Also**

Reference  
fi_handle Structure
CompareTo Overload
FreelImageAPI.IO Namespace

Contact/Feedback: FreelImage.NET Homepage
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fi_handleDispose Method

Releases all resources used by the instance.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Dispose()
```

Implements  
IDisposableDispose

### See Also

Reference
- fi_handle Structure
- FreeImageAPI.IO Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
## fi_handleEquals Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <code>fi_handle</code> structure and is equivalent to this <code>fi_handle</code> structure. (Overrides <code>ValueType.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(fi_handle)</td>
<td>Indicates whether the current object is equal to another object of the same type.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- `fi_handle` Structure
- `FreelimageAPI.IO` Namespace

---

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Help improve this Documentation: [Join the Project](#)
fi_handle.Equals Method (Object)

Tests whether the specified object is a fi_handle structure and is equivalent to this fi_handle structure.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override bool Equals(
    Object obj
)
```

### Parameters

**obj**
- Type: `System.Object`
- The object to test.

### Return Value

**Type:** `Boolean`
- `true` if `obj` is a `fi_handle` structure equivalent to this `fi_handle` structure; otherwise, `false`.

### See Also

**Reference**
- `fi_handle Structure`
- `Equals Overload`
- `FreeImageAPI.IO Namespace`
fi_handleEquals Method (fi_handle)

Indicates whether the current object is equal to another object of the same type.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Equals(
    fi_handle other
)
```

### Parameters

- **other**
  - Type: FreeImageAPI.IOfi_handle
  - An object to compare with this object.

### Return Value

- Type: Boolean
- True if the current object is equal to the other parameter; otherwise, false.

### See Also

Reference
## fi_handle.GetHashCode Method

Returns a hash code for this fi_handle structure.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override int GetHashCode()
```

### Return Value

Type: **Int32**  
An integer value that specifies the hash code for this fi_handle.

### See Also

Reference  
fi_handle Structure  
FreeImageAPI.IO Namespace

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fi_handleToString Method

Converts the numeric value of the fi_handle object to its equivalent string representation.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

Reference  
- fi_handle Structure  
- FreeImageAPI.IO Namespace

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The `fi_handle` type exposes the following members.

### Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Tests whether two specified <code>fi_handle</code> structures are equivalent.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Tests whether two specified <code>fi_handle</code> structures are different.</td>
</tr>
</tbody>
</table>

### See Also

- Reference
  - `fi_handle` Structure
  - `FreeImageAPI.IO` Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://freimage.net)
Help improve this Documentation: [Join the Project](https://github.com/FreImage)
fi_handleEquality Operator

Tests whether two specified fi_handle structures are equivalent.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator ==(fi_handle left, fi_handle right)
```

### Parameters

**left**
- **Type:** FreeImageAPI.IOfi_handle  
  The fi_handle that is to the left of the equality operator.

**right**
- **Type:** FreeImageAPI.IOfi_handle  
  The fi_handle that is to the right of the equality operator.

### Return Value
- **Type:** Boolean  
  **true** if the two fi_handle structures are equal; otherwise, **false**.

### See Also

Reference
- fi_handle Structure  
- FreeImageAPI.IO Namespace
fi_handle Inequality Operator

Tests whether two specified fi_handle structures are different.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static bool operator !=(
    fi_handle left,
    fi_handle right
)
```

### Parameters

- **left**  
  Type: FreeImageAPI.IO.fi_handle  
  The fi_handle that is to the left of the inequality operator.

- **right**  
  Type: FreeImageAPI.IO.fi_handle  
  The fi_handle that is to the right of the inequality operator.

### Return Value

Type: Boolean  
true if the two fi_handle structures are different; otherwise, false.

### See Also

Reference  
fi_handle Structure  
FreeImageAPI.IO Namespace
The `fi_handle` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>handle</td>
<td>The handle to wrap.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- `fi_handle` Structure
- `FreeImageAPI.IO` Namespace

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Help improve this Documentation: [Join the Project](#)
**fi_handle**

The handle to wrap.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public IntPtr handle
```

**Field Value**

Type: IntPtr

### See Also

Reference
- fi_handle Structure
- FreeImageAPI.IO Namespace

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FreeImageIO Structure

Structure for implementing access to custom handles.

Namespace: FreeImageAPI.IO
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public struct FreeImageIO
```

The `FreeImageIO` type exposes the following members.

Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Indicates whether this instance and a specified object are equal.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>ValueTuple</code>.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns the hash code for this instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>ValueTuple</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>ValueTuple</code>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>ValueTuple</code>.)</td>
</tr>
</tbody>
</table>
## Fields

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>readProc</td>
<td>Delegate to the C++ function <code>fread</code>.</td>
</tr>
<tr>
<td>seekProc</td>
<td>Delegate to the C++ function <code>fseek</code>.</td>
</tr>
<tr>
<td>tellProc</td>
<td>Delegate to the C++ function <code>ftell</code>.</td>
</tr>
<tr>
<td>writeProc</td>
<td>Delegate to the C++ function <code>fwrite</code>.</td>
</tr>
</tbody>
</table>

## See Also

Reference

FreelmageAPI.IO Namespace

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Help improve this Documentation: Join the Project
FreeImageIO Methods

The `FreeImageIO` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from <code>ValueType</code>.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns the hash code for this instance. (Inherited from <code>ValueType</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance. (Inherited from <code>ValueType</code>.)</td>
</tr>
</tbody>
</table>

See Also

Reference

- `FreeImageIO Structure`
- `FreeImageAPI.IO Namespace`

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Help improve this Documentation: Join the Project
The `FreeImageIO` type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>readProc</code></td>
<td>Delegate to the C++ function <code>fread</code>.</td>
</tr>
<tr>
<td><code>seekProc</code></td>
<td>Delegate to the C++ function <code>fseek</code>.</td>
</tr>
<tr>
<td><code>tellProc</code></td>
<td>Delegate to the C++ function <code>ftell</code>.</td>
</tr>
<tr>
<td><code>writeProc</code></td>
<td>Delegate to the C++ function <code>fwrite</code>.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- `FreeImageIO` Structure
- `FreeImageAPI.IO` Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimage.sourceforge.net)
Help improve this Documentation: [Join the Project](https://github.com/freeimage)
FreeImageIOReadProc Field

Delegate to the C++ function `fread`.

**Namespace**: FreeImageAPI.IO  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ReadProc readProc
```

**Field Value**  
Type: `ReadProc`

### See Also

Reference  
FreeImageIO Structure  
FreeImageAPI.IO Namespace

Contact/Feedback: FreImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImage.IOSeekProc Field

Delegate to the C++ function `fseek`.

**Namespace:** FreeImageAPI.IO

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public SeekProc seekProc
```

Field Value

Type: `SeekProc`

### See Also

Reference

- FreeImageIO Structure
- FreeImageAPI.IO Namespace

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FreeImage.IOTellProc Field

Delegate to the C++ function `ftell`.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4  
(3.17.0)

### Syntax

```
public TellProc tellProc
```

### Field Value

**Type:** TellProc

### See Also

Reference
- FreeImageIO Structure
- FreeImageAPI.IO Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImage.IO WriteProc Field

Delegate to the C++ function `fwrite`.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public WriteProc writeProc
```

### Field Value

Type: `WriteProc`

### See Also

Reference  
FreeImageIO Structure  
FreeImageAPI.IO Namespace

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ReadProc Delegate

Delegate to the C++ function `fread`.

**Namespace:** FreeImageAPI.IO
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate uint ReadProc(
    IntPtr buffer,
    uint size,
    uint count,
    fi_handle handle
)
```

### Parameters

- **buffer**
  - Type: `SystemIntPtr`
  - Pointer to read from.

- **size**
  - Type: `SystemUInt32`
  - Item size in bytes.

- **count**
  - Type: `SystemUInt32`
  - Maximum number of items to be read.

- **handle**
  - Type: `FreeImageAPI.IOfi_handle`
  - Handle/stream to read from.

### Return Value

Type: `UInt32`
Number of full items actually read, which may be less than count if an error occurs or if the end of the file is encountered before reaching count.

See Also

Reference
FreelmageAPI.IO Namespace

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Help improve this Documentation: Join the Project
SeekProc Delegate

Delegate to the C++ function `fseek`.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate int SeekProc(
    fi_handle handle,
    int offset,
    SeekOrigin origin
)
```

### Parameters

**handle**
- Type: `FreeImageAPI.IOfi_handle`
  - Handle/stream to seek in.

**offset**
- Type: `System.Int32`
  - Number of bytes from origin.

**origin**
- Type: `System.IOSeekOrigin`
  - Initial position.

### Return Value
- Type: `Int32`
  - If successful 0 is returned; otherwise a nonzero value.

### See Also
TellProc Delegate

Delegate to the C++ function `ftell`.

**Namespace:** FreeImageAPI.IO  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public delegate int TellProc(
    fi_handle handle
)
```

### Parameters

- **handle**
  - Type: FreeImageAPI.IOfi_handle  
  Handle/stream to retrieve its current position from.

### Return Value

Type: **Int32**  
The current position.

### See Also

- **Reference**  
  FreeImageAPI.IO Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
WriteProc Delegate

Delegate to the C++ function fwrite.

Namespace: FreeImageAPI.IO
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public delegate uint WriteProc(
    IntPtr buffer,
    uint size,
    uint count,
    fi_handle handle
)
```

Parameters

- **buffer**
  - Type: System IntPtr
  - Pointer to data to be written.
- **size**
  - Type: System UInt32
  - Item size in bytes.
- **count**
  - Type: System UInt32
  - Maximum number of items to be written.
- **handle**
  - Type: FreeImageAPI.IO fi_handle
  - Handle/stream to write to.

Return Value

Type: UInt32
Number of full items actually written, which may be less than count if an error occurs. Also, if an error occurs, the file-position indicator cannot be determined.

See Also

Reference
FreelmageAPI.IO Namespace

Contact/Feedback: Freelmage.NET Homepage
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### Classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GifInformation</td>
<td>Provides additional information specific for GIF files. This class cannot be inherited.</td>
</tr>
<tr>
<td>ImageMetadata</td>
<td>Class handling metadata of a FreeImage bitmap.</td>
</tr>
<tr>
<td>MDM_ANIMATION</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_ANIMATION.</td>
</tr>
<tr>
<td>MDM_COMMENTS</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_COMMENTS.</td>
</tr>
<tr>
<td>MDM_CUSTOM</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_CUSTOM.</td>
</tr>
<tr>
<td>MDM_EXIF_EXIF</td>
<td>Represents a collection of all tags contained in the metadata model</td>
</tr>
<tr>
<td>Metadata Model</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>FIMD_EXIF_EXIF</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_EXIF_EXIF.</td>
</tr>
<tr>
<td>MDM_EXIF_GPS</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_EXIF_GPS.</td>
</tr>
<tr>
<td>MDM_EXIF_MAIN</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_EXIF_MAIN.</td>
</tr>
<tr>
<td>MDM_GEOTIFF</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_GEOTIFF.</td>
</tr>
<tr>
<td>MDM_INTEROP</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_EXIF_INTEROP.</td>
</tr>
<tr>
<td>MDM_IPTC</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_IPTC.</td>
</tr>
<tr>
<td>MDM_MAKERNOTE</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_EXIF_MAKERNOTE.</td>
</tr>
<tr>
<td>MDM_NODATA</td>
<td>Represents a collection of all tags contained in the metadata model FIMD_NODATA.</td>
</tr>
<tr>
<td>MDM_XMP</td>
<td>Represents a collection of all tags contained in the</td>
</tr>
</tbody>
</table>
MetadataModel

Base class that represents a collection of all tags contained in a metadata model.

MetadataTag

Manages metadata objects and operations.

WICMetadataHandler

Windows Imaging Component Metadata Handler. See BitmapMetadata.

## Enumerations

<table>
<thead>
<tr>
<th>Enumeration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DisposalMethodType</td>
<td>Specifies how a single frame will be handled after being displayed.</td>
</tr>
<tr>
<td>MetadataModelAltitudeType</td>
<td>Specifies different altitude types.</td>
</tr>
<tr>
<td>MetadataModelDirectionReference</td>
<td>Specifies different direction types.</td>
</tr>
<tr>
<td>MetadataModelExifImageOrientation</td>
<td>Specifies orientation of images.</td>
</tr>
<tr>
<td>MetadataModelInteroperabilityMode</td>
<td>Specifies interoperability types.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>MetadataModelLatitudeType</td>
<td>Specifies the type of a latitude value.</td>
</tr>
<tr>
<td>MetadataModelLongitudeType</td>
<td>Specifies the type of a longitude value.</td>
</tr>
<tr>
<td>MetadataModelVelocityUnit</td>
<td>Specified different unit types.</td>
</tr>
</tbody>
</table>

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DisposalMethodType
Enumeration

Specifies how a single frame will be handled after being displayed.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public enum DisposalMethodType
```

Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unspecified</td>
<td>0</td>
<td>Same behavior as Leave but should not be used.</td>
</tr>
<tr>
<td>Leave</td>
<td>1</td>
<td>The image is left in place and will be overdrawn by the next image.</td>
</tr>
<tr>
<td>Background</td>
<td>2</td>
<td>The area of the image will be blanked out by its background.</td>
</tr>
<tr>
<td>Previous</td>
<td>3</td>
<td>Restores the the area of the image to the state it was before it has been dawn.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelmageAPI_Metadata Namespace

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GifInformation Class

Provides additional information specific for GIF files. This class cannot be inherited.

Inheritance Hierarchy

System
  Object
  FreeImageAPI.MetadataMetadataModel
  FreeImageAPI.MetadataMDM_ANIMATION
  FreeImageAPI.MetadataGifInformation

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public class GifInformation : MDM_ANIMATION
```

The GifInformation type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GifInformation</td>
<td>Initializes a new instance of the GifInformation class with the specified FreeImageBitmap.</td>
</tr>
</tbody>
</table>

Properties
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DisposalMethod</td>
<td>Gets or sets this frame's disposal method. Generally, this method defines, how to remove or replace a frame when the next frame has to be drawn. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>FrameLeft</td>
<td>Gets or sets the horizontal offset within the logical canvas area, this frame is to be displayed at. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>FrameTime</td>
<td>Gets or sets the amount of time in milliseconds this frame is to be displayed. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>FrameTop</td>
<td>Gets or sets the vertical offset within the logical canvas area, this frame is to be displayed.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>GlobalPalette</strong></td>
<td>Gets or sets the global palette of the GIF image.</td>
</tr>
<tr>
<td><strong>Interlaced</strong></td>
<td>Gets or sets a value indicating whether the image is interlaced.</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags.</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>Returns a list of all metadata tags this instance represents.</td>
</tr>
<tr>
<td><strong>LogicalHeight</strong></td>
<td>Gets or sets the height of the entire canvas area, that each page is displayed in.</td>
</tr>
<tr>
<td><strong>LogicalWidth</strong></td>
<td>Gets or sets the width of the entire canvas area, that each page is displayed in.</td>
</tr>
</tbody>
</table>
### LoopCount

Gets or sets the number of replays for the animation. Use 0 (zero) to specify an infinite number of replays. (Inherited from \texttt{MDM_ANIMATION}.)

### Model

Retrieves the datamodel that this instance represents. (Inherited from \texttt{MDM_ANIMATION}.)

### NoLocalPalette

Gets or sets a flag to suppress saving the dib's attached palette (making it use the global palette). The local palette is the palette used by a page. (Inherited from \texttt{MDM_ANIMATION}.)

### UseGlobalPalette

Gets or sets a value indicating whether this frame uses the GIF image's global palette. If set to \texttt{false}, this frame uses its local palette.

#### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{AddTag(MetadataTag)}</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. \texttt{Key} will be used as key.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AddTag(IEnumerableMetadataTag)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <code>Key</code> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>CreateGlobalPalette</td>
<td>Creates a global palette for the GIF image, initialized with all entries of the current local palette. The property <code>UseGlobalPalette</code> will be set to <code>true</code> when invoking this method. This effectively enables the newly created global palette.</td>
</tr>
<tr>
<td>CreateGlobalPalette(Int32)</td>
<td>Creates a global palette for the GIF image with the specified size, initialized with the first <code>size</code> entries of the current local palette.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>CreateGlobalPalette(Palette)</td>
<td>Creates a global palette for the GIF image, initialized with the entries of the specified palette. The property <code>UseGlobalPalette</code> will be set to <code>true</code> when invoking this method. This effectively enables the newly created global palette.</td>
</tr>
<tr>
<td>CreateGlobalPalette(Palette, Int32)</td>
<td>Creates a global palette for the GIF image with the specified size, initialized with the first <code>size</code> entries of the specified palette. The property <code>UseGlobalPalette</code> will be set to <code>true</code> when invoking</td>
</tr>
</tbody>
</table>
This method. This effectively enables the newly created global palette.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DestoryModel</strong></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>GetType</strong></td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>GetUInt32Array</strong></td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><strong>GetUInt32Value</strong></td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><strong>MemberwiseClone</strong></td>
<td>Creates a shallow copy of the current <strong>Object</strong>. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>RegexSearch</strong></td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>
Top

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImageAPI.Metadata Namespace

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GifInformation Constructor

Initializes a new instance of the GifInformation class with the specified FreeImageBitmap.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public GifInformation(
    FreeImageBitmap bitmap
)
```

Parameters

- `bitmap`
  Type: FreeImageAPI.FreeImageBitmap
  A reference to a FreeImageBitmap instance.

See Also

Reference
- GifInformation Class
- FreeImageAPI.Metadata Namespace

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The **GifInformation** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DisposalMethod</td>
<td>Gets or sets this frame's disposal method. Generally, this method defines, how to remove or replace a frame when the next frame has to be drawn. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>FrameLeft</td>
<td>Gets or sets the horizontal offset within the logical canvas area, this frame is to be displayed at. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FrameTime</td>
<td>Gets or sets the amount of time in milliseconds this frame is to be displayed. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>FrameTop</td>
<td>Gets or sets the vertical offset within the logical canvas area, this frame is to be displayed at. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>GlobalPalette</td>
<td>Gets or sets the global palette of the GIF image. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>Interlaced</td>
<td>Gets or sets a value indicating whether the image is interlaced. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>LogicalHeight</td>
<td>Gets or sets the height of the entire canvas area, that each page is displayed in.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>LogicalWidth</td>
<td>Gets or sets the width of the entire canvas area, that each page is displayed in. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>LoopCount</td>
<td>Gets or sets the number of replays for the animation. Use 0 (zero) to specify an infinite number of replays. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>NoLocalPalette</td>
<td>Gets or sets a flag to suppress saving the dib's attached palette (making it use the global palette). The local palette is the palette used by a page. (Inherited from MDM_ANIMATION.)</td>
</tr>
<tr>
<td>UseGlobalPalette</td>
<td>Gets or sets a value indicating whether this frame uses the GIF image's global palette. If set to <code>false</code>, this frame uses its local palette.</td>
</tr>
</tbody>
</table>
See Also

Reference
GifInformation Class
FreelmageAPI.Metadata Namespace

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GifInformationUseGlobalPalette Property

Gets or sets a value indicating whether this frame uses the GIF image's global palette. If set to **false**, this frame uses its local palette.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<bool> UseGlobalPalette { get; set; }
```

**Property Value**

Type: **NullableBoolean**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- **Reference**
  - GifInformation Class
  - FreelImageAPI.Metadata Namespace
The `GifInformation` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>AddTag(MetadataTag)</code></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>AddTag(IEnumerable&lt;MetadataTag&gt;)</code></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>CreateGlobalPalette</code></td>
<td>Creates a global palette for the GIF image, initialized with all entries of the current local palette. The</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CreateGlobalPalette(Int32)</strong></td>
<td>Creates a global palette for the GIF image with the specified size, initialized with the first size entries of the current local palette. The property <strong>UseGlobalPalette</strong> will be set to true when invoking this method. This effectively enables the newly created global palette.</td>
</tr>
<tr>
<td><strong>CreateGlobalPalette(Palette)</strong></td>
<td>Creates a global palette for the GIF image, initialized with the entries of the specified palette. The property <strong>UseGlobalPalette</strong> will be set to true when invoking</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CreateGlobalPalette(Palette, Int32)</td>
<td>Creates a global palette for the GIF image with the specified size, initialized with the first size entries of the specified palette. The property UseGlobalPalette will be set to true when invoking this method. This effectively enables the newly created global palette.</td>
</tr>
<tr>
<td>DestroyModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>GetTag</strong></td>
<td>Returns the specified metadata tag. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><strong>GetTagArray</strong></td>
<td>Returns an array containing the data of the</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag specified tag.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>as unsigned 32bit integer.</td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined.</td>
</tr>
<tr>
<td>Tag Exists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference
- GifInformation Class
- FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="CreateGlobalPalette" /></td>
<td>Creates a global palette for the GIF image, initialized with all entries of the current local palette. The property UseGlobalPalette will be set to true when invoking this method. This effectively enables the newly created global palette.</td>
</tr>
<tr>
<td><img src="image" alt="CreateGlobalPalette(Int32)" /></td>
<td>Creates a global palette for the GIF image with the specified size, initialized with the first size entries of the current local palette. The property UseGlobalPalette will be set to true when invoking this method.</td>
</tr>
</tbody>
</table>
method. This effectively enables the newly created global palette.

CreateGlobalPalette(Palette)

Creates a global palette for the GIF image, initialized with the entries of the specified palette. The property UseGlobalPalette will be set to true when invoking this method. This effectively enables the newly created global palette.

CreateGlobalPalette(Palette, Int32)

Creates a global palette for the GIF image with the specified size, initialized with the first size entries of the specified palette. The property UseGlobalPalette will be set to true when invoking this method. This effectively enables the newly created global palette.
See Also

Reference
GifInformation Class
FreelmageAPI.Metadata Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
GifInformation.CreateGlobalPalette Method

Creates a global palette for the GIF image, initialized with all entries of the current local palette. The property `UseGlobalPalette` will be set to `true` when invoking this method. This effectively enables the newly created global palette.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void CreateGlobalPalette()
```

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidOperationException</td>
<td>The image does not have a palette.</td>
</tr>
</tbody>
</table>

### See Also

**Reference**  
- GifInformation Class  
- CreateGlobalPalette Overload  
- FreeImageAPI.Metadata Namespace

**Contact/Feedback:** FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
GifInformationCreateGlobalPalette Method (Int32)

Creates a global palette for the GIF image with the specified size, initialized with the first size entries of the current local palette. The property UseGlobalPalette will be set to true when invoking this method. This effectively enables the newly created global palette.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void CreateGlobalPalette(
    int size
)
```

Parameters

**size**
Type: SystemInt32
The size of the newly created global palette.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>palette is a null reference.</td>
</tr>
</tbody>
</table>

See Also
GifInformationCreateGlobalPalette Method (Palette)

Creates a global palette for the GIF image, initialized with the entries of the specified palette. The property UseGlobalPalette will be set to true when invoking this method. This effectively enables the newly created global palette.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void CreateGlobalPalette(
    Palette palette
)
```

Parameters

- **palette**
  - Type: FreeImageAPIPalette
  - The palette that contains the initial values for the newly created global palette.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>palette is a null reference.</td>
</tr>
</tbody>
</table>

See Also
GifInformation\n
CreateGlobalPalette Method (Palette, Int32)

Creates a global palette for the GIF image with the specified size, intialized with the first size entries of the specified palette. The property UseGlobalPalette will be set to true when invoking this method. This effectively enables the newly created global palette.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public void CreateGlobalPalette(
    Palette palette,
    int size
)
```

Parameters

- **palette**
  - Type: FreeImageAPI.Palette
  - The palette that contains the initial values for the newly created global palette.

- **size**
  - Type: System.Int32
  - The size of the newly created global palette.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>


ArgumentNullException

palette is a null reference.

See Also

Reference
GifInformation Class
CreateGlobalPalette Overload
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
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GifInformation Fields

The `GifInformation` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
</tbody>
</table>

### See Also

- **Reference**
  - `GifInformation Class`
  - `FreeImageAPI.Metadata Namespace`

Contact/Feedback: [FreeImage.NET Homepage](https://freimage.net)
Help improve this Documentation: [Join the Project](https://github.com/FreImageNET/FreImage.NET)
ImageMetadata Class

Class handling metadata of a FreeImage bitmap.

Inheritance Hierarchy

- System
  - Object
  - FreeImageAPI.Metadata
    - ImageMetadata

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c# public class ImageMetadata : IEnumerable, IComparable, IComparable<ImageMetadata>```

The `ImageMetadata` type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImageMetadata(FIBITMAP)</td>
<td>Initializes a new instance based on the specified FIBITMAP, showing all known models.</td>
</tr>
<tr>
<td>ImageMetadata(FIBITMAP, Boolean)</td>
<td>Initializes a new instance based on the specified FIBITMAP, showing or hiding empty</td>
</tr>
</tbody>
</table>
Top

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Count] Count</td>
<td>Returns the number of visible MetadataModels.</td>
</tr>
<tr>
<td>![HideEmptyModels] HideEmptyModels</td>
<td>Gets or sets whether empty MetadataModels are hidden.</td>
</tr>
<tr>
<td>![ItemInt32] ItemInt32</td>
<td>Gets or sets the MetadataModel at the specified index. In case the getter returns null the model is not contained by the list. null can be used calling the setter to destroy the model.</td>
</tr>
<tr>
<td>![ItemFREE_IMAGE_MDMODEL] ItemFREE_IMAGE_MDMODEL</td>
<td>Gets or sets the MetadataModel of the specified type. In case the getter returns null the model is not contained by the list. null can be</td>
</tr>
</tbody>
</table>
used calling the setter to destroy the model.

<table>
<thead>
<tr>
<th>List</th>
<th>Returns a list of all visible MetadataModels.</th>
</tr>
</thead>
</table>

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddTag</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key.</td>
</tr>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
<tr>
<td>CompareTo(ImageMetadata)</td>
<td>Compares this instance with a specified <strong>ImageMetadata</strong> object.</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual <code>MetadataModels</code> in this <code>ImageMetadata</code>.</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>GetType</strong></td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>MemberwiseClone</strong></td>
<td>Creates a shallow copy of the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Returns a string that represents the</td>
</tr>
</tbody>
</table>
current object. (Inherited from Object.)

See Also

Reference
FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
### ImageMetadata Constructor

#### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImageMetadata(FIBITMAP)</td>
<td>Initializes a new instance based on the specified FIBITMAP, showing all known models.</td>
</tr>
<tr>
<td>ImageMetadata(FIBITMAP, Boolean)</td>
<td>Initializes a new instance based on the specified FIBITMAP, showing or hiding empty models.</td>
</tr>
</tbody>
</table>

See Also

- Reference
  - ImageMetadata Class
  - FreelImageAPI.Metadata Namespace
ImageMetadata Constructor
(FIBITMAP)

Initializes a new instance based on the specified FIBITMAP, showing all known models.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ImageMetadata(
    FIBITMAP dib
)
```

### Parameters

- **dib**  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

### See Also

- Reference  
  ImageMetadata Class  
  ImageMetadata Overload  
  FreeImageAPI.Metadata Namespace

---

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ImageMetadata Constructor
(FIBITMAP, Boolean)

Initializes a new instance based on the specified FIBITMAP, showing or hiding empty models.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public ImageMetadata(FIBITMAP dib, bool hideEmptyModels)
```

**Parameters**

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

- **hideEmptyModels**
  - Type: System.Boolean
  - When true, empty metadata models will be hidden until a tag to this model is added.

**See Also**

- Reference
  - ImageMetadata Class
  - ImageMetadata Overload
The `ImageMetadata` type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of visible <code>MetadataModels</code>.</td>
</tr>
<tr>
<td>HideEmptyModels</td>
<td>Gets or sets whether empty <code>MetadataModels</code> are hidden.</td>
</tr>
<tr>
<td>ItemInt32</td>
<td>Gets or sets the <code>MetadataModel</code> at the specified index. In case the getter returns <code>null</code> the model is not contained by the list. <code>null</code> can be used calling the setter to destroy the model.</td>
</tr>
<tr>
<td>ItemFREE_IMAGE_MDMODEL</td>
<td>Gets or sets the <code>MetadataModel</code> of the specified type. In case the getter returns <code>null</code> the model is not contained by the list. <code>null</code> can be used calling the setter to destroy the model.</td>
</tr>
</tbody>
</table>
null the model is not contained by the list. null can be used calling the setter to destroy the model.

| List | Returns a list of all visible MetadataModels. |

See Also

Reference
- ImageMetadata Class
- FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
ImageMetadataCount Property

Returns the number of visible MetadataModels.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int Count { get; }
```

### Property Value

Type: **Int32**

### See Also

Reference  
**ImageMetadata Class**  
**FreeImageAPI.Metadata Namespace**

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# ImageMetadata.HideEmptyModels Property

Gets or sets whether empty MetadataModels are hidden.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public bool HideEmptyModels { get; set; }
```

## Property Value

Type: Boolean

## See Also

Reference  
- ImageMetadata Class  
- FreeImageAPI.Metadata Namespace

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# ImageMetadata Item Property

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ItemInt32</td>
<td>Gets or sets the MetadataModel at the specified index. In case the getter returns <code>null</code> the model is not contained by the list. <code>null</code> can be used calling the setter to destroy the model.</td>
</tr>
<tr>
<td>ItemFREE_IMAGE_MDMODEL</td>
<td>Gets or sets the MetadataModel of the specified type. In case the getter returns <code>null</code> the model is not contained by the list. <code>null</code> can be used calling the setter to destroy the model.</td>
</tr>
</tbody>
</table>

**See Also**
Reference

ImageMetadata Class
FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
ImageMetadataItem Property (Int32)

Gets or sets the MetadataModel at the specified index. In case the getter returns null the model is not contained by the list.

null can be used calling the setter to destroy the model.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MetadataModel this[int index] { get; }
```

### Parameters

**index**
Type: System.Int32  
Index of the MetadataModel within this instance.

### Return Value
Type: MetadataModel  
The MetadataModel object at the specified index.

### See Also

Reference  
ImageMetadata Class  
Item Overload
ImageMetadataItem Property (FREE_IMAGE_MDMODEL)

Gets or sets the MetadataModel of the specified type. In case the getter returns null the model is not contained by the list. null can be used calling the setter to destroy the model.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public MetadataModel this[FREE_IMAGE_MDMODEL model] { get; }
```

Parameters

- **model**
  Type: FreeImageAPI.FREE_IMAGE_MDMODEL
  Type of the model.

Return Value

Type: MetadataModel
The MetadataModel object of the specified type.

See Also

Reference
ImageMetadata Class
Item Overload
ImageMetadataList Property

Returns a list of all visible MetadataModels.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public List<MetadataModel> List { get; }
```

### Property Value

Type: List<MetadataModel>

### See Also

Reference
- ImageMetadata Class
- FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage  
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The `ImageMetadata` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>AddTag</code></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key.</td>
</tr>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <strong>Object</strong>.</td>
</tr>
<tr>
<td><code>CompareTo(ImageMetadata)</code></td>
<td>Compares this instance with a specified <strong>ImageMetadata</strong> object.</td>
</tr>
<tr>
<td><code>Equals</code></td>
<td>Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><code>Finalize</code></td>
<td>Allows an object to try to free resources and</td>
</tr>
</tbody>
</table>
Perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from `Object`.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual <code>MetadataModels</code> in this <code>ImageMetadata</code>.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns a string that represents the current object. (Inherited from <code>Object</code>.)</td>
</tr>
</tbody>
</table>
See Also

Reference
ImageMetadata Class
FreelImageAPI.Metadata Namespace
ImageMetadata AddTag Method

Adds new tag to the bitmap or updates its value in case it already exists. **Key** will be used as key.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool AddTag(
    MetadataTag tag
)
```

### Parameters

**tag**
- Type: `FreeImageAPI.MetadataMetadataTag`
- The tag to add or update.

### Return Value

Type: `Boolean`
- Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>tag</code> is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
ImageMetadata Class
FreelmageAPI.Metadata Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
# ImageMetadata.CompareTo Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>CompareTo(Object)</code></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><code>CompareTo(ImageMetadata)</code></td>
<td>Compares this instance with a specified <code>ImageMetadata</code> object.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- ImageMetadata Class
- FreelImageAPI.Metadata Namespace

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ImageMetadata.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
    Object obj
)
```

### Parameters

**obj**
- Type: System.Object
- An object to compare with this instance.

### Return Value

- Type: Int32
- A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

IComparable.CompareTo(Object)

### Exceptions
ArgumentException

$obj$ is not a $ImageMetadata$.

See Also

Reference

$ImageMetadata$ Class

CompareTo Overload

FreeImageAPI.Metadata Namespace

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ImageMetadata.CompareTo Method (ImageMetadata)

Compares this instance with a specified ImageMetadata object.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public int CompareTo(
    ImageMetadata other
)
```

### Parameters

- **other**  
  Type: FreeImageAPI.Metadata.ImageMetadata  
  A ImageMetadata to compare.

### Return Value

Type: Int32  
A signed number indicating the relative values of this instance and `other`.

- Implements `IComparable.CompareTo(T)`

### See Also

- Reference  
  ImageMetadata Class
CompareTo Overload
FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
ImageMetadata.GetEnumerator Method

Retrieves an object that can iterate through the individual MetadataModels in this ImageMetadata.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public IEnumerator GetEnumerator()
```

### Return Value

Type: IEnumerable  
An IEnumerator for this ImageMetadata.

Implements  
IEnumerable.GetEnumerator

### See Also

Reference  
ImageMetadata Class  
FreeImageAPI.Metadata Namespace

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MDM_ANIMATION Class

Represents a collection of all tags contained in the metadata model FIMD_ANIMATION.

Inheritance Hierarchy

System
  Object
  FreeImageAPI.Metadata
  MetadataModel
  FreeImageAPI.Metadata.FIMD_ANIMATION
  FreeImageAPI.Metadata.GifInformation

Namespace: FreeImageAPI.Metadata
Assembly: FreeImage.NET (in FreeImage.NET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public class MDM_ANIMATION : MetadataModel
```

The MDM_ANIMATION type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_ANIMATION</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Count</strong></td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>DisposalMethod</strong></td>
<td>Gets or sets this frame's disposal method. Generally, this method defines, how to remove or replace a frame when the next frame has to be drawn.</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>FrameLeft</strong></td>
<td>Gets or sets the horizontal offset within the logical canvas area, this frame is to be displayed at.</td>
</tr>
<tr>
<td><strong>FrameTime</strong></td>
<td>Gets or sets the amount of time in milliseconds this frame is to be displayed.</td>
</tr>
<tr>
<td><strong>FrameTop</strong></td>
<td>Gets or sets the vertical offset within the logical canvas area, this frame is to be displayed at.</td>
</tr>
<tr>
<td><strong>GlobalPalette</strong></td>
<td>Gets or sets the global palette of the GIF image.</td>
</tr>
<tr>
<td><strong>Interlaced</strong></td>
<td>Gets or sets a value indicating whether the image is interlaced.</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>
List

Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)

LogicalHeight

Gets or sets the height of the entire canvas area, that each page is displayed in.

LogicalWidth

Gets or sets the width of the entire canvas area, that each page is displayed in.

LoopCount

Gets or sets the number of replays for the animation. Use 0 (zero) to specify an infinite number of replays.

Model

Retrieves the datamodel that this instance represents. (Overrides MetadataModel.Model.)

NoLocalPalette

Gets or sets a flag to supress saving the dib's attached palette (making it use the global palette). The local palette is the palette used by a page.

---

Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists.</td>
</tr>
</tbody>
</table>

Key will
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AddTag(IEnumerable&lt;MetadataTag&gt;)</strong></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. Key will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>DestroyModel</strong></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| **GetTagText** | Returns the string contained by the specified tag.  
(Inherited from MetadataModel.) |
| **GetTagValue** | Returns the value of the specified tag.  
(Inherited from MetadataModel.) |
| **GetType** | Gets the Type of the current instance.  
(Inherited from Object.) |
| **GetUInt32Array** | Returns an array containing the data of the specified tag as unsigned 32bit integer.  
(Inherited from MetadataModel.) |
| **GetUInt32Value** | Returns the value of the tag as unsigned 32bit integer.  
(Inherited from MetadataModel.) |
<p>| <strong>MemberwiseClone</strong> | Creates a shallow copy of |</p>
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists.</td>
</tr>
</tbody>
</table>

the current Object. (Inherited from Object.)
ToString

Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference
FreeImageAPI.Metadata Namespace

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MDM_ANIMATION Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_ANIMATION(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### See Also

- Reference
  - MDM_ANIMATION Class
  - FreeImageAPI.Metadata Namespace
The **MDM_ANIMATION** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DisposalMethod</td>
<td>Gets or sets this frame's disposal method. Generally, this method defines, how to remove or replace a frame when the next frame has to be drawn.</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>FrameLeft</td>
<td>Gets or sets the horizontal offset within the logical canvas area, this frame is to be displayed at.</td>
</tr>
<tr>
<td>FrameTime</td>
<td>Gets or sets the amount of time in milliseconds this frame is to be displayed.</td>
</tr>
<tr>
<td>FrameTop</td>
<td>Gets or sets the vertical offset within the logical canvas area,</td>
</tr>
</tbody>
</table>
GlobalPalette | Gets or sets the global palette of the GIF image.

Interlaced | Gets or sets a value indicating whether the image is interlaced.

Item | Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)

List | Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)

LogicalHeight | Gets or sets the height of the entire canvas area, that each page is displayed in.

LogicalWidth | Gets or sets the width of the entire canvas area, that each page is displayed in.

LoopCount | Gets or sets the number of replays for the animation. Use 0 (zero) to specify an infinite number of replays.

Model | Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)

NoLocalPalette | Gets or sets a flag to suppress saving the dib's attached palette (making it use the global palette). The local palette is the
palette used by a page.

See Also

Reference
MDM_ANIMATION Class
FreeImageAPI.Metadata Namespace

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MDM_ANIMATION.DisposalMethod Property

Gets or sets this frame's disposal method. Generally, this method defines, how to remove or replace a frame when the next frame has to be drawn.

Namespace: FreelImageAPI.Metadata
Assembly: FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<DisposalMethodType> DisposalMethod
```

**Property Value**
Type: Nullable<DisposalMethodType>

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference
MDM_ANIMATION Class
FreelImageAPI.Metadata Namespace
MDM_ANIMATIONFrameLeft Property

Gets or sets the horizontal offset within the logical canvas area, this frame is to be displayed at.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<ushort> FrameLeft { get; set; }
```

**Property Value**

Type: Nullable(UInt16)

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_ANIMATION Class

FreeImageAPI.Metadata Namespace

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MDM_ANIMATION FrameTime Property

Gets or sets the amount of time in milliseconds this frame is to be displayed.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<uint> FrameTime { get; set; }
```

**Property Value**

Type: NullableUInt32

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference
- MDM_ANIMATION Class
- FreeImageAPI.Metadata Namespace

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MDM_ANIMATIONFrameTop Property

Gets or sets the vertical offset within the logical canvas area, this frame is to be displayed at.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> FrameTop { get; set; }
```

### Property Value

Type: Nullable(UInt16)

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property’s value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**  
MDM_ANIMATION Class  
FreeImageAPI.Metadata Namespace
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MDM_ANIMATION GlobalPalette Property

Gets or sets the global palette of the GIF image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Palette GlobalPalette { get; set; }
```

### Property Value

Type: Palette

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_ANIMATION Class  
FreeImageAPI.Metadata Namespace

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MDM_ANIMATION.Interlaced

Property

Gets or sets a value indicating whether the image is interlaced.

**Namespace:** FreiImageAPI.Metadata

**Assembly:** FreiImageNET (in FreiImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<bool> Interlaced { get; set; }
```

### Property Value

Type: NullableBoolean

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_ANIMATION Class
FreiImageAPI.Metadata Namespace
MDM_ANIMATION.LogicalHeight Property

Gets or sets the height of the entire canvas area, that each page is displayed in.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> LogicalHeight { get; set; }
```

### Property Value

Type: Nullable(UInt16)

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_ANIMATION Class
FreeImageAPI.Metadata Namespace
Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_ANIMATION.LogicalWidth Property

Gets or sets the width of the entire canvas area, that each page is displayed in.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> LogicalWidth { get; set; }
```

### Property Value

Type: Nullable(UInt16)

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_ANIMATION Class  
FreeImageAPI.Metadata Namespace
**MDM_ANIMATION\LoopCount Property**

Gets or sets the number of replays for the animation. Use 0 (zero) to specify an infinite number of replays.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<uint> LoopCount { get; set; }
```

**Property Value**  
Type: Nullable(UInt32)

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_ANIMATION Class  
FreeImageAPI.Metadata Namespace

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MDM_ANIMATION Model Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: **FREE_IMAGE_MDMODEL**

### See Also

Reference  
**MDM_ANIMATION Class**  
**FreeImageAPI.Metadata Namespace**

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MDM_ANIMATION.NoLocalPalette Property

Gets or sets a flag to suppress saving the dib's attached palette (making it use the global palette). The local palette is the palette used by a page.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<bool> NoLocalPalette { get; set; }
```

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_ANIMATION Class  
FreeImageAPI.Metadata Namespace
## MDM_ANIMATION Methods

The **MDM_ANIMATION** type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="_addtag" /> AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><img src="image" alt="addtag" /> AddTag(IEnumerableMetadataTag)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><img src="image" alt="destroymodel" /> DestoryModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup</td>
</tr>
<tr>
<td></td>
<td>operations before it is reclaimed by garbage collection.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual MetadataTags in</td>
</tr>
<tr>
<td></td>
<td>this MetadataModel.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from</td>
</tr>
<tr>
<td></td>
<td>MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32 bit integer.</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object.</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list.</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap.</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>SetTagValueT(String, NullableT)</code></td>
<td>Sets the value of the specified tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>SetTagValueUndefined</code></td>
<td>Sets the value of the specified tag as undefined. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>TagExists</code></td>
<td>Returns whether the specified tag exists. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the model of the <code>MetadataModel</code> object to its equivalent string representation. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
</tbody>
</table>

### See Also

- **Reference**
  - `MDM_ANIMATION` Class
  - `FreelmageAPI.Metadata` Namespace

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The MDM_ANIMATION type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated Freelite-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

## See Also

Reference

MDM_ANIMATION Class

FreeliteAPI.Metadata Namespace
MDM_COMMENTS Class

Represents a collection of all tags contained in the metadata model FIMD_COMMENTS.

Inheritance Hierarchy

```
System.Object  FreeImageAPI.MetadataMetadataModel
               FreeImageAPI.MetadataMDM_COMMENTS
```

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public class MDM_COMMENTS : MetadataModel
```

The MDM_COMMENTS type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_COMMENTS</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment</td>
<td>Gets or sets the comment of the</td>
</tr>
</tbody>
</table>
image. Supported formats are JPEG, PNG and GIF.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Count</strong></td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)</td>
</tr>
</tbody>
</table>

Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AddTag(MetadataTag)</strong></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>AddTag(IEnumerable&lt;MetadataTag&gt;)</code></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <code>Key</code> will be used as key. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>DestoryModel</code></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>Equals</code></td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>Finalize</code></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from</td>
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<td>Method</td>
<td>Description</td>
</tr>
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<td>-----------------</td>
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</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32-bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32-bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>
| ToString            | Converts the
model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

### See Also

**Reference**

FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
MDM_COMMENTS Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_COMMENTS(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

**Reference**

- MDM_COMMENTS Class
- FreeImageAPI.Metadata Namespace

Contact/Feedback: [FreeImage.NET Homepage](#)  
Help improve this Documentation: [Join the Project](#)
The **MDM_COMMENTS** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Comment" /></td>
<td><strong>Comment</strong> Gets or sets the comment of the image. Supported formats are JPEG, PNG and GIF.</td>
</tr>
<tr>
<td><img src="image" alt="Count" /></td>
<td><strong>Count</strong> Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="image" alt="Exists" /></td>
<td><strong>Exists</strong> Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="image" alt="Item" /></td>
<td><strong>Item</strong> Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="image" alt="List" /></td>
<td><strong>List</strong> Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="image" alt="Model" /></td>
<td><strong>Model</strong> Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)</td>
</tr>
</tbody>
</table>
See Also

Reference
- MDM_COMMENTS Class
- FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_COMMENTSComment Property

Gets or sets the comment of the image. Supported formats are JPEG, PNG and GIF.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string Comment { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_COMMENTS Class  
FreeImageAPI.Metadata Namespace

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MDMCOMMENTSMODEL Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: FREE_IMAGE_MDMODEL

### See Also

Reference  
MDMCOMMENTSMODEL Class  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
The **MDM_COMMENTS** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>AddTag(IEnumerable&lt;MetadataTag&gt;)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DestroyModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
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<td>---------------</td>
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</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <em>Object</em> is equal to the current <em>Object</em>. (Inherited from <em>Object</em>.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <em>Object</em>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <em>Object</em>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- MDM_COMMENTS Class
- FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
The `MDM_COMMENTS` type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>dib</code></td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
</tbody>
</table>

## See Also

- Reference
  - `MDM_COMMENTS` Class
  - `FreelImageAPI.Metadata` Namespace
MDM_CUSTOM Class

Represents a collection of all tags contained in the metadata model `FIMD_CUSTOM`.

### Inheritance Hierarchy

```
System
  Object
  FreeImageAPI.Metadata
    MetadataModel
    MDM_CUSTOM
```

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public class MDM_CUSTOM : MetadataModel
```

The `MDM_CUSTOM` type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>MDM_CUSTOM</code></td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>Count</code></td>
<td>Returns the number of metadata tags</td>
</tr>
</tbody>
</table>
this instance represents. (Inherited from MetadataModel.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)</td>
</tr>
</tbody>
</table>

**Methods**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. Key will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>AddTag(IEnumerableMetadataTag)</td>
<td>Adds a list of tags to the bitmap or updates their</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DestoryModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
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</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>GetTag</code></td>
<td>Returns the specified metadata tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetTagArrayT</code></td>
<td>Returns an array containing the data of the specified tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetTagFromIndex</code></td>
<td>Returns the tag at the given index. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetTagText</code></td>
<td>Returns the string contained by the specified tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td>Method Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the</td>
</tr>
<tr>
<td>Method Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string.</td>
</tr>
</tbody>
</table>
Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference

FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_CUSTOM Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_CUSTOM(
    FIBITMAP dib
)
```

### Parameters

`dib`  
Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

**Reference**  
MDM_CUSTOM Class  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage  
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MDM_CUSTOM Properties

The MDM_CUSTOM type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Count</strong></td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference

MDM_CUSTOM Class
MDM_CUSTOMModel Property

Retrieves the datamodel that this instance represents.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public override FREE_IMAGE_MDMODEL Model { get; }
```

Property Value

Type: FREE_IMAGE_MDMODEL

See Also

Reference
MDM_CUSTOM Class
FreeImageAPI.Metadata Namespace

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The **MDM_CUSTOM** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="Image" alt="AddTag(MetadataTag)" /></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="Image" alt="AddTag(IEnumerableMetadataTag)" /></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="Image" alt="DestoryModel" /></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from</td>
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<tr>
<td>Method</td>
<td>Description</td>
</tr>
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</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified <a href="#">Object</a> is equal to the current <a href="#">Object</a>. (Inherited from <a href="#">Object</a>)</td>
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<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <a href="#">Object</a>)</td>
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<td>GetEnumerator</td>
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<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
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<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
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<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
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<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
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<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
<tr>
<td>Member</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
</tbody>
</table>
### SetTagValueT(String, NullableT)
Sets the value of the specified tag. (Inherited from MetadataModel.)

### SetTagValueUndefined
Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)

### TagExists
Returns whether the specified tag exists. (Inherited from MetadataModel.)

### ToString
Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)
Help improve this Documentation: Join the Project
The **MDM_CUSTOM** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![CheckMarkBorder] dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

### See Also

Reference
- MDM_CUSTOM Class
- FreImageAPI.Metadata Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIF Class

Represents a collection of all tags contained in the metadata model FIMD_EXIF_EXIF.

Inheritance Hierarchy

System
  Object
  FreeImageAPI.MetadataMetadataModel
  FreeImageAPI.MetadataMDM_EXIF_EXIF

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

The MDM_EXIF_EXIF type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_EXIF_EXIF</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ApertureValue</td>
<td>Gets or sets the lens</td>
</tr>
</tbody>
</table>
aperture. The unit is the APEX value.

<table>
<thead>
<tr>
<th><strong>BrightnessValue</strong></th>
<th>Gets or sets the value of brightness. The unit is the APEX value. Ordinarily it is given in the range of -99.99 to 99.99.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CFAPattern</strong></td>
<td>Gets or sets the color filter array (CFA) geometric pattern of the image sensor when a one-chip color area sensor is used. It does not apply to all sensing methods.</td>
</tr>
<tr>
<td><strong>ColorSpace</strong></td>
<td>Gets or sets the color space information tag. See remarks for further information.</td>
</tr>
<tr>
<td><strong>ComponentsConfiguration</strong></td>
<td>Gets or sets components configuration. See remarks for further information. Constant length of 4.</td>
</tr>
<tr>
<td><strong>CompressedBitsPerPixel</strong></td>
<td>Gets or sets compression mode used for a compressed image is indicated in unit bits per pixel.</td>
</tr>
<tr>
<td><strong>Contrast</strong></td>
<td>Gets or sets the direction of contrast processing applied by the camera when the image was</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>CustomRendered</td>
<td>Gets or sets the use of special processing on image data, such as rendering geared to output. When special processing is performed, the reader is expected to disable or minimize any further processing. See remarks for further information.</td>
</tr>
<tr>
<td>DateTimeDigitized</td>
<td>Gets or sets the date and time when the image was stored as digital data.</td>
</tr>
<tr>
<td>DateTimeOriginal</td>
<td>Gets or sets the date and time when the original image data was generated.</td>
</tr>
<tr>
<td>DeviceSettingDescription</td>
<td>Gets or sets information on the picture-taking conditions of a particular camera model. The tag is used only to indicate the picture-taking conditions in the reader.</td>
</tr>
<tr>
<td>DigitalZoomRatio</td>
<td>Gets or sets the digital</td>
</tr>
</tbody>
</table>
When the image was shot. If the numerator of the recorded value is 0, this indicates that digital zoom was not used.

<table>
<thead>
<tr>
<th>ExifVersion</th>
<th>Gets or sets the version of this standard supported. Constant length or 4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ExposureBiasValue</td>
<td>Gets or sets the exposure bias. The unit is the APEX value. Ordinarily it is given in the range of –99.99 to 99.99.</td>
</tr>
<tr>
<td>ExposureIndex</td>
<td>Gets or sets the exposure index selected on the camera or input device at the time the image was captured.</td>
</tr>
<tr>
<td>ExposureMode</td>
<td>Gets or sets the exposure mode set when the image was shot. In auto-bracketing mode, the camera shoots a series of frames of the same scene at different exposure settings. See remarks for</td>
</tr>
<tr>
<td><strong>ExposureProgram</strong></td>
<td>Gets or sets the class of the program used by the camera to set exposure when the picture is taken. See remarks for further information.</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>ExposureTime</strong></td>
<td>Gets or the exposure time, given in seconds (sec).</td>
</tr>
<tr>
<td><strong>FileSource</strong></td>
<td>Gets or sets the image source. If a DSC recorded the image, this tag value of this tag always be set to 3, indicating that the image was recorded on a DSC.</td>
</tr>
<tr>
<td><strong>Flash</strong></td>
<td>Gets or sets a value indicating the status of flash when the image was shot. Bit 0 indicates the flash firing status, bits 1 and 2 indicate the flash return status, bits 3 and 4 indicate the flash mode, bit 5 indicates whether the flash function is present, and bit 6 indicates &quot;red eye&quot; mode.</td>
</tr>
<tr>
<td><strong>FlashEnergy</strong></td>
<td>Gets or sets the strobe energy at the time the image is captured, as measured in Beam Candle Power Seconds.</td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FlashpixVersion</td>
<td>Gets or sets the Flashpix format version supported by a FPXR file. Constant length or 4.</td>
</tr>
<tr>
<td>FNumber</td>
<td>Gets or the F number.</td>
</tr>
<tr>
<td>FocalLength</td>
<td>Gets or sets the actual focal length of the lens, in mm. Conversion is not made to the focal length of a 35 mm film camera.</td>
</tr>
<tr>
<td>FocalLengthIn35mmFilm</td>
<td>Gets or sets the equivalent focal length assuming a 35mm film camera, in mm. A value of 0 means the focal length is unknown. Note that this tag differs from the FocalLength tag.</td>
</tr>
<tr>
<td>FocalPlaneResolutionUnit</td>
<td>Gets or sets the unit for measuring FocalPlaneXResolution and FocalPlaneYResolution. This value is the same as the ResolutionUnit.</td>
</tr>
<tr>
<td>FocalPlaneXResolution</td>
<td>Gets or sets the number of pixels in the image width (X) direction per FocalPlaneResolutionUnit on the camera focal plane.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>FocalPlaneYResolution</strong></td>
<td>Gets or sets the number of pixels in the image height (Y) direction per FocalPlaneResolutionUnit on the camera focal plane.</td>
</tr>
<tr>
<td><strong>GainControl</strong></td>
<td>Gets or sets the degree of overall image gain adjustment. See remarks for further information.</td>
</tr>
<tr>
<td><strong>ImageUniqueID</strong></td>
<td>Gets or sets an identifier assigned uniquely to each image. It is recorded as an ASCII string equivalent to hexadecimal notation and 128-bit fixed length. Constant length of 32.</td>
</tr>
<tr>
<td><strong>ISOSpeedRatings</strong></td>
<td>Gets or sets the ISO Speed and ISO Latitude of the camera or input device as specified in ISO 12232.</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>LightSource</strong></td>
<td>Gets or sets the kind of light source. See remarks for further information.</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>Returns a list of all</td>
</tr>
</tbody>
</table>
metadata tags this instance represents.
(Inherited from MetadataModel.)

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MakerNote</td>
<td>Gets or sets a tag for manufacturers of Exif writers to record any desired information. The contents are up to the manufacturer, but this tag should not be used for any other than its intended purpose.</td>
</tr>
<tr>
<td>MaxApertureValue</td>
<td>Gets or sets the smallest F number of the lens. The unit is the APEX value. Ordinarily it is given in the range of 00.00 to 99.99, but it is not limited to this range.</td>
</tr>
<tr>
<td>MeteringMode</td>
<td>Gets or sets the metering mode. See remarks for further information.</td>
</tr>
</tbody>
</table>
| Model        | Retrieves the datamodel that this instance represents.
(Overrides MetadataModel.Model.) |
| OECF         | Gets or sets the Opto-Electric Conversion Function (OECF) specified in ISO 14524. OECF is the relationship between the camera |
optical input and the image values.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PixelXDimension</strong></td>
<td>Gets or sets the valid width of a compressed image.</td>
</tr>
<tr>
<td><strong>PixelYDimension</strong></td>
<td>Gets or sets the valid height of a compressed image.</td>
</tr>
<tr>
<td><strong>RelatedSoundFile</strong></td>
<td>Gets or sets the name of an audio file related to the image data. The format is 8.3. Constant length of 12</td>
</tr>
<tr>
<td><strong>Saturation</strong></td>
<td>Gets or sets the direction of saturation processing applied by the camera when the image was shot. See remarks for further information.</td>
</tr>
<tr>
<td><strong>SceneCaptureType</strong></td>
<td>Gets or sets the type of scene that was shot. It can also be used to record the mode in which the image was shot. See remarks for further information.</td>
</tr>
<tr>
<td><strong>SceneType</strong></td>
<td>Gets or sets the type of scene. If a DSC recorded the image, this tag value shall always be set to 1, indicating that the image was directly photographed.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SensingMethod</td>
<td>Gets or sets the image sensor type on the camera or input device. See remarks for further information.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Gets or sets the direction of sharpness processing applied by the camera when the image was shot. See remarks for further information.</td>
</tr>
<tr>
<td>ShutterSpeedValue</td>
<td>Gets or sets the shutter speed. The unit is the APEX (Additive System of Photographic Exposure).</td>
</tr>
<tr>
<td>SpatialFrequencyResponse</td>
<td>Gets or sets the camera or input device spatial frequency table and SFR values in the direction of image width, image height, and diagonal direction, as specified in ISO 12233.</td>
</tr>
<tr>
<td>SpectralSensitivity</td>
<td>Gets or sets the spectral sensitivity of each channel of the camera used.</td>
</tr>
<tr>
<td>SubjectArea</td>
<td>Gets or sets a value indicating the location and area of the main subject in the overall scene. Variable length between 2 and 4.</td>
</tr>
<tr>
<td>SubjectDistance</td>
<td>Gets or sets distance to the subject, given in meters. Note that if the numerator of the recorded value is FFFFFFFF, infinity shall be indicated; and if the numerator is 0, distance unknown shall be indicated.</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SubjectDistanceRange</td>
<td>Gets or sets the distance to the subject. See remarks for further information.</td>
</tr>
<tr>
<td>SubjectLocation</td>
<td>Gets or sets the location of the main subject in the scene. The value of this tag represents the pixel at the center of the main subject relative to the left edge, prior to rotation processing as per the Rotation tag. The first value indicates the X column number and second indicates the Y row number.</td>
</tr>
<tr>
<td>SubsecTime</td>
<td>Gets or sets a tag used to record fractions of seconds for the DateTime tag.</td>
</tr>
<tr>
<td>SubsecTimeDigitized</td>
<td>Gets or sets a tag used to record fractions of seconds for the DateTimeDigitized tag.</td>
</tr>
</tbody>
</table>
SubsecTimeOriginal

Gets or sets a tag used to record fractions of seconds for the DateTimeOriginal tag.

UserComment

Gets or sets a tag for Exif users to write keywords or comments on the image besides those in ImageDescription, and without the character code limitations of the ImageDescription tag. Minimum length of 8. See remarks for further information.

WhiteBalance

Gets or sets the white balance mode set when the image was shot. See remarks for further information.

<table>
<thead>
<tr>
<th>Methods</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. Key will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>AddTag(IEnumerable&lt;MetadataTag&gt;)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
<td></td>
</tr>
<tr>
<td>DestroyModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
<td></td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Inherited from Object.)</td>
<td></td>
</tr>
<tr>
<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)</td>
<td></td>
</tr>
</tbody>
</table>
### GetEnumerator
Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. *(Inherited from MetadataModel.)*

### GetHashCode
Serves as a hash function for a particular type. *(Inherited from Object.)*

### GetTag
Returns the specified metadata tag. *(Inherited from MetadataModel.)*

### GetTagArrayT
Returns an array containing the data of the specified tag. *(Inherited from MetadataModel.)*

### GetTagFromIndex
Returns the tag at the given index. *(Inherited from MetadataModel.)*

### GetTagText
Returns the string contained
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GetTagValueT</strong></td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>GetType</strong></td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td><strong>GetUInt32Array</strong></td>
<td>Returns an array containing the data of the specified tag as unsigned 32-bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>GetUInt32Value</strong></td>
<td>Returns the value of the tag as unsigned 32-bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>MemberwiseClone</strong></td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>
| ToString               | Converts the
model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference
FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIF Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_EXIF_EXIF(
    FIBITMAP dib
)
```

### Parameters

**dib**

Type: FreeImageAPIFIBITMAP  
Handle to a FreeImage bitmap.

### See Also

**Reference**

MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
## MDM_EXIF_EXIF Properties

The **MDM_EXIF_EXIF** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ApertureValue</td>
<td>Gets or sets the lens aperture. The unit is the APEX value.</td>
</tr>
<tr>
<td>BrightnessValue</td>
<td>Gets or sets the value of brightness. The unit is the APEX value. Ordinarily it is given in the range of -99.99 to 99.99.</td>
</tr>
<tr>
<td>CFAPattern</td>
<td>Gets or sets the color filter array (CFA) geometric pattern of the image sensor when a one-chip color area sensor is used. It does not apply to all sensing methods.</td>
</tr>
<tr>
<td>ColorSpace</td>
<td>Gets or sets the color space information tag. See remarks for further information.</td>
</tr>
<tr>
<td>ComponentsConfiguration</td>
<td>Gets or sets components configuration. See remarks for further information. Constant</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CompressedBitsPerPixel</td>
<td>Gets or sets compression mode used for a compressed image is indicated in unit bits per pixel.</td>
</tr>
<tr>
<td>Contrast</td>
<td>Gets or sets the direction of contrast processing applied by the camera when the image was shot. See remarks for further information.</td>
</tr>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>CustomRendered</td>
<td>Gets or sets the use of special processing on image data, such as rendering geared to output. When special processing is performed, the reader is expected to disable or minimize any further processing. See remarks for further information.</td>
</tr>
<tr>
<td>DateTimeDigitized</td>
<td>Gets or sets the date and time when the image was stored as digital data.</td>
</tr>
<tr>
<td>DateTimeOriginal</td>
<td>Gets or sets the date and time when the original image was shot.</td>
</tr>
<tr>
<td>Tag Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DeviceSettingDescription</td>
<td>Gets or sets information on the picture-taking conditions of a particular camera model. The tag is used only to indicate the picture-taking conditions in the reader.</td>
</tr>
<tr>
<td>DigitalZoomRatio</td>
<td>Gets or sets the digital zoom ratio when the image was shot. If the numerator of the recorded value is 0, this indicates that digital zoom was not used.</td>
</tr>
<tr>
<td>ExifVersion</td>
<td>Gets or sets the version of this standard supported. Constant length or 4.</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ExposureBiasValue</td>
<td>Gets or sets the exposure bias. The unit is the APEX value. Ordinarily it is given in the range of – 99.99 to 99.99.</td>
</tr>
<tr>
<td>ExposureIndex</td>
<td>Gets or sets the exposure index selected on the</td>
</tr>
</tbody>
</table>
camera or input device at the time the image was captured.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ExposureMode</strong></td>
<td>Gets or sets the exposure mode set when the image was shot. In auto-bracketing mode, the camera shoots a series of frames of the same scene at different exposure settings. See remarks for further information.</td>
</tr>
<tr>
<td><strong>ExposureProgram</strong></td>
<td>Gets or sets the class of the program used by the camera to set exposure when the picture is taken. See remarks for further information.</td>
</tr>
<tr>
<td><strong>ExposureTime</strong></td>
<td>Gets or the exposure time, given in seconds (sec).</td>
</tr>
<tr>
<td><strong>FileSource</strong></td>
<td>Gets or sets the image source. If a DSC recorded the image, this tag value of this tag always be set to 3, indicating that the image was recorded on a DSC.</td>
</tr>
<tr>
<td><strong>Flash</strong></td>
<td>Gets or sets a value indicating the status of flash when the image was shot. Bit 0 indicates the flash firing status, bits 1 and 2 indicate the flash</td>
</tr>
</tbody>
</table>
return status, bits 3 and 4 indicate the flash mode, bit 5 indicates whether the flash function is present, and bit 6 indicates "red eye" mode.

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FlashEnergy</td>
<td>Gets or sets the strobe energy at the time the image is captured, as measured in Beam Candle Power Seconds (BCPS).</td>
</tr>
<tr>
<td>FlashpixVersion</td>
<td>Gets or sets the Flashpix format version supported by a FPXR file. Constant length or 4.</td>
</tr>
<tr>
<td>FNumber</td>
<td>Gets or the F number.</td>
</tr>
<tr>
<td>FocalLength</td>
<td>Gets or sets the actual focal length of the lens, in mm. Conversion is not made to the focal length of a 35 mm film camera.</td>
</tr>
<tr>
<td>FocalLengthIn35mmFilm</td>
<td>Gets or sets the equivalent focal length assuming a 35mm film camera, in mm. A value of 0 means the focal length is unknown. Note that this tag differs from the FocalLength tag.</td>
</tr>
<tr>
<td>FocalPlaneResolutionUnit</td>
<td>Gets or sets the unit for measuring FocalPlaneXResolution</td>
</tr>
</tbody>
</table>
and FocalPlaneYResolution. This value is the same as the ResolutionUnit.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FocalPlaneXResolution</strong></td>
<td>Gets or sets the number of pixels in the image width (X) direction per FocalPlaneResolutionUnit on the camera focal plane.</td>
</tr>
<tr>
<td><strong>FocalPlaneYResolution</strong></td>
<td>Gets or sets the number of pixels in the image height (Y) direction per FocalPlaneResolutionUnit on the camera focal plane.</td>
</tr>
<tr>
<td><strong>GainControl</strong></td>
<td>Gets or sets the degree of overall image gain adjustment. See remarks for further information.</td>
</tr>
<tr>
<td><strong>ImageUniqueID</strong></td>
<td>Gets or sets an identifier assigned uniquely to each image. It is recorded as an ASCII string equivalent to hexadecimal notation and 128-bit fixed length. Constant length of 32.</td>
</tr>
<tr>
<td><strong>ISOSpeedRatings</strong></td>
<td>Gets or sets the the ISO Speed and ISO Latitude of the camera or input device as specified in ISO 12232.</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>LightSource</td>
<td>Gets or sets the kind of light source. See remarks for further information.</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td>MakerNote</td>
<td>Gets or sets a tag for manufacturers of Exif writers to record any desired information. The contents are up to the manufacturer, but this tag should not be used for any other than its intended purpose.</td>
</tr>
<tr>
<td>MaxApertureValue</td>
<td>Gets or sets the smallest F number of the lens. The unit is the APEX value. Ordinarily it is given in the range of 00.00 to 99.99, but it is not limited to this range.</td>
</tr>
<tr>
<td>MeteringMode</td>
<td>Gets or sets the metering mode. See remarks for further information.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)</td>
</tr>
<tr>
<td>OECF</td>
<td>Gets or sets the Opto-Electric Conversion Function (OECF) specified in ISO 14524. OECF is the relationship between the camera optical input and the image values.</td>
</tr>
<tr>
<td>PixelXDimension</td>
<td>Gets or sets the valid width of a compressed image.</td>
</tr>
<tr>
<td>PixelYDimension</td>
<td>Gets or sets the valid height of a compressed image.</td>
</tr>
<tr>
<td>RelatedSoundFile</td>
<td>Gets or sets the name of an audio file related to the image data. The format is 8.3. Constant length of 12</td>
</tr>
<tr>
<td>Saturation</td>
<td>Gets or sets the direction of saturation processing applied by the camera when the image was shot. See remarks for further information.</td>
</tr>
<tr>
<td>SceneCaptureType</td>
<td>Gets or sets the type of scene that was shot. It can also be used to record the mode in which</td>
</tr>
</tbody>
</table>
the image was shot. See remarks for further information.

<p>| <strong>SceneType</strong> | Gets or sets the type of scene. If a DSC recorded the image, this tag value shall always be set to 1, indicating that the image was directly photographed. |
| <strong>SensingMethod</strong> | Gets or sets the image sensor type on the camera or input device. See remarks for further information. |
| <strong>Sharpness</strong> | Gets or sets the direction of sharpness processing applied by the camera when the image was shot. See remarks for further information. |
| <strong>ShutterSpeedValue</strong> | Gets or sets the shutter speed. The unit is the APEX (Additive System of Photographic Exposure). |
| <strong>SpatialFrequencyResponse</strong> | Gets or sets the camera or input device spatial frequency table and SFR values in the direction of image width, image height, and diagonal direction, as specified in ISO 12233. |</p>
<table>
<thead>
<tr>
<th>Tag Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SpectralSensitivity</td>
<td>Gets or sets the spectral sensitivity of each channel of the camera used.</td>
</tr>
<tr>
<td>SubjectArea</td>
<td>Gets or sets a value indicating the location and area of the main subject in the overall scene. Variable length between 2 and 4.</td>
</tr>
<tr>
<td>SubjectDistance</td>
<td>Gets or sets distance to the subject, given in meters. Note that if the numerator of the recorded value is FFFFFFFF, infinity shall be indicated; and if the numerator is 0, distance unknown shall be indicated.</td>
</tr>
<tr>
<td>SubjectDistanceRange</td>
<td>Gets or sets the distance to the subject. See remarks for further information.</td>
</tr>
<tr>
<td>SubjectLocation</td>
<td>Gets or sets the location of the main subject in the scene. The value of this tag represents the pixel at the center of the main subject relative to the left edge, prior to rotation processing as per the Rotation tag. The first value indicates the X column number and</td>
</tr>
</tbody>
</table>
second indicates the Y row number.

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SubsecTime</strong></td>
<td>Gets or sets a tag used to record fractions of seconds for the DateTime tag.</td>
</tr>
<tr>
<td><strong>SubsecTimeDigitized</strong></td>
<td>Gets or sets a tag used to record fractions of seconds for the DateTimeDigitized tag.</td>
</tr>
<tr>
<td><strong>SubsecTimeOriginal</strong></td>
<td>Gets or sets a tag used to record fractions of seconds for the DateTimeOriginal tag.</td>
</tr>
<tr>
<td><strong>UserComment</strong></td>
<td>Gets or sets a tag for Exif users to write keywords or comments on the image besides those in ImageDescription, and without the character code limitations of the ImageDescription tag. Minimum length of 8. See remarks for further information.</td>
</tr>
<tr>
<td><strong>WhiteBalance</strong></td>
<td>Gets or sets the white balance mode set when the image was shot. See remarks for further information.</td>
</tr>
</tbody>
</table>
See Also

Reference
MDM_EXIF_EXIF Class
FreelmageAPI.Metadata Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFApertureValue Property

Gets or sets the lens aperture. The unit is the APEX value.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public Nullable<FIURational> ApertureValue { get; }
```

### Property Value

Type: Nullable<FIURational>

## Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference
- MDM_EXIF_EXIF Class
- FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
**MDM_EXIF_EXIFBrightnessValue Property**

Gets or sets the value of brightness. The unit is the APEX value. Ordinarily it is given in the range of -99.99 to 99.99.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIRational> BrightnessValue { get }
```

**Property Value**  
Type: Nullable<FIRational>

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreelImageAPI.Metadata Namespace
FreeImage.NET Class Library Reference

MDM_EXIF_EXIFCFAPattern

Property

Gets or sets the color filter array (CFA) geometric pattern of the image sensor when a one-chip color area sensor is used. It does not apply to all sensing methods.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] CFAPattern { get; set; }
```

### Property Value

**Type:** Byte

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFColorSpace Property

Gets or sets the color space information tag. See remarks for further information.

**Namespace:** FreeImageAPI_Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> ColorSpace { get; set; }
```

### Property Value

Type: NullableUInt16

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>sRGB (default)</td>
</tr>
<tr>
<td>0xFFFF</td>
<td>uncalibrated</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a
non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_EXIFComponentsConfiguration Property

Gets or sets components configuration. See remarks for further information. Constant length of 4.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] ComponentsConfiguration { get; set; }
```

### Property Value

*Type: Byte*

### Remarks

The channels of each component are arranged in order from the 1st component to the 4th. For uncompressed data the data arrangement is given in the PhotometricInterpretation tag. However, since PhotometricInterpretation can only express the order of Y,Cb and Cr, this tag is provided for cases when compressed data uses components other than Y, Cb, and Cr and to enable support of other sequences.  
Default = 4 5 6 0 (if RGB uncompressed)

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>other</td>
<td></td>
</tr>
</tbody>
</table>

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

**Reference**

MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFCompressedBitsPerPixel

Property

Gets or sets compression mode used for a compressed image is indicated in unit bits per pixel.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<FIURational> CompressedBitsPerPixel
```

**Property Value**  
Type: NullableFIURational

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_EXIF_EXIF Class  
FreelImageAPI.Metadata Namespace
MDM_EXIF_EXIFContrast Property

Gets or sets the direction of contrast processing applied by the camera when the image was shot. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> Contrast { get; set; }
```

### Property Value

Type: Nullable(UInt16)

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>normal</td>
</tr>
<tr>
<td>1</td>
<td>soft</td>
</tr>
<tr>
<td>2</td>
<td>hard</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace

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MDM_EXIF_EXIFCustomRendered

Property

Gets or sets the use of special processing on image data, such as rendering geared to output. When special processing is performed, the reader is expected to disable or minimize any further processing. See remarks for further information.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<ushort> CustomRendered { get; set; }
```

Property Value

Type: Nullable.UInt16

Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>normal process</td>
</tr>
<tr>
<td>1</td>
<td>custom process</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_EXIF Class
FreelimageAPI.Metadata Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFDateTimeDigitized Property

Gets or sets the date and time when the image was stored as digital data.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax


c#  

```csharp
public Nullable<DateTime> DateTimeDigitized {
get
}
```

### Property Value

Type: Nullable<DateTime>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreelImageAPI.Metadata Namespace
MDM_EXIF_EXIFDateTimeOriginal Property

Gets or sets the date and time when the original image data was generated.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<DateTime> DateTimeOriginal { get; }
```

### Property Value

- Type: `Nullable<DateTime>`

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_EXIF_EXIF Class
  - FreelImageAPI.Metadata Namespace
MDM_EXIF_EXIFDDeviceSettingDescription Property

Gets or sets information on the picture-taking conditions of a particular camera model. The tag is used only to indicate the picture-taking conditions in the reader.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] DeviceSettingDescription { get; set; }
```

### Property Value

Type: **Byte**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFDigitalZoomRatio Property

Gets or sets the digital zoom ratio when the image was shot. If the numerator of the recorded value is 0, this indicates that digital zoom was not used.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public Nullable<FIURational> DigitalZoomRatio {
    get;
    set;
}
```

Property Value
Type: Nullable<FIURational>

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreeImageAPI.Metadata Namespace
Contact/Feedback:  Freelite.NET Homepage  
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFExifVersion Property

Gets or sets the version of this standard supported. Constant length or 4.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] ExifVersion { get; set; }
```

### Property Value

Type: **Byte**

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_EXIFExposureBiasValue

Property

Gets or sets the exposure bias. The unit is the APEX value. Ordinarily it is given in the range of –99.99 to 99.99.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIRational> ExposureBiasValue {
    get;
    set;
}
```

**Property Value**  
Type: NullableFIRational

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
Contact/Feedback: FreelImage.NET Homepage
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MDM_EXIF_EXIFExposureIndex Property

Gets or sets the exposure index selected on the camera or input device at the time the image was captured.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> ExposureIndex { get; }
```

### Property Value

Type: Nullable<FIURational>

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFExposureMode Property

Gets or sets the exposure mode set when the image was shot. In auto-bracketing mode, the camera shoots a series of frames of the same scene at different exposure settings. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax
```csharp
public Nullable<ushort> ExposureMode {
    get; set;
}
```

### Property Value
Type: Nullable(UInt16)

### Remarks
The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>auto exposure</td>
</tr>
<tr>
<td>1</td>
<td>manual exposure</td>
</tr>
<tr>
<td>2</td>
<td>auto bracket</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
  - MDM_EXIF_EXIF Class
  - FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
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MDM_EXIF_EXIFExposureProgram Property

Gets or sets the class of the program used by the camera to set exposure when the picture is taken. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<ushort> ExposureProgram { get; set; }
```

### Property Value

Type: `Nullable(UInt16)`

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>not defined</td>
</tr>
<tr>
<td>1</td>
<td>manual</td>
</tr>
<tr>
<td>2</td>
<td>normal program</td>
</tr>
<tr>
<td>3</td>
<td>aperture priority</td>
</tr>
<tr>
<td>4</td>
<td>shutter priority</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>create program</td>
</tr>
<tr>
<td>6</td>
<td>action program</td>
</tr>
<tr>
<td>7</td>
<td>portrait mode</td>
</tr>
<tr>
<td>8</td>
<td>landscape mode</td>
</tr>
<tr>
<td>others</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace
MDM_EXIF_EXIFExposureTime

Property

Gets or the exposure time, given in seconds (sec).

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> ExposureTime { get; }
```

### Property Value

Type: Nullable<FIURational>

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFFileSource Property

Gets or sets the image source. If a DSC recorded the image, this tag value of this tag always be set to 3, indicating that the image was recorded on a DSC.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public Nullable<byte> FileSource { get; set; }
```

### Property Value

Type: NullableByte

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFFlash Property

Gets or sets a value indicating the status of flash when the image was shot. Bit 0 indicates the flash firing status, bits 1 and 2 indicate the flash return status, bits 3 and 4 indicate the flash mode, bit 5 indicates whether the flash function is present, and bit 6 indicates "red eye" mode.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<ushort> Flash { get; set; }
```

**Property Value**
Type: Nullable(UInt16)

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference
MDM_EXIF_EXIF Class
MDM_EXIF_EXIFFlashEnergy Property

Gets or sets the strobe energy at the time the image is captured, as measured in Beam Candle Power Seconds (BCPS).

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public Nullable<FIURational> FlashEnergy { get; set; }
```

### Property Value

Type: `Nullable<FIURational>`

## Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

**Reference**

[MDM_EXIF_EXIF Class](#)

[FreeImageAPI.Metadata Namespace](#)
MDM_EXIF_EXIFFlashpixVersion Property

Gets or sets the Flashpix format version supported by a FPXR file. Constant length or 4.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] FlashpixVersion { get; set; }
```

### Property Value

Type: **Byte**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property’s value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**

- MDM_EXIF_EXIF Class
- FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_EXIFNumber Property

Gets or the F number.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> FNumber { get; set; }
```

### Property Value

Type: Nullable<FIURational>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFFFFocalLength

Property

Gets or sets the actual focal length of the lens, in mm. Conversion is not made to the focal length of a 35 mm film camera.

Namespace: FreelImageAPI.Metadata
Assembly: FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public Nullable<FIURational> FocalLength { get; set;
```

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace
MDM_EXIF_EXIFFocalLengthIn35mmFilm Property

Gets or sets the equivalent focal length assuming a 35mm film camera, in mm. A value of 0 means the focal length is unknown. Note that this tag differs from the FocalLength tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> FocalLengthIn35mmFilm {
}
```

### Property Value

Type: **NullableUInt16**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

- **MDM_EXIF_EXIF Class**
- **FreeImageAPI.Metadata Namespace**
MDM_EXIF_EXIFFocalPlaneResolutionUnit

Gets or sets the unit for measuring FocalPlaneXResolution and FocalPlaneYResolution. This value is the same as the ResolutionUnit.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<ushort> FocalPlaneResolutionUnit
```

### Property Value
Type: Nullable.UInt16

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFFocalPlaneXResolution Property

Gets or sets the number of pixels in the image width (X) direction per FocalPlaneResolutionUnit on the camera focal plane.

**Namespace:** FreelImageAPI.Metadata

**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> FocalPlaneXResolution;
```

### Property Value

Type: Nullable<FIURational>

### Remarks

**Handling of null values**

A null value indicates that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace
**MDM_EXIF_EXIFFocalPlaneYResolution Property**

Gets or sets the number of pixels in the image height (Y) direction per FocalPlaneResolutionUnit on the camera focal plane.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> FocalPlaneYResolution
```

### Property Value

Type: NullableFIURational

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFGainControl Property

Gets or sets the degree of overall image gain adjustment. See remarks for further information.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<ushort> GainControl { get; set; }
```

Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>none</td>
</tr>
<tr>
<td>1</td>
<td>low gain up</td>
</tr>
<tr>
<td>2</td>
<td>high gain up</td>
</tr>
<tr>
<td>3</td>
<td>low gain down</td>
</tr>
<tr>
<td>4</td>
<td>high gain down</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace

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Property

Gets or sets an identifier assigned uniquely to each image. It is recorded as an ASCII string equivalent to hexadecimal notation and 128-bit fixed length. Constant length of 32.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public string ImageUniqueID { get; set; }
```

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFISOSpeedRatings Property

Gets or sets the ISO Speed and ISO Latitude of the camera or input device as specified in ISO 12232.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public ushort[] ISOSpeedRatings { get; set; }
```

**Property Value**

Type: UInt16

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_EXIFLightSource Property

Gets or sets the kind of light source. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> LightSource { get; set; }
```

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>unknown</td>
</tr>
<tr>
<td>1</td>
<td>daylight</td>
</tr>
<tr>
<td>2</td>
<td>fluorescent</td>
</tr>
<tr>
<td>3</td>
<td>tungsten</td>
</tr>
<tr>
<td>4</td>
<td>flash</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>fine weather</td>
</tr>
<tr>
<td>10</td>
<td>cloudy weather</td>
</tr>
<tr>
<td>11</td>
<td>shade</td>
</tr>
<tr>
<td>12</td>
<td>daylight fluorescent (D 5700 - 7100K)</td>
</tr>
<tr>
<td>13</td>
<td>day white fluorescent (N 4600 - 5400K)</td>
</tr>
<tr>
<td>14</td>
<td>cool white fluorescent (W 3900 - 4500K)</td>
</tr>
<tr>
<td>15</td>
<td>white fluorescent (WW 3200 - 3700K)</td>
</tr>
<tr>
<td>17</td>
<td>standard light A</td>
</tr>
<tr>
<td>18</td>
<td>standard light B</td>
</tr>
<tr>
<td>19</td>
<td>standard light C</td>
</tr>
<tr>
<td>20</td>
<td>D55</td>
</tr>
<tr>
<td>21</td>
<td>D65</td>
</tr>
<tr>
<td>22</td>
<td>D75</td>
</tr>
<tr>
<td>23</td>
<td>D50</td>
</tr>
<tr>
<td>24</td>
<td>ISO studio tungsten</td>
</tr>
<tr>
<td>255</td>
<td>other light source</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from
the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFMakerNote Property

Gets or sets a tag for manufacturers of Exif writers to record any desired information. The contents are up to the manufacturer, but this tag should not be used for any other than its intended purpose.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public byte[] MakerNote { get; set; }
```

Property Value
Type: Byte

Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreeImageAPI.Metadata Namespace
**MDM_EXIF_EXIFMaxApertureValue Property**

Gets or sets the smallest F number of the lens. The unit is the APEX value. Ordinarily it is given in the range of 00.00 to 99.99, but it is not limited to this range.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public Nullable<FIURational> MaxApertureValue {

public Nullable<FIURational> MaxApertureValue {

```

Property Value  
Type: Nullable<FIURational>

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFMeteringMode

Property

Gets or sets the metering mode. See remarks for further information.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public Nullable<ushort> MeteringMode { get; set; }
```

Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>unknown</td>
</tr>
<tr>
<td>1</td>
<td>average</td>
</tr>
<tr>
<td>2</td>
<td>center-weighted-average</td>
</tr>
<tr>
<td>3</td>
<td>spot</td>
</tr>
<tr>
<td>4</td>
<td>multi-spot</td>
</tr>
<tr>
<td>5</td>
<td>pattern</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_EXIFModel

Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: FREE_IMAGE_MDMODEL

### See Also

Reference
- MDM_EXIF_EXIF Class
- FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MMD_EXIF_EXIFOECF Property

Gets or sets the Opto-Electric Conversion Function (OECF) specified in ISO 14524. OECF is the relationship between the camera optical input and the image values.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] OECF { get; set; }
```

### Property Value

Type: **Byte**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
**MDM_EXIF_EXIF Class**  
**FreeImageAPI.Metadata Namespace**
Contact/Feedback: FreiImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFPixelXDimension Property

Gets or sets the valid width of a compressed image.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<UInt32> PixelXDimension { get; set; }
```

### Property Value

Type: NullableUInt32

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_EXIF Class
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFPixelYDimension

Property

Gets or sets the valid height of a compressed image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<uint> PixelYDimension { get; set; }
```

### Property Value

Type: NullableUInt32

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFRelatedSoundFile Property

Gets or sets the name of an audio file related to the image data. The format is 8.3. Constant length of 12

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string RelatedSoundFile { get; set; }
```

**Property Value**  
Type: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- **Reference**  
  MDM_EXIF_EXIF Class  
  FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFSaturation Property

Gets or sets the direction of saturation processing applied by the camera when the image was shot. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> Saturation { get; set; }
```

### Property Value

Type: Nullable.UInt16

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>normal</td>
</tr>
<tr>
<td>1</td>
<td>low saturation</td>
</tr>
<tr>
<td>2</td>
<td>high saturation</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_EXIF Class
FreelmageAPI.Metadata Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_EXIFSceneCaptureType Property

Gets or sets the type of scene that was shot. It can also be used to record the mode in which the image was shot. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> SceneCaptureType { get; set; }
```

### Property Value

Type: Nullable<UInt16>

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>standard</td>
</tr>
<tr>
<td>1</td>
<td>landscape</td>
</tr>
<tr>
<td>2</td>
<td>portrait</td>
</tr>
<tr>
<td>3</td>
<td>night scene</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_EXIF Class
FreelImageAPI.Metadata Namespace
MDM_EXIF_EXIFSceneType Property

Gets or sets the type of scene. If a DSC recorded the image, this tag value shall always be set to 1, indicating that the image was directly photographed.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<byte> SceneType { get; set; }
```

**Property Value**  
**Type:** Nullable.Byte

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIF.SensingMethod Property

Gets or sets the image sensor type on the camera or input device. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable.UInt16 SensingMethod { get; set; }
```

### Property Value

Type: Nullable(UInt16)

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>not defined</td>
</tr>
<tr>
<td>2</td>
<td>one-chip color area sensor</td>
</tr>
<tr>
<td>3</td>
<td>two-chip color area sensor</td>
</tr>
<tr>
<td>4</td>
<td>three-chip color area sensor</td>
</tr>
<tr>
<td>5</td>
<td>color sequential area sensor</td>
</tr>
</tbody>
</table>
7 trilinear sensor

8 color sequential linear sensor

other reserved

Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_EXIF Class
FreelmageAPI.Metadata Namespace

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MDM_EXIF_EXIFSharpness Property

Gets or sets the direction of sharpness processing applied by the camera when the image was shot. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```csharp
public Nullable<ushort> Sharpness { get; set; }
```

**Property Value**

Type: `Nullable<UInt16>`

⚠️ Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>normal</td>
</tr>
<tr>
<td>1</td>
<td>soft</td>
</tr>
<tr>
<td>2</td>
<td>hard</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_EXIF Class
FreelmageAPI.Metadata Namespace

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MDM_EXIF_EXIFShutterSpeedValue Property

Gets or sets the shutter speed. The unit is the APEX (Additive System of Photographic Exposure).

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C#

```csharp
public Nullable<FIRational> ShutterSpeedValue {
    get;
}
```

### Property Value

Type: Nullable<FIRational>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_EXIFSpatialFrequencyResponse Property

Gets or sets the camera or input device spatial frequency table and SFR values in the direction of image width, image height, and diagonal direction, as specified in ISO 12233.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] SpatialFrequencyResponse { get; set; }
```

### Property Value
- **Type:** Byte

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also
- Reference
  - MDM_EXIF_EXIF Class
  - FreeImageAPI.Metadata Namespace
**MDM_EXIF_EXIF.SpectralSensitivity Property**

Gets or sets the spectral sensitivity of each channel of the camera used.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string SpectralSensitivity { get; set; }
```

**Property Value**

Type: **String**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**

- MDM_EXIF_EXIF Class
- FreeImageAPI.Metadata Namespace

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MDM_EXIF_EXIFSubjectArea Property

Gets or sets a value indicating the location and area of the main subject in the overall scene. Variable length between 2 and 4.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public ushort[] SubjectArea { get; set; }
```

**Property Value**

Type: UInt16

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_EXIF_EXIF Class  
FreImageAPI.Metadata Namespace

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MDM_EXIF_EXIFSubjectDistance Property

Gets or sets distance to the subject, given in meters. Note that if the numerator of the recorded value is FFFFFFFF, infinity shall be indicated; and if the numerator is 0, distance unknown shall be indicated.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<FIURational> SubjectDistance { get; }
```

Property Value  
Type: Nullable<FIURational>

Remarks

Handling of null values  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property’s value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference  
MDM_EXIF_EXIF Class
FreelmageAPI.Metadata Namespace

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MDM_EXIF_EXIFSSubjectDistance

Property

Gets or sets the distance to the subject. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public Nullable<ushort> SubjectDistanceRange { get; }
```

## Property Value

Type: Nullable(UInt16)

## Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>unknown</td>
</tr>
<tr>
<td>1</td>
<td>macro</td>
</tr>
<tr>
<td>2</td>
<td>close view</td>
</tr>
<tr>
<td>3</td>
<td>distant view</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

- MDM_EXIF_EXIF Class
- FreelImageAPI.Metadata Namespace

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MDM_EXIF_EXIFSubjectLocation Property

Gets or sets the location of the main subject in the scene. The value of this tag represents the pixel at the center of the main subject relative to the left edge, prior to rotation processing as per the Rotation tag. The first value indicates the X column number and second indicates the Y row number.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<ushort> SubjectLocation { get; set; }
```

**Property Value**

Type: Nullable(UInt16)

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference
MDM_EXIF_EXIF Class
FreelmageAPI.Metadata Namespace

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MDM_EXIF_EXIFSubsecTime Property

Gets or sets a tag used to record fractions of seconds for the DateTime tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string SubsecTime { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace

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MDM_EXIF_EXIFSubsecTimeDigitized Property

Gets or sets a tag used to record fractions of seconds for the DateTimeDigitized tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public string SubsecTimeDigitized { get; set; }
```

## Property Value

Type: String

## Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference

- MDM_EXIF_EXIF Class
- FreeImageAPI.Metadata Namespace

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MDM_EXIF_EXIFSubsecTimeOriginal Property

Gets or sets a tag used to record fractions of seconds for the DateTimeOriginal tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string SubsecTimeOriginal { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_EXIF Class  
FreeImageAPI.Metadata Namespace

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**MDM_EXIF_EXIFUserComment Property**

Gets or sets a tag for Exif users to write keywords or comments on the image besides those in ImageDescription, and without the character code limitations of the ImageDescription tag. Minimum length of 8. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public byte[] UserComment { get; set; }
```

### Property Value  
**Type:** Byte

### Remarks

The character code used in the UserComment tag is identified based on an ID code in a fixed 8-byte area at the start of the tag data area. The unused portion of the area is padded with NULL. The ID code for the UserComment area may be a Defined code such as JIS or ASCII, or may be Undefined.

#### Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.
See Also

Reference
MDM_EXIF_EXIF Class
FreeImageAPI.Metadata Namespace

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MDM_EXIF_EXIFWhiteBalance Property

Gets or sets the white balance mode set when the image was shot. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<ushort> WhiteBalance { get; set; }
```

**Property Value**

Type: Nullable(UInt16)

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>auto white balance</td>
</tr>
<tr>
<td>1</td>
<td>manual white balance</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not
present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_EXIF Class
FreelmageAPI.Metadata Namespace

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## MDM_EXIF_EXIF Methods

The `MDM_EXIF_EXIF` type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="MetadataTag" alt="AddTag" /></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <em>Key</em> will be used as key. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><img src="IEnumerableMetadataTag" alt="AddTag" /></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <em>Key</em> will be used as key. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><img src="DestoryModel" alt="DestoryModel" /></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. <em>(Inherited from</em></td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a> is equal to the current <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this <a href="https://docs.microsoft.com/en-us/dotnet/api/system.metadata.model.metadatamodel">MetadataModel</a>. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.metadata.model.metadatamodel">MetadataModel</a>)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>SetTagValue</strong>&lt;sub&gt;T(String, Nullable{T})&lt;/sub&gt;</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>SetTagValueUndefined</strong></td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>TagExists</strong></td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
- MDM_EXIF_EXIF Class
- FreelImageAPI.Metadata Namespace

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The `MDM_EXIF_EXIF` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
</tbody>
</table>

### See Also

Reference
- `MDM_EXIF_EXIF Class`
- `FreelImageAPI.Metadata Namespace`
MDM_EXIF_GPS Class

Represents a collection of all tags contained in the metadata model FIMD_EXIF_GPS.

Inheritance Hierarchy

System
  Object
  FreeImageAPI.MetadataMetadataModel
  FreeImageAPI.MetadataMDM_EXIF_GPS

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public class MDM_EXIF_GPS : MetadataModel
```

The MDM_EXIF_GPS type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_EXIF_GPS</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altitude</td>
<td>Gets or sets the</td>
</tr>
</tbody>
</table>
altitude based on the reference in AltitudeDirection. Altitude is expressed as one rational value. The reference unit is meters.

<table>
<thead>
<tr>
<th></th>
<th>AltitudeDirection</th>
<th>Gets a value indicating whether Altitude is sea level and the altitude is above sea level. If the altitude is below sea level Altitude is indicated as an absolute value.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AltitudeSign</td>
<td>Gets or sets the sign of the SignedAltitude.</td>
</tr>
<tr>
<td></td>
<td>AreaInformation</td>
<td>Gets or sets a character string recording the name of the GPS area. The first byte indicates the character code used, and this is followed by the name of the GPS area. Since the Type is not ASCII, NULL termination is not necessary.</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>DateStamp</td>
<td>Gets or sets date information relative to UTC (Coordinated Universal Time).</td>
<td></td>
</tr>
<tr>
<td>DateTimeStamp</td>
<td>Gets or sets date and time information relative to UTC (Coordinated Universal Time).</td>
<td></td>
</tr>
<tr>
<td>DestinationBearing</td>
<td>Gets or sets the bearing to the destination point. The range of values is from 0.00 to 359.99.</td>
<td></td>
</tr>
<tr>
<td>DestinationDirectionReference</td>
<td>Gets or sets the reference used for giving the bearing to the destination point.</td>
<td></td>
</tr>
<tr>
<td>DestinationLatitude</td>
<td>Gets or sets the latitude of the destination point. The latitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.</td>
<td></td>
</tr>
<tr>
<td>DestinationLatitudeDirection</td>
<td>Gets or sets a value indicating whether the destination point is north or south latitude.</td>
<td></td>
</tr>
<tr>
<td>DestinationLongitude</td>
<td>Gets or sets the longitude of the destination point.</td>
<td></td>
</tr>
</tbody>
</table>
destination point. The longitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DestinationLongitudeDirection</strong></td>
<td>Gets or sets a value indicating whether the destination point is east or west longitude.</td>
</tr>
<tr>
<td><strong>DestinationUnit</strong></td>
<td>Gets or sets the unit used to express the distance to the destination point.</td>
</tr>
<tr>
<td><strong>DOP</strong></td>
<td>Gets or sets the GPS DOP (data degree of precision). An HDOP value is written during two-dimensional measurement, and PDOP during three-dimensional measurement.</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>ImageDirection</strong></td>
<td>Gets or sets the direction of the image when it was captured. The range of values is</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ImageDirectionReference</td>
<td>Gets or sets the reference for giving the direction of GPS receiver movement.</td>
</tr>
<tr>
<td>IsDifferential</td>
<td>Gets or sets a value indicating whether differential correction was applied to the GPS receiver.</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Latitude</td>
<td>Gets or sets the latitude of the image. The latitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.</td>
</tr>
<tr>
<td>LatitudeDirection</td>
<td>Gets or sets a value indicating whether the Latitude is north or south latitude.</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents.</td>
</tr>
</tbody>
</table>
(Inherited from MetadataModel.)

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Longitude</strong></td>
<td>Gets or sets the longitude of the image. The longitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.</td>
</tr>
<tr>
<td><strong>LongitudeDirection</strong></td>
<td>Gets or sets a value indicating whether Longitude is east or west longitude.</td>
</tr>
<tr>
<td><strong>MapDatum</strong></td>
<td>Gets or sets the geodetic survey data used by the GPS receiver. If the survey data is restricted to Japan, the value of this tag is 'TOKYO' or 'WGS-84'.</td>
</tr>
<tr>
<td><strong>MeasureMode3D</strong></td>
<td>Gets or sets a value indicating the GPS measurement mode. true indicates three-dimensional measurement; false indicated two-dimensional measurement was in progress.</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>Retrieves the</td>
</tr>
</tbody>
</table>


The datamodel that this instance represents. (Overrides MetadataModel Model.)

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProcessingMethod</td>
<td>Gets or sets a character string recording the name of the method used for location finding. The first byte indicates the character code used, and this is followed by the name of the method. Since the Type is not ASCII, NULL termination is not necessary.</td>
</tr>
<tr>
<td>Satellites</td>
<td>Gets or sets the GPS satellites used for measurements. This tag can be used to describe the number of satellites, their ID number, angle of elevation, azimuth, SNR and other information in ASCII notation. The format is not specified.</td>
</tr>
<tr>
<td>SignedAltitude</td>
<td>Gets or sets the signed altitude. Altitude is expressed as one rational value. The reference unit is meters.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Speed</td>
<td>Gets or sets the speed of GPS receiver movement.</td>
</tr>
<tr>
<td>SpeedUnit</td>
<td>Gets or sets the unit used to express the GPS receiver Speed of movement.</td>
</tr>
<tr>
<td>Status</td>
<td>Gets or sets a value indicating the status of the GPS receiver when the image was recorded. true indicates measurement was in progress; false indicates measurement was Interoperability.</td>
</tr>
<tr>
<td>TimeStamp</td>
<td>Gets or sets the time as UTC (Coordinated Universal Time). Constant length of 3.</td>
</tr>
<tr>
<td>Track</td>
<td>Gets or sets the direction of GPS receiver movement. The range of values is from 0.00 to 359.99.</td>
</tr>
<tr>
<td>TrackDirectionReference</td>
<td>Gets or sets the reference for giving the direction of GPS receiver movement.</td>
</tr>
<tr>
<td>VersionID</td>
<td>Gets or sets the GPS version ID. Constant</td>
</tr>
</tbody>
</table>
### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AddTag(MetadataTag)</strong></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. Key will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>AddTag(IEnumerableMetadataTag)</strong></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. Key will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>DestroyModel</strong></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the                                                                ------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
Finalize

Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)

GetEnumerator

Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)

GetHashCode

Serves as a hash function for a particular type. (Inherited from Object.)

GetTag

Returns the specified metadata tag. (Inherited from Object.)
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
</table>
| GetTagArrayT                | Returns an array containing the data of the specified tag.  
(Inherited from MetadataModel.) |
| GetTagFromIndex             | Returns the tag at the given index.  
(Inherited from MetadataModel.) |
| GetTagText                  | Returns the string contained by the specified tag.  
(Inherited from MetadataModel.) |
| GetTagValueT                | Returns the value of the specified tag.  
(Inherited from MetadataModel.) |
| GetType                     | Gets the Type of the current instance.  
(Inherited from Object.) |
<p>| GetUInt32Array              | Returns an array containing the data of the specified tag as unsigned 32bit |</p>
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of</td>
</tr>
</tbody>
</table>
the specified tag. (Inherited from MetadataModel.)

<table>
<thead>
<tr>
<th>Method/Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

Top
See Also

Reference
FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
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MDM_EXIF_GPS Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_EXIF_GPS(
    FIBITMAP dib
)
```

**Parameters**

*dib*

Type: `FIBITMAP`

Handle to a FreeImage bitmap.

### See Also

**Reference**

- MDM_EXIF_GPS Class
- FreeImageAPI.Metadata Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://freimage.net/)

Help improve this Documentation: [Join the Project](https://github.com/freimage)
# MDM_EXIF_GPS Properties

The **MDM_EXIF_GPS** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Altitude" /> Altitude</td>
<td>Gets or sets the altitude based on the reference in <em>AltitudeDirection</em>. Altitude is expressed as one rational value. The reference unit is meters.</td>
</tr>
<tr>
<td><img src="image" alt="AltitudeDirection" /> AltitudeDirection</td>
<td>Gets a value indicating whether <em>Altitude</em> is sea level and the altitude is above sea level. If the altitude is below sea level <em>Altitude</em> is indicated as an absolute value.</td>
</tr>
<tr>
<td><img src="image" alt="AltitudeSign" /> AltitudeSign</td>
<td>Gets or sets the sign of the <em>SignedAltitude</em>.</td>
</tr>
<tr>
<td><img src="image" alt="ArealInformation" /> ArealInformation</td>
<td>Gets or sets a character string recording the name of the GPS area. The first byte indicates the character code used,</td>
</tr>
</tbody>
</table>
and this is followed by the name of the GPS area. Since the Type is not ASCII, NULL termination is not necessary.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DateStamp</td>
<td>Gets or sets date information relative to UTC (Coordinated Universal Time).</td>
</tr>
<tr>
<td>DateTimeStamp</td>
<td>Gets or sets date and time information relative to UTC (Coordinated Universal Time).</td>
</tr>
<tr>
<td>DestinationBearing</td>
<td>Gets or sets the bearing to the destination point. The range of values is from 0.00 to 359.99.</td>
</tr>
<tr>
<td>DestinationDirectionReference</td>
<td>Gets or sets the reference used for giving the bearing to the destination point.</td>
</tr>
<tr>
<td>DestinationLatitude</td>
<td>Gets or sets the latitude of the destination point. The latitude is expressed</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>DestinationLatitudeDirection</td>
<td>Gets or sets a value indicating whether the destination point is north or south latitude.</td>
</tr>
<tr>
<td>DestinationLongitude</td>
<td>Gets or sets the longitude of the destination point. The longitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.</td>
</tr>
<tr>
<td>DestinationLongitudeDirection</td>
<td>Gets or sets a value indicating whether the destination point is east or west longitude.</td>
</tr>
<tr>
<td>DestinationUnit</td>
<td>Gets or sets the unit used to express the distance to the destination point.</td>
</tr>
<tr>
<td>DOP</td>
<td>Gets or sets the GPS DOP (data degree of precision). An HDOP value is written during two-dimensional measurement, and PDOP during three-dimensional</td>
</tr>
<tr>
<td></td>
<td>Exists</td>
</tr>
<tr>
<td>---</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td>ImageDirection</td>
</tr>
<tr>
<td></td>
<td>ImageDirectionReference</td>
</tr>
<tr>
<td></td>
<td>IsDifferential</td>
</tr>
<tr>
<td></td>
<td>Item</td>
</tr>
<tr>
<td></td>
<td>Latitude</td>
</tr>
</tbody>
</table>
the degrees, minutes, and seconds, respectively. Constant length of 3.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LatitudeDirection</strong></td>
<td>Gets or sets a value indicating whether the <strong>Latitude</strong> is north or south latitude.</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><strong>Longitude</strong></td>
<td>Gets or sets the longitude of the image. The longitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.</td>
</tr>
<tr>
<td><strong>LongitudeDirection</strong></td>
<td>Gets or sets a value indicating whether <strong>Longitude</strong> is east or west longitude.</td>
</tr>
<tr>
<td><strong>MapDatum</strong></td>
<td>Gets or sets the geodetic survey data used by the GPS receiver. If the survey data is restricted to Japan, the value of this tag is 'TOKYO' or 'WGS-84'.</td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>MeasureMode3D</td>
<td>Gets or sets a value indicating the GPS measurement mode. <strong>true</strong> indicates three-dimensional measurement; <strong>false</strong> indicated two-dimensional measurement was in progress.</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)</td>
</tr>
<tr>
<td>ProcessingMethod</td>
<td>Gets or sets a character string recording the name of the method used for location finding. The first byte indicates the character code used, and this is followed by the name of the method. Since the Type is not ASCII, NULL termination is not necessary.</td>
</tr>
<tr>
<td>Satellites</td>
<td>Gets or sets the GPS satellites used for measurements. This tag can be used to describe the number of satellites, their ID number, angle of elevation, azimuth,</td>
</tr>
</tbody>
</table>
SNR and other information in ASCII notation. The format is not specified.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SignedAltitude</td>
<td>Gets or sets the signed altitude. Altitude is expressed as one rational value. The reference unit is meters.</td>
</tr>
<tr>
<td>Speed</td>
<td>Gets or sets the speed of GPS receiver movement.</td>
</tr>
<tr>
<td>SpeedUnit</td>
<td>Gets or sets the unit used to express the GPS receiver speed of movement.</td>
</tr>
<tr>
<td>Status</td>
<td>Gets or sets a value indicating the status of the GPS receiver when the image was recorded. <strong>true</strong> indicates measurement was in progress; <strong>false</strong> indicates measurement was Interoperability.</td>
</tr>
<tr>
<td>TimeStamp</td>
<td>Gets or sets the time as UTC (Coordinated Universal Time). Constant length of 3.</td>
</tr>
<tr>
<td>Track</td>
<td>Gets or sets the</td>
</tr>
</tbody>
</table>
The range of values is from 0.00 to 359.99.

**TrackDirectionReference**

Gets or sets the reference for giving the direction of GPS receiver movement.

**VersionID**

Gets or sets the GPS version ID. Constant length of 4.

See Also

Reference

- MDM_EXIF_GPS Class
- FreelImageAPI.Metadata Namespace

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MDM_EXIF_GPSAltitude Property

Gets or sets the altitude based on the reference in AltitudeDirection. Altitude is expressed as one rational value. The reference unit is meters.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> Altitude { get; set; }
```

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreelImageAPI.Metadata Namespace
MDM_EXIF_GPSAltitudeDirection Property

Gets a value indicating whether Altitude is sea level and the altitude is above sea level. If the altitude is below sea level Altitude is indicated as an absolute value.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModelAltitudeType> AltitudeDirection { get; }
```

**Property Value**

Type: `Nullable<MetadataModelAltitudeType>`

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
- MDM_EXIF_GPS Class
- FreeImageAPI.Metadata Namespace
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MDM_EXIF_GPSAltitudeSign Property

Gets or sets the sign of the SignedAltitude.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<int> AltitudeSign { get; set; }
```

### Property Value

Type: NullableInt32

### Remarks

This is a derived property. There is no metadata tag directly associated with this property value.

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
FreeImage.NET Class Library Reference

MDM_EXIF_GPSAreaInformation Property

Gets or sets a character string recording the name of the GPS area. The first byte indicates the character code used, and this is followed by the name of the GPS area. Since the Type is not ASCII, NULL termination is not necessary.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public byte[] AreaInformation { get; set; }
```

Property Value

Type: Byte

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
Contact/Feedback: FreImage.NET Homepage
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MDM_EXIF_GPS DateStamp Property

Gets or sets date information relative to UTC (Coordinated Universal Time).

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<DateTime> DateStamp { get; set; }
```

### Property Value

Type: NullableDateTime

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreelImageAPI.Metadata Namespace
MDM_EXIF_GPSDateTimeStamp Property

Gets or sets date and time information relative to UTC (Coordinated Universal Time).

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<DateTime> DateTimeStamp { get; set; }
```

### Property Value

Type: NullableDateTime

### Remarks

This is a derived property. There is no metadata tag directly associated with this property value.

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
MDM_EXIF_GPS Class
FreelImageAPI.Metadata Namespace

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MDM_EXIF_GPSDestinationBearing Property

Gets or sets the bearing to the destination point. The range of values is from 0.00 to 359.99.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll)  
Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> DestinationBearing { }
```

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace  
MDM_EXIF_GPSDestinationDirectionReference
MDM_EXIF_GPSDestinationDirectionReference Property

Gets or sets the reference used for giving the bearing to the destination point.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<MetadataModelDirectionReference> DestinationDirectionReference
```

### Property Value

Type: Nullable<MetadataModelDirectionReference>

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference  
  MDM_EXIF_GPS Class  
  FreelImageAPI.Metadata Namespace  
  MDM_EXIF_GPSDestinationBearing
MDM_EXIF_GPSDestinationLatitude Property

 Gets or sets the latitude of the destination point. The latitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public FIURational[] DestinationLatitude { get; set; }
```

Property Value
Type: FIURational

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_GPS Class
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSDestinationLatitudeDirection

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MDM_EXIF_GPSDestinationLatitudeDirection Property

Gets or sets a value indicating whether the destination point is north or south latitude.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModelLatitudeType> DestinationLatitudeDirection
```

### Property Value

Type: Nullable<MetadataModelLatitudeType>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_GPS Class  
FreelImageAPI.Metadata Namespace  
MDM_EXIF_GPSLatitude
MDM_EXIF_GPS DestinationLongitude Property

Gets or sets the longitude of the destination point. The longitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FIURational[] DestinationLongitude { get; }
```

Property Value  
Type: FIURational

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSDestinationLongitudeDirection Property

Gets or sets a value indicating whether the destination point is east or west longitude.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModelLongitudeType> DestinationLongitudeDirection { get; set; }
```

### Property Value

Type: Nullable<MetadataModelLongitudeType>

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreelImageAPI.Metadata Namespace  
MDM_EXIF_GPSLatitude
MDM_EXIF_GPSDestinationUnit

Property

Gets or sets the unit used to express the distance to the destination point.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModelVelocityUnit> DestinationUnit
```

### Property Value

Type: NullableMetadataModelVelocityUnit

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_EXIF_GPS Class
  - FreelImageAPI.Metadata Namespace
  - MDM_EXIF_GPSDestinationBearing
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MDM_EXIF_GPSDOP Property

Gets or sets the GPS DOP (data degree of precision). An HDOP value is written during two-dimensional measurement, and PDOP during three-dimensional measurement.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public Nullable<FIURational> DOP { get; set; }
```

## Property Value

Type: NullableFIURational

## Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI_Metadata Namespace
MDM_EXIF_GPSImageDirection

Property

Gets or sets the direction of the image when it was captured. The range of values is from 0.00 to 359.99.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<FIURational> ImageDirection { get }
```

**Property Value**

Type: **NullableFIURational**

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace  
MDM_EXIF_GPSImageDirectionReference
MDM_EXIF_GPSImageDirection Property

Gets or sets the reference for giving the direction of GPS receiver movement.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModel.DirectionReference> ImageDirectionReference
```

### Property Value

Type: Nullable<MetadataModel.DirectionReference>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

- MDM_EXIF_GPS Class
- FreelImageAPI.Metadata Namespace
- MDM_EXIF_GPSImageDirection
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MDM_EXIF_GPS.IsDifferential Property

Gets or sets a value indicating whether differential correction was applied to the GPS receiver.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<bool> IsDifferential { get; set; }
```

**Property Value**

Type: NullableBoolean

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_GPS Class  
FreelImageAPI.Metadata Namespace
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MDM_EXIF_GPSLatitude Property

Gets or sets the latitude of the image. The latitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public FIURational[] Latitude { get; set; }
```

### Property Value

Type: FIURational

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_EXIF_GPS Class
  - FreeImageAPI.Metadata Namespace
  - MDM_EXIF_GPSLatitudeDirection
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MDM_EXIF_GPSLatitudeDirection Property

Gets or sets a value indicating whether the Latitude is north or south latitude.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModelLatitudeType> LatitudeDirection
```

**Property Value**  
Type: Nullable<MetadataModelLatitudeType>

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSLongitude Property

Gets or sets the longitude of the image. The longitude is expressed as three rational values giving the degrees, minutes, and seconds, respectively. Constant length of 3.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FIURational[] Longitude { get; set; }
```

### Property Value

Type: FIURational

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace  
MDM_EXIF_GPSLongitudeDirection
**MDM_EXIF_GPSLongitudeDirection Property**

Gets or sets a value indicating whether Longitude is east or west longitude.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<MetadataModelLongitudeType> Longitude;
```

**Property Value**  
Type: Nullable<MetadataModelLongitudeType>

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_EXIF_GPS Class  
FreelImageAPI.Metadata Namespace
MDM_EXIF_GPSMapDatum Property

Gets or sets the geodetic survey data used by the GPS receiver. If the survey data is restricted to Japan, the value of this tag is 'TOKYO' or 'WGS-84'.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

✦ Syntax

```csharp
public string MapDatum { get; set; }
```

**Property Value**

Type: String

✦ Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

✦ See Also

Reference
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSMeasureMode3D

Property

Gets or sets a value indicating the GPS measurement mode. true indicates three-dimensional measurement; false indicated two-dimensional measurement was in progress.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public Nullable<bool> MeasureMode3D { get; set; }
```

Property Value
Type: NullableBoolean

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also
Reference
MDM_EXIF_GPS Class
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSModel

Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: FREE_IMAGE_MDMODEL

### See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace

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**MDM_EXIF_GPSProcessingMethod Property**

Gets or sets a character string recording the name of the method used for location finding. The first byte indicates the character code used, and this is followed by the name of the method. Since the Type is not ASCII, NULL termination is not necessary.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public byte[] ProcessingMethod { get; set; }
```

**Property Value**

**Type:** Byte

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**

MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSSatellites Property

Gets or sets the GPS satellites used for measurements. This tag can be used to describe the number of satellites, their ID number, angle of elevation, azimuth, SNR and other information in ASCII notation. The format is not specified.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public string Satellites { get; set; }
```

Property Value
Type: String

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property’s value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_GPS Class
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSSignedAltitude Property

Gets or sets the signed altitude. Altitude is expressed as one rational value. The reference unit is meters.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIRational> SignedAltitude { get; }
```

### Property Value

Type: `Nullable<FIRational>`

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>OverflowException</code></td>
<td>Altitude is too large to fit into a FIRational.</td>
</tr>
</tbody>
</table>

### Remarks

This is a derived property. There is no metadata tag directly associated with this property value.

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this
property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_GPS Class
FreeImageAPI.Metadata Namespace

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MDM_EXIF_GPSSpeed Property

Gets or sets the speed of GPS receiver movement.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> Speed { get; set; }
```

### Property Value

**Type:** Nullable<FIURational>

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference  
  MDM_EXIF_GPS Class  
  FreeImageAPI.Metadata Namespace  
  MDM_EXIF_GPSSpeedUnit

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MDM_EXIF_GPSSpeedUnit Property

Gets or sets the unit used to express the GPS receiver Speed of movement.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModelVelocityUnit> SpeedUnit
```

### Property Value

Type: Nullable<MetadataModelVelocityUnit>

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
- MDM_EXIF_GPS Class
- FreeImageAPI.Metadata Namespace
- MDM_EXIF_GPSSpeed
MDM_EXIF_GPSStatus Property

Gets or sets a value indicating the status of the GPS receiver when the image was recorded. **true** indicates measurement was in progress; **false** indicates measurement was Interoperability.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```c#
public Nullable<bool> Status { get; set; }
```

Property Value

Type: NullableBoolean

▲ Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

▲ See Also

Reference

MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPSTimeStamp Property

Gets or sets the time as UTC (Coordinated Universal Time). Constant length of 3.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<TimeSpan> TimeStamp { get; set; }
```

**Property Value**

Type: Nullable<TimeSpan>

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_GPS Track Property

Gets or sets the direction of GPS receiver movement. The range of values is from 0.00 to 359.99.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<FIURational> Track { get; set; }
```

### Property Value

Type: Nullable<FIURational>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreeImageAPI.Metadata Namespace  
MDM_EXIF_GPSTrackDirectionReference
## MDM_EXIF_GPSTrackDirectionReference Property

Gets or sets the reference for giving the direction of GPS receiver movement.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

[C#]
```csharp
public Nullable<MetadataModel.DirectionReference> TrackDirectionReference
```

### Property Value

Type: Nullable<MetadataModel.DirectionReference>

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_GPS Class  
FreelImageAPI.Metadata Namespace  
MDM_EXIF_GPSTrack
### MDM_EXIF_GPSVersionID Property

Gets or sets the GPS version ID. Constant length of 4.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

#### Syntax

```csharp
public byte[] VersionID { get; set; }
```

#### Property Value

Type: **Byte**

#### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

#### See Also

Reference  
[MDM_EXIF_GPS Class](#)  
[FreeImageAPI.Metadata Namespace](#)

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# MDM_EXIF_GPS Methods

The MDM_EXIF_GPS type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![AddTag(MetadataTag)] AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>![AddTag(IEnumerableMetadataTag)] AddTag(IEnumerableMetadataTag)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>![DestoryModel] DestoryModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <a href="#">Object</a> is equal to the current <a href="#">Object</a>. (Inherited from <a href="#">Object</a>)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <a href="#">Object</a>)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <a href="#">Object</a>)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
</tbody>
</table>
### SetTagValueT(String, NullableT)
Sets the value of the specified tag. (Inherited from MetadataModel.)

### SetTagValueUndefined
Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)

### TagExists
Returns whether the specified tag exists. (Inherited from MetadataModel.)

### ToString
Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)

---

**See Also**

**Reference**
- MDM_EXIF_GPS Class
- FreelImageAPI.Metadata Namespace

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The `MDM_EXIF_GPS` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreImage-bitmap. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
</tbody>
</table>

### See Also

- **Reference**
  - `MDM_EXIF_GPS Class`
  - `FreImageAPI.Metadata Namespace`
MDM_EXIF_MAIN Class

Represents a collection of all tags contained in the metadata model FIMD_EXIF_MAIN.

Inheritance Hierarchy

System\Object FreeImageAPI.MetadataMetadataModel FreeImageAPI.MetadataMDM_EXIF_MAIN

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public class MDM_EXIF_MAIN : MetadataModel
```

The MDM_EXIF_MAIN type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_EXIF_MAIN</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artist</td>
<td>Gets or sets the name</td>
</tr>
</tbody>
</table>
get or sets number of bits per image component. In this standard each component of the image is 8 bits, so the value for this tag is 8. Constant length of 3.

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BitsPerSample</td>
<td>Gets or sets the compression scheme used for the image data. When a primary image is JPEG compressed, this designation is not necessary and is omitted. When thumbnails use JPEG compression, this tag value is set to 6.</td>
</tr>
<tr>
<td>Compression</td>
<td></td>
</tr>
<tr>
<td>Copyright</td>
<td>Gets or sets the photographer and editor copyrights. Constant length of 1-2.</td>
</tr>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DateTime</td>
<td>Gets or sets the date and time of image.</td>
</tr>
<tr>
<td><strong>EquipmentModel</strong></td>
<td>Gets or sets the model name or model number of the equipment.</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>ImageDescription</strong></td>
<td>Gets or sets a string giving the title of the image.</td>
</tr>
<tr>
<td><strong>ImageHeight</strong></td>
<td>Gets or sets number of rows of image data. In JPEG compressed data a JPEG marker is used instead of this tag.</td>
</tr>
<tr>
<td><strong>ImageWidth</strong></td>
<td>Gets or sets the number of columns of image data, equal to the number of pixels per row. In JPEG compressed data a JPEG marker is used instead of this tag.</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags.</td>
</tr>
</tbody>
</table>
**JPEGInterchangeFormat**

Gets or sets the offset to the start byte (SOI) of JPEG compressed thumbnail data. This is not used for primary image JPEG data.

**JPEGInterchangeFormatLength**

Gets or sets the number of bytes of JPEG compressed thumbnail data.

**List**

Returns a list of all metadata tags this instance represents.

*(Inherited from `MetadataModel`)*

**Make**

Gets or sets the manufacturer of the recording equipment.

**Model**

Retrieves the datamodel that this instance represents.

*(Overrides `MetadataModel.Model`)*

**Orientation**

Gets or sets the image orientation viewed in terms of rows and columns.

**PhotometricInterpretation**

Gets or sets pixel composition. In JPEG compressed data a
**PlanarConfiguration**

- Gets or sets a value that indicates whether pixel components are recorded in chunky or planar format. In JPEG compressed files a JPEG marker is used instead of this tag. If this field does not exist, the TIFF default of 1 (chunky) is assumed. See remarks for further information.

**PrimaryChromaticities**

- Gets or sets the chromaticity of the three primary colors of the image. Constant length of 6.

**ReferenceBlackWhite**

- Gets or sets the reference black point value and reference white point value. Constant length of 6.

**ResolutionUnit**

- Gets or sets the unit for measuring XResolution and YResolution. The same unit is used for both XResolution and YResolution. If the
image resolution unknown, 2 (inches) is designated. See remarks for further information.

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RowsPerStrip</strong></td>
<td>Gets or sets number of rows per strip. This is the number of rows in the image of one strip when an image is divided into strips. With JPEG compressed data this designation is not needed and is omitted.</td>
</tr>
<tr>
<td><strong>SamplesPerPixel</strong></td>
<td>Gets or sets the number of components per pixel. Since this standard applies to RGB and YCbCr images, the value set for this tag is 3. In JPEG compressed data a JPEG marker is used instead of this tag.</td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>Gets or sets the name and version of the software or firmware of the camera or image input device used to generate the image.</td>
</tr>
<tr>
<td><strong>StripByteCounts</strong></td>
<td>Gets or sets the total number of bytes in each strip. With JPEG</td>
</tr>
<tr>
<td><strong>StripOffsets</strong></td>
<td>Gets or sets the byte offset of that strip. It is recommended that this be selected so the number of strip bytes does not exceed 64 Kbytes. With JPEG compressed data this designation is not needed and is omitted. Constant length of \texttt{SamplesPerPixel} * \texttt{StripsPerImage}.</td>
</tr>
<tr>
<td><strong>TransferFunction</strong></td>
<td>Gets or sets a transfer function for the image, described in tabular style. Constant length of 3 * 256.</td>
</tr>
<tr>
<td><strong>WhitePoint</strong></td>
<td>Gets or sets the chromaticity of the white point of the image. Constant length of 2.</td>
</tr>
<tr>
<td><strong>XResolution</strong></td>
<td>Gets or sets the number of pixels per \texttt{ResolutionUnit} in the \texttt{ImageWidth} direction. When the image resolution is unknown,</td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>YCbCrCoefficients</strong></td>
<td>Gets or sets the matrix coefficients for transformation from RGB to YCbCr image data. Constant length of 3.</td>
</tr>
<tr>
<td><strong>YCbCrPositioning</strong></td>
<td>Gets or sets position of chrominance components in relation to the luminance component. See remarks for further information.</td>
</tr>
<tr>
<td><strong>YCbCrSubSampling</strong></td>
<td>Gets or sets the sampling ratio of chrominance components in relation to the luminance component. In JPEG compressed data a JPEG marker is used instead of this tag. See remarks for further information.</td>
</tr>
<tr>
<td><strong>YResolution</strong></td>
<td>Gets or sets the number of pixels per ResolutionUnit in the ImageHeight direction. When the image resolution is unknown, 72 [dpi] is designated.</td>
</tr>
</tbody>
</table>

72 [dpi] is designated.
## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AddTag(MetadataTag)</strong></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <em>Key</em> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>AddTag(IEnumerable&lt;MetadataTag&gt;)</strong></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <em>Key</em> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>DestoryModel</strong></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <em>Object</em> is equal to the current <em>Object</em>.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual <code>MetadataTags</code> in this <code>MetadataModel</code>. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>GetTag</strong></td>
<td>Returns the specified metadata tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><strong>GetTagArrayT</strong></td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>
**GetUInt32Value**

Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)

**MemberwiseClone**

Creates a shallow copy of the current Object. (Inherited from Object.)

**RegexSearch**

Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)

**RemoveTag**

Removes the specified tag from the bitmap. (Inherited from MetadataModel.)

**SetTagValue(String, Object)**

Sets the value of the specified tag. (Inherited from MetadataModel.)

**SetTagValueT(String, NullableT)**

Sets the value of the specified tag. (Inherited from MetadataModel.)
### SetTagValueUndefined

Sets the value of the specified tag as undefined.
(Inherited from MetadataModel.)

### TagExists

Returns whether the specified tag exists.
(Inherited from MetadataModel.)

### ToString

Converts the model of the MetadataModel object to its equivalent string representation.
(Inherited from MetadataModel.)

---

#### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

---

#### See Also

Reference
FreImageAPI.Metadata Namespace
MDM_EXIF_MAIN Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_EXIF_MAIN(
    FIBITMAP dib
)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### See Also

**Reference**
- MDM_EXIF_MAIN Class
- FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
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The `MDM_EXIF_MAIN` type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artist</td>
<td>Gets or sets the name of the camera owner, photographer or image creator.</td>
</tr>
<tr>
<td>BitsPerSample</td>
<td>Gets or sets number of bits per image component. In this standard each component of the image is 8 bits, so the value for this tag is 8. Constant length of 3.</td>
</tr>
<tr>
<td>Compression</td>
<td>Gets or sets compression scheme used for the image data. When a primary image is JPEG compressed, this designation is not necessary and is omitted. When thumbnails use JPEG compression, this tag value is set to 6.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Copyright</strong></td>
<td>Gets or sets the photographer and editor copyrights. Constant length of 1-2.</td>
</tr>
<tr>
<td><strong>Count</strong></td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>DateTime</strong></td>
<td>Gets or sets the date and time of image creation.</td>
</tr>
<tr>
<td><strong>EquipmentModel</strong></td>
<td>Gets or sets the model name or model number of the equipment.</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>ImageDescription</strong></td>
<td>Gets or sets a string giving the title of the image.</td>
</tr>
<tr>
<td><strong>ImageHeight</strong></td>
<td>Gets or sets number of rows of image data. In JPEG compressed data a JPEG marker is used instead of this tag.</td>
</tr>
<tr>
<td><strong>ImageWidth</strong></td>
<td>Gets or sets the</td>
</tr>
</tbody>
</table>
number of columns of image data, equal to the number of pixels per row. In JPEG compressed data a JPEG marker is used instead of this tag.

<table>
<thead>
<tr>
<th>Item</th>
<th>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEGInterchangeFormat</td>
<td>Gets or sets the offset to the start byte (SOI) of JPEG compressed thumbnail data. This is not used for primary image JPEG data.</td>
</tr>
<tr>
<td>JPEGInterchangeFormatLength</td>
<td>Gets or sets the number of bytes of JPEG compressed thumbnail data.</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Make</td>
<td>Gets or sets the manufacturer of the recording equipment.</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Orientation</td>
<td>Gets or sets the image orientation viewed in terms of rows and columns.</td>
</tr>
<tr>
<td>PhotometricInterpretation</td>
<td>Gets or sets pixel composition. In JPEG compressed data a JPEG marker is used instead of this tag. See remarks for further information.</td>
</tr>
<tr>
<td>PlanarConfiguration</td>
<td>Gets or sets a value that indicates whether pixel components are recorded in chunky or planar format. In JPEG compressed files a JPEG marker is used instead of this tag. If this field does not exist, the TIFF default of 1 (chunky) is assumed. See remarks for further information.</td>
</tr>
<tr>
<td>PrimaryChromaticities</td>
<td>Gets or sets the chromaticity of the three primary colors of the image. Constant length of 6.</td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>ReferenceBlackWhite</strong></td>
<td>Gets or sets the reference black point value and reference white point value. Constant length of 6.</td>
</tr>
<tr>
<td><strong>ResolutionUnit</strong></td>
<td>Gets or sets the unit for measuring XResolution and YResolution. The same unit is used for both XResolution and YResolution. If the image resolution in unknown, 2 (inches) is designated. See remarks for further information.</td>
</tr>
<tr>
<td><strong>RowsPerStrip</strong></td>
<td>Gets or sets number of rows per strip. This is the number of rows in the image of one strip when an image is divided into strips. With JPEG compressed data this designation is not needed and is omitted.</td>
</tr>
</tbody>
</table>
| **SamplesPerPixel**        | Gets or sets the number of components per pixel. Since this standard applies to RGB and YCbCr images, the value set for this tag is 3. In JPEG compressed data a JPEG marker is
<table>
<thead>
<tr>
<th>Tag Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>Gets or sets the name and version of the software or firmware of the camera or image input device used to generate the image.</td>
</tr>
<tr>
<td>StripByteCounts</td>
<td>Gets or sets the total number of bytes in each strip. With JPEG compressed data this designation is not needed and is omitted. Constant length of ( \text{SamplesPerPixel} \times \text{StripsPerImage} ).</td>
</tr>
<tr>
<td>StripOffsets</td>
<td>Gets or sets the byte offset of that strip. It is recommended that this be selected so the number of strip bytes does not exceed 64 Kbytes. With JPEG compressed data this designation is not needed and is omitted. Constant length of ( \text{SamplesPerPixel} \times \text{StripsPerImage} ).</td>
</tr>
<tr>
<td>TransferFunction</td>
<td>Gets or sets a transfer function for the image, described in tabular style. Constant length of 3 * 256.</td>
</tr>
<tr>
<td><strong>WhitePoint</strong></td>
<td>Gets or sets the chromaticity of the white point of the image. Constant length of 2.</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>XResolution</strong></td>
<td>Gets or sets the number of pixels per ResolutionUnit in the ImageWidth direction. When the image resolution is unknown, 72 [dpi] is designated.</td>
</tr>
<tr>
<td><strong>YCbCrCoefficients</strong></td>
<td>Gets or sets the matrix coefficients for transformation from RGB to YCbCr image data. Constant length of 3.</td>
</tr>
<tr>
<td><strong>YCbCrPositioning</strong></td>
<td>Gets or sets position of chrominance components in relation to the luminance component. See remarks for further information.</td>
</tr>
<tr>
<td><strong>YCbCrSubSampling</strong></td>
<td>Gets or sets the sampling ratio of chrominance components in relation to the luminance component. In JPEG compressed data a JPEG marker is used instead of this tag. See remarks for further information.</td>
</tr>
<tr>
<td>YResolution</td>
<td>Gets or sets the number of pixels per ResolutionUnit in the ImageHeight direction. When the image resolution is unknown, 72 [dpi] is designated.</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
- MDM_EXIF_MAIN Class
- FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_MAINArtist Property

Gets or sets the name of the camera owner, photographer or image creator.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C#  Copy

```csharp
public string Artist { get; set; }
```

### Property Value

Type: `String`

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
**MDM_EXIF_MAIN Class**  
**FreeImageAPI.Metadata Namespace**

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MDM_EXIF_MAIN BitsPerSample Property

Gets or sets number of bits per image component. In this standard each component of the image is 8 bits, so the value for this tag is 8. Constant length of 3.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public ushort[] BitsPerSample { get; set; }
```

### Property Value

Type: UInt16

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_MAIN Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_MAIN Compression Property

Gets or sets compression scheme used for the image data. When a primary image is JPEG compressed, this designation is not necessary and is omitted. When thumbnails use JPEG compression, this tag value is set to 6.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<ushort> Compression { get; set; }
```

**Property Value**  
Type: Nullable(UInt16)

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_EXIF_MAIN Class
FreelImageAPI.Metadata Namespace

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MDM_EXIF_MAIN

Copyright Property

Gets or sets the photographer and editor copyrights. Constant length of 1-2.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string[] Copyright { get; set; }
```

**Property Value**

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_EXIF_MAIN Class

FreImageAPI.Metadata Namespace

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MDM_EXIF_MAIN DateTime Property

Gets or sets the date and time of image creation.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<DateTime> DateTime { get; set; }
```

### Property Value

Type: Nullable<DateTime>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

| MDM_EXIF_MAIN Class  
FreelImageAPI.Metadata Namespace
```

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MDM_EXIF_MAINEquipmentModel

Property

Gets or sets the model name or model number of the equipment.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public string EquipmentModel { get; set; }
```

## Property Value

Type: **String**

## Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference
  - MDM_EXIF_MAIN Class  
  - FreeImageAPI.Metadata Namespace

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MDM_EXIF_MAIN ImageDescription Property

Gets or sets a string giving the title of the image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ImageDescription { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_MAIN Class
FreeImageAPI.Metadata Namespace
MDM_EXIF_MAIN ImageHeight Property

Gets or sets number of rows of image data. In JPEG compressed data a JPEG marker is used instead of this tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<uint> ImageHeight { get; set; }
```

### Property Value

Type: NullableUInt32

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property’s value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**
- MDM_EXIF_MAIN Class
- FreeImageAPI.Metadata Namespace

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MDM_EXIF_MAIN ImageWidth Property

Gets or sets the number of columns of image data, equal to the number of pixels per row. In JPEG compressed data a JPEG marker is used instead of this tag.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<uint> ImageWidth { get; set; }
```

Property Value
Type: NullableUInt32

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_MAIN Class
FreeImageAPI.Metadata Namespace
MDM_EXIF_MAIN.JPGInterchangeFormat Property

Gets or sets the offset to the start byte (SOI) of JPEG compressed thumbnail data. This is not used for primary image JPEG data.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<uint> JPEGInterchangeFormat { get

Property Value
Type: NullableUInt32

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_MAIN Class  
FreeImageAPI.Metadata Namespace
MDM_EXIF_MAINJPEGInterchangeFormatLength Property

Gets or sets the number of bytes of JPEG compressed thumbnail data.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public Nullable<uint> JPEGInterchangeFormatLength
```

Property Value
Type: Nullable<uint>

Remarks

This is not used for primary image JPEG data. JPEG thumbnails are not divided but are recorded as a continuous JPEG bitstream from SOI to EOI. APPn and COM markers should not be recorded. Compressed thumbnails shall be recorded in no more than 64 Kbytes, including all other data to be recorded in APP1.

Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also
Reference

MDM_EXIF_MAIN Class
FreelImageAPI.Metadata Namespace

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**MDM_EXIF_MAIN.Make**

Gets or sets the manufacturer of the recording equipment.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string Make { get; set; }
```

**Property Value**

Type: String

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property’s value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference
- MDM_EXIF_MAIN Class
- FreeImageAPI.Metadata Namespace
MDM_EXIF_MAIN Model Property

Retrieves the datamodel that this instance represents.

**Namespace:**FreImageAPI.Metadata  
**Assembly:** FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: **FREE_IMAGE_MDMODEL**

### See Also

Reference  
MDM_EXIF_MAIN Class  
FreImageAPI.Metadata Namespace

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MDM_EXIF_MAINOrientation Property

Gets or sets the image orientation viewed in terms of rows and columns.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModel.ExifImageOrientation> ...
```

### Property Value

Type: `Nullable<MetadataModel.ExifImageOrientation>`

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

- MDM_EXIF_MAIN Class  
- FreelImageAPI.Metadata Namespace
MDM_EXIF_MAIN

Property

Gets or sets pixel composition. In JPEG compressed data a JPEG marker is used instead of this tag. See remarks for further information.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<ushort> PhotometricInterpretation
```

Property Value

Type: Nullable.UInt16

Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>RGB</td>
</tr>
<tr>
<td>6</td>
<td>YCbCr</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

Handling of null values

A null value indicates, that the corresponding metadata tag is not
present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_MAIN Class
FreelimageAPI_MetadataNamespace

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Help improve this Documentation: Join the Project
MDM_EXIF_MAIN PlanarConfiguration Property

Gets or sets a value that indicates whether pixel components are recorded in chunky or planar format. In JPEG compressed files a JPEG marker is used instead of this tag. If this field does not exist, the TIFF default of 1 (chunky) is assumed. See remarks for further information.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public Nullable<ushort> PlanarConfiguration { get }
```

Property Value
Type: Nullable(UInt16)

Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>chunky format</td>
</tr>
<tr>
<td>2</td>
<td>planar format</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

  MDM_EXIF_MAIN Class
  FreelImageAPI_Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_MAIN

PrimaryChromaticities

Property

Gets or sets the chromaticity of the three primary colors of the image. Constant length of 6.

**Namespace:** FreelImageAPI.Metadata
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public FIURational[] PrimaryChromaticities { get; }
```

**Property Value**

Type: FIURational

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_EXIF_MAIN Class
FreelImageAPI.Metadata Namespace
Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_MAINReferenceBlackWhite Property

Gets or sets the reference black point value and reference white point value. Constant length of 6.

**Namespace**: FreelImageAPI.Metadata  
**Assembly**: FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FIURational[] ReferenceBlackWhite { get; set; }
```

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_MAIN Class  
FreelImageAPI.Metadata Namespace
MDM_EXIF_MAINResolutionUnit Property

Gets or sets the unit for measuring XResolution and YResolution. The same unit is used for both XResolution and YResolution. If the image resolution in unknown, 2 (inches) is designated. See remarks for further information.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<ushort> ResolutionUnit { get; set }
```

Property Value

Type: NullableUInt16

Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>inches</td>
</tr>
<tr>
<td>3</td>
<td>YCbCr4:2:0</td>
</tr>
<tr>
<td>other</td>
<td>centimeters</td>
</tr>
</tbody>
</table>
Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_EXIF_MAIN Class
FreImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_MAIN.RowsPerStrip Property

Gets or sets number of rows per strip. This is the number of rows in the image of one strip when an image is divided into strips. With JPEG compressed data this designation is not needed and is omitted.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<uint> RowsPerStrip { get; set; }
```

### Property Value

Type: Nullable(UInt32)

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
- MDM_EXIF_MAIN Class
- FreeImageAPI.Metadata Namespace
- MDM_EXIF_MAIN.StripByteCounts
MDM_EXIF_MAIN SamplesPerPixel Property

Gets or sets the number of components per pixel. Since this standard applies to RGB and YCbCr images, the value set for this tag is 3. In JPEG compressed data a JPEG marker is used instead of this tag.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Nullable<ushort> SamplesPerPixel { get; set; }
```

Property Value
Type: Nullable<UInt16>

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_MAIN Class  
FreeImageAPI.Metadata Namespace
Contact/Feedback: FreedImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_EXIF_MAIN Software Property

Gets or sets the name and version of the software or firmware of the camera or image input device used to generate the image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string Software {
    get; 
    set; 
}
```

**Property Value**

Type: String

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

- MDM_EXIF_MAIN Class
- FreeImageAPI.Metadata Namespace

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MDM_EXIF_MAIN.StripByteCounts Property

Gets or sets the total number of bytes in each strip. With JPEG compressed data this designation is not needed and is omitted. Constant length of SamplesPerPixel * StripsPerImage.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public uint[] StripByteCounts { get; set; }
```

Property Value
Type: UInt32

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_MAIN Class
FreeImageAPI.Metadata Namespace
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MDM_EXIF_MAIN StripOffsets Property

Gets or sets the byte offset of that strip. It is recommended that this be selected so the number of strip bytes does not exceed 64 Kbytes. With JPEG compressed data this designation is not needed and is omitted. Constant length of SamplesPerPixel * StripsPerPixelImage.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dl) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public uint[] StripOffsets { get; set; }
```

Property Value
Type: UInt32

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_MAIN Class
FreeImageAPI.Metadata Namespace
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MDM_EXIF_MAIN TransferFunction Property

Gets or sets a transfer function for the image, described in tabular style. Constant length of 3 * 256.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ushort[] TransferFunction { get; set; }
```

### Property Value

Type: **UInt16**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**

MDM_EXIF_MAIN Class  
FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_EXIF_MAIN{WhitePoint

Gets or sets the chromaticity of the white point of the image. Constant length of 2.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public FIURational[] WhitePoint { get; set; }
```

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**  
MDM_EXIF_MAIN Class  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
MDM_EXIF_MAIN XResolution Property

Gets or sets the number of pixels per ResolutionUnit in the ImageWidth direction. When the image resolution is unknown, 72 [dpi] is designated.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public Nullable<FIURational> XResolution { get; set; }
```

Property Value
Type: Nullable<FIURational>

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_MAIN Class
FreeImageAPI.Metadata Namespace
MDM_EXIF_MAIN YCbCrCoefficients Property

Gets or sets the matrix coefficients for transformation from RGB to YCbCr image data. Constant length of 3.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FIURational[] YCbCrCoefficients { get; set }
```

### Property Value

Type: FIURational

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_EXIF_MAIN Class  
FreelImageAPI.Metadata Namespace
**MDM_EXIF_MAIN YCbCrPositioning Property**

Gets or sets position of chrominance components in relation to the luminance component. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public Nullable<ushort> YCbCrPositioning { get; set; }
```

**Remarks**

This field is designated only for JPEG compressed data or uncompressed YCbCr data. The TIFF default is 1 (centered); but when Y:Cb:Cr = 4:2:2 it is recommended in this standard that 2 (co-sited) be used to record data, in order to improve the image quality when viewed on TV systems.

When this field does not exist, the reader shall assume the TIFF default. In the case of Y:Cb:Cr = 4:2:0, the TIFF default (centered) is recommended. If the reader does not have the capability of supporting both kinds of YCbCrPositioning, it shall follow the TIFF default regardless of the value in this field. It is preferable that readers be able to support both centered and co-sited positioning.

The following values are defined:
### Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

#### See Also

**Reference**

- MDM_EXIF_MAIN Class
- FreelImageAPI.Metadata Namespace

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MDM_EXIF_MAIN YCbCrSubSar Property

Gets or sets the sampling ratio of chrominance components in relation to the luminance component. In JPEG compressed data a JPEG marker is used instead of this tag. See remarks for further information.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ushort[] YCbCrSubSampling { get; set; }
```

### Property Value

**Type:** UInt16

### Remarks

The following values are defined:

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[2,1]</td>
<td>YCbCr4:2:2</td>
</tr>
<tr>
<td>[2,2]</td>
<td>YCbCr4:2:0</td>
</tr>
<tr>
<td>other</td>
<td>reserved</td>
</tr>
</tbody>
</table>

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not
present in the metadata model. Setting this property's value to a
non-null reference creates the metadata tag if necessary. Setting this
property's value to a null reference deletes the metadata tag from
the metadata model.

See Also

Reference

MDM_EXIF_MAIN Class
FreelimageAPI.Metadata Namespace

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Property

Gets or sets the number of pixels per ResolutionUnit in the ImageHeight direction. When the image resolution is unknown, 72 [dpi] is designated.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public Nullable<FIURational> YResolution { get; set; }
```

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_EXIF_MAIN Class
FreeImageAPI.Metadata Namespace
### MDM_EXIF_MAIN Methods

The MDM_EXIF_MAIN type exposes the following members.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>AddTag(IEnumerable&lt;MetadataTag&gt;)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DestroyModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a> is equal to the current <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">MetadataModel</a>.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <a href="https://docs.microsoft.com/en-us/dotnet/api/system.object">Object</a>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
</tbody>
</table>
containg the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)

GetUInt32Value
Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)

MemberwiseClone
Creates a shallow copy of the current Object. (Inherited from Object.)

RegexSearch
Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)

RemoveTag
Removes the specified tag from the bitmap. (Inherited from MetadataModel.)

SetTagValue(String, Object)
Sets the value of the specified tag.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SetTagValueT(String, NullableT)</strong></td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>SetTagValueUndefined</strong></td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>TagExists</strong></td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>ToString</strong></td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

**See Also**

Reference

MDM_EXIF_MAIN Class
FreelImageAPI.Metadata Namespace
Help improve this Documentation: Join the Project
MDM_EXIF_MAIN Fields

The MDM_EXIF_MAIN type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

### See Also

Reference  
MDM_EXIF_MAIN Class  
FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_GEOTIFF Class

Represents a collection of all tags contained in the metadata model FIMD_GEOTIFF.

Inheritance Hierarchy

System
   Object
   FreeImageAPI.Metadata
   MetadataModel
   FreeImageAPI.Metadata
   MDM_GEOTIFF

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public class MDM_GEOTIFF : MetadataModel
```

The MDM_GEOTIFF type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_GEOTIFF</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata entries.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure.</td>
</tr>
<tr>
<td><strong>GeoASCIIParams</strong></td>
<td>Gets or sets the value of the GeoTIFF GeoASCIIParamsTag.</td>
</tr>
<tr>
<td><strong>GeoDoubleParams</strong></td>
<td>Gets or sets the value of the GeoTIFF GeoDoubleParamsTag.</td>
</tr>
<tr>
<td><strong>GeoKeyDirectory</strong></td>
<td>Gets or sets the value of the GeoTIFF GeoKeyDirectoryTag.</td>
</tr>
<tr>
<td><strong>IntergraphTransformationMatrix</strong></td>
<td>Gets or sets the value of the GeoTIFF IntergraphTransformationMatrixTag.</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel)</td>
</tr>
<tr>
<td><strong>JPLCartoIFDOffset</strong></td>
<td>Gets or sets the value of the GeoTIFF JPLCartoIFDOffset.</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>Returns a list of all metadata tags this instance represents.                (Inherited from MetadataModel)</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>Retrieves the datamodel that this instance represents.                       (Overrides MetadataModel)</td>
</tr>
<tr>
<td><strong>ModelPixelScale</strong></td>
<td>Gets or sets the value of the GeoTIFF ModelPixelScale.</td>
</tr>
<tr>
<td><strong>ModelTiePoints</strong></td>
<td>Gets or sets the value of the GeoTIFF ModelTiePoints.</td>
</tr>
</tbody>
</table>
GeoTIFF GeoTiePointsTag

<table>
<thead>
<tr>
<th>Method Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ModelTransformationMatrix</td>
<td>Gets or sets the value of the GeoTIFF ModelTransformationMatrix.</td>
</tr>
<tr>
<td><strong>Methods</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Name</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>AddTag(IEnumerableMetadataTag)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>DestroyModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual <code>MetadataTags</code> in this <code>MetadataModel</code>. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>GetUInt32Value</strong></td>
<td>Returns the value of the tag as unsigned 32-bit integer.</td>
</tr>
<tr>
<td>(Inherited from MetadataModel.)</td>
<td></td>
</tr>
<tr>
<td><strong>MemberwiseClone</strong></td>
<td>Creates a shallow copy of the current Object.</td>
</tr>
<tr>
<td>(Inherited from Object.)</td>
<td></td>
</tr>
<tr>
<td><strong>RegexSearch</strong></td>
<td>Searches for a pattern in each metadata tag and returns the result as a list.</td>
</tr>
<tr>
<td>(Inherited from MetadataModel.)</td>
<td></td>
</tr>
<tr>
<td><strong>RemoveTag</strong></td>
<td>Removes the specified tag from the bitmap.</td>
</tr>
<tr>
<td>(Inherited from MetadataModel.)</td>
<td></td>
</tr>
<tr>
<td><strong>SetTagValue(String, Object)</strong></td>
<td>Sets the value of the specified tag.</td>
</tr>
</tbody>
</table>
- **SetTagValueT**(String, Nullable{T})
  Sets the value of the specified tag.
  (Inherited from MetadataModel.)

- **SetTagValueUndefined**
  Sets the value of the specified tag as undefined.
  (Inherited from MetadataModel.)

- **TagExists**
  Returns whether the specified tag exists.
  (Inherited from MetadataModel.)

- **ToString**
  Converts the model of the MetadataModel object to its equivalent string representation.
  (Inherited from MetadataModel.)

---

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>dib</strong></td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>
MDM_GEOTIFF Constructor

 Initializes a new instance of this class.

 **Namespace:** FreeImageAPI.Metadata  
 **Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public MDM_GEOTIFF(
    FIBITMAP dib
)
```

### Parameters

*dib*

Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference

MDM_GEOTIFF Class  
FreeImageAPI.Metadata Namespace

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The **MDM_GEOTIFF** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from <strong>MetadataModel</strong>)</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmap's metadata structure. (Inherited from <strong>MetadataModel</strong>)</td>
</tr>
<tr>
<td>GeoASCIIParams</td>
<td>Gets or sets the value of the GeoTIFF GeoASCIIParamsTag.</td>
</tr>
<tr>
<td>GeoDoubleParams</td>
<td>Gets or sets the value of the GeoTIFF GeoDoubleParamsTag.</td>
</tr>
<tr>
<td>GeoKeyDirectory</td>
<td>Gets or sets the value of the GeoTIFF GeoKeyDirectory.</td>
</tr>
<tr>
<td>IntergraphTransformationMatrix</td>
<td>Gets or sets the value of the GeoTIFF IntergraphTransformationMatrix.</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag given index. This operation is slow when accessing all tags. (Inherited from <strong>MetadataModel</strong>)</td>
</tr>
<tr>
<td>JPLCartoIFDOffset</td>
<td>Gets or sets the value of the GeoTIFF JPLCartoIFDOffset.</td>
</tr>
<tr>
<td>Method Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel)</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModel)</td>
</tr>
<tr>
<td>ModelPixelScale</td>
<td>Gets or sets the value of the GeoTIFF ModelPixelScale tag.</td>
</tr>
<tr>
<td>ModelTiePoints</td>
<td>Gets or sets the value of the GeoTIFF GeoTiePointsTag.</td>
</tr>
<tr>
<td>ModelTransformationMatrix</td>
<td>Gets or sets the value of the GeoTIFF ModelTransformationMatrix tag.</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
- MDM_GEOTIFF Class
- FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_GEOTIFFGeoASCIIParamsProperty

Gets or sets the value of the GeoTIFF GeoASCIIParamsTag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string GeoASCIIParams { get; set; }
```

### Property Value

Type: *String*

### Remarks

The GeoASCIIParamsTag is used to store all of the *String* valued GeoKeys, referenced by the *GeoKeyDirectory* property. Since keys defined in the GeoKeyDirectoryTag use offsets into this tag, any special comments may be placed at the beginning of this tag. For the most part, the only keys that are *String* valued are *Citation* keys, giving documentation and references for obscure projections, datums, etc.

Special handling is required for *String*-valued keys. While it is true that TIFF 6.0 permits multiple NULL-delimited strings within a single ASCII tag, the secondary strings might not appear in the output of naive *tiffdump* programs. For this reason, the NULL delimiter of each ASCII key value shall be converted to a "|" (pipe) character before being installed back into the *String* holding tag, so that a dump of the tag will look like this.

```
AsciiTag="first_value|second_value|etc...last_value|"
```
A baseline GeoTIFF-reader must check for and convert the final "|" pipe character of a key back into a NULL before returning it to the client software.

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_GEOTIFF Class
FreelImageAPI.Metadata Namespace

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MDM_GEOTIFFGeoDoubleParamsTag

Property

Gets or sets the value of the GeoTIFF GeoDoubleParamsTag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public double[] GeoDoubleParams { get; set; }
```

Property Value

Type: **Double**

Remarks

The GeoDoubleParamsTag is used to store all of the **Double** valued GeoKeys, referenced by the **GeoKeyDirectory** property. The meaning of any value of this double array is determined from the GeoKeyDirectoryTag reference pointing to it. **Single** values should first be converted to **Double** and stored here.

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also
Reference

MDM_GEOTIFF Class
FreelmageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_GEOTIFFGeoKeyDirectory Property

Gets or sets the value of the GeoTIFF GeoKeyDirectoryTag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ushort[] GeoKeyDirectory { get; set; }
```

### Property Value

*Type:* UInt16

### Remarks

The GeoKeyDirectoryTag may be used to store the GeoKey Directory, which defines and references the GeoKeys. The tag is an array of unsigned UInt16 values, which are primarily grouped into blocks of 4. The first 4 values are special, and contain GeoKey directory header information. The header values consist of the following information, in order:

Header={KeyDirectoryVersion, KeyRevision, MinorRevision, NumberOfKeys}

where

*KeyDirectoryVersion* indicates the current version of Key implementation, and will only change if this Tag's Key structure is changed. (Similar to the TIFFVersion (42)). The current DirectoryVersion number is 1. This value will most likely never change, and may be used to ensure that this is a valid Key-implementation.
*KeyRevision* indicates what revision of Key-Sets are used.

*MinorRevision* indicates what set of Key-Codes are used. The complete revision number is denoted `<KeyRevision>`. `<MinorRevision>`.

*NumberOfKeys* indicates how many Keys are defined by the rest of this Tag.

This header is immediately followed by a collection of `<NumberOfKeys>` KeyEntry sets, each of which is also 4-`Utf16` long. Each KeyEntry is modeled on the `TIFFEntry` format of the TIFF directory header, and is of the form:

```
KeyEntry = { KeyID, TIFFTagLocation, Count, Value_Offset }
```

where

*KeyID* gives the Key-ID value of the Key (identical in function to TIFF tag ID, but completely independent of TIFF tag-space),

*TIFFTagLocation* indicates which TIFF tag contains the value(s) of the Key: if TIFFTagLocation is 0, then the value is `Utf16`, and is contained in the `Value_Offset` entry. Otherwise, the type (format) of the value is implied by the TIFF-Type of the tag containing the value.

*Count* indicates the number of values in this key.

*Value_Offset* indicates the index-offset into the TagArray indicated by TIFFTagLocation, if it is nonzero. If TIFFTagLocation is 0 (zero), then Value_Offset contains the actual (Utf16) value of the Key, and Count=1 is implied. Note that the offset is not a byte-offset, but rather an index based on the natural data type of the specified tag array.

Following the KeyEntry definitions, the KeyDirectory tag may also contain additional values. For example, if a key requires multiple `Utf16` values, they shall be placed at the end of this tag, and the KeyEntry will set TIFFTagLocation=GeoKeyDirectoryTag, with the Value_Offset pointing to the location of the value(s).

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.
See Also

Reference
MDM_GEOTIFF Class
FreelmageAPI.Metadata Namespace

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MDM_GEOTIFFIntergraphTransformationMatrix Property

Gets or sets the value of the GeoTIFF IntergraphTransformationMatrixTag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public double[] IntergraphTransformationMatrixMatrix { 

Property Value
Type: Double

### Remarks

The IntergraphTransformationMatrixTag conflicts with an internal software implementation at Intergraph, and so its use is no longer encouraged. A GeoTIFF reader should look first for the new tag, and only if it is not found should it check for this older tag. If found, it should only consider it to be contain valid GeoTIFF matrix information if the tag-count is 16; the Intergraph version uses 17 values.

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.
See Also

Reference
MDM_GEOTIFF Class
FreeImageAPI_Metadata Namespace

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MDM_GEOTIFFJPLCartoIFDOffset Property

Gets or sets the value of the GeoTIFF JPLCartoIFDOffsetTag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<uint> JPLCartoIFDOffset { get; set; }
```

### Property Value

Type: Nullable(UInt32)

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_GEOTIFF Class  
FreeImageAPI.Metadata Namespace

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MDM_GEOTIFFModel Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override FREE_IMAGE_MDMODEL Model {
    get;
}
```

### Property Value

Type: **FREE_IMAGE_MDMODEL**

### See Also

Reference  
MDM_GEOTIFF Class  
FreeImageAPI.Metadata Namespace

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MDM_GEOTIFF ModelPixelScale Property

Gets or sets the value of the GeoTIFF ModelPixelScaleTag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public double[] ModelPixelScale { get; set; }
```

### Property Value

Type: **Double**

### Remarks

The ModelPixelScaleTag tag may be used to specify the size of raster pixel spacing in the model space units, when the raster space can be embedded in the model space coordinate system without rotation, and consists of the following 3 values:

```
ModelPixelScaleTag = (ScaleX, ScaleY, ScaleZ)
```

where ScaleX and ScaleY give the horizontal and vertical spacing of raster pixels. The ScaleZ is primarily used to map the pixel value of a digital elevation model into the correct Z-scale, and so for most other purposes this value should be zero (since most model spaces are 2-D, with Z=0).

A single tiepoint in the `ModelTiePoints` tag, together with this tag, completely determine the relationship between raster and model space; thus they comprise the two tags which Baseline GeoTIFF files most often will use to place a raster image into a "standard position" in model space.
Like the ModelTiePoints tag, this tag information is independent of the XPosition, YPosition, Resolution and Orientation tags of the standard TIFF 6.0 spec. However, simple reversals of orientation between raster and model space (e.g. horizontal or vertical flips) may be indicated by reversal of sign in the corresponding component of the ModelPixelScaleTag. GeoTIFF compliant readers must honor this signreversal convention.

This tag must not be used if the raster image requires rotation or shearing to place it into the standard model space. In such cases the transformation shall be defined with the more general ModelTransformationMatrix.

Naming differences

In the native FreeImage library and thus, in the FreeImage API documentation, this property’s key is named GeoPixelScale. Since the GeoTIFF specification as well as Java’s EXIFTIFFTagSet class call this tag ModelPixelScale, this property was renamed accordingly. However, when accessing this property's tag by its MetadataTag object, the native FreeImage tag key GeoPixelScale must be used.

Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

MDM_GEOTIFF Class
FreelImageAPI.Metadata Namespace

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MDM_GEOTIFFModelTiePoints Property

Gets or sets the value of the GeoTIFF GeoTiePointsTag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public double[] ModelTiePoints { get; set; }
```

### Property Value

Type: **Double**

### Remarks

The GeoTiePointsTag stores raster -> model tiepoint pairs in the order

ModelTiePoints = (...I,J,K, X,Y,Z...),

where (I,J,K) is the point at location (I,J) in raster space with pixel-value K, and (X,Y,Z) is a vector in model space. In most cases the model space is only two-dimensional, in which case both K and Z should be set to zero; this third dimension is provided in anticipation of future support for 3D digital elevation models and vertical coordinate systems.

A raster image may be georeferenced simply by specifying its location, size and orientation in the model coordinate space M. This may be done by specifying the location of three of the four bounding corner points. However, tiepoints are only to be considered exact at the points specified; thus defining such a set of bounding tiepoints does not imply that the model space locations of the interior of the image may be exactly computed by a linear interpolation of these tiepoints.
However, since the relationship between the Raster space and the model space will often be an exact, affine transformation, this relationship can be defined using one set of tiepoints and the `ModelPixelScale`, described below, which gives the vertical and horizontal raster grid cell size, specified in model units.

If possible, the first tiepoint placed in this tag shall be the one establishing the location of the point (0,0) in raster space. However, if this is not possible (for example, if (0,0) is goes to a part of model space in which the projection is ill-defined), then there is no particular order in which the tiepoints need be listed.

For orthorectification or mosaicking applications a large number of tiepoints may be specified on a mesh over the raster image. However, the definition of associated grid interpolation methods is not in the scope of the current GeoTIFF spec.

**Naming differences**

In the native FreImage library and thus, in the FreeImage API documentation, this property's key is named `GeoTiePoints`. Since the GeoTIFF specification as well as Java's `EXIFTIFFTagSet` class call this tag `ModelTiePoints`, this property was renamed accordingly. However, when accessing this property's tag by its `MetadataTag` object, the native FreImage tag key `GeoTiePoints` must be used.

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference
- MDM_GEOTIFF Class
- FreeImageAPI_Metadata Namespace

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MDM_GEOTIFFModelTransformProperty

Gets or sets the value of the GeoTIFF ModelTransformationMatrixTag.

**Namespace:** FreelImageAPI.Metadata

**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

#### Syntax

```csharp
public double[] ModelTransformationMatrix { get; }
```

#### Property Value

**Type:** Double

#### Remarks

This tag may be used to specify the transformation matrix between the raster space (and its dependent pixel-value space) and the (possibly 3D) model space.

**Naming differences**

In the native FreelImage library and thus, in the FreelImage API documentation, this property's key is named GeoTransformationMatrix. Since the GeoTIFF specification as well as Java's EXIFTIFFTagSet class call this tag ModelTransformationMatrix, this property was renamed accordingly. However, when accessing this property's tag by its MetadataTag object, the native FreelImage tag key GeoTransformationMatrix must be used.

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_GEOTIFF Class
FreelmageAPI.Metadata Namespace

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## MDM_GEOTIFF Methods

The `MDM_GEOTIFF` type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="AddTag(MetadataTag)" /></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><img src="image" alt="AddTag(IEnumerableMetadataTag)" /></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><img src="image" alt="DestroyModel" /></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual <code>MetadataTags</code> in this <code>MetadataModel</code>. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>GetTag</code></td>
<td>Returns the specified metadata tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetTagArrayT</code></td>
<td>Returns an array containing the data of the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetTagFromIndex</code></td>
<td>Returns the tag at the given index.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetTagText</code></td>
<td>Returns the string contained by the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetTagValueT</code></td>
<td>Returns the value of the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>GetUInt32Array</code></td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>SetTagValue&lt;T&gt;</code> (String, Nullable&lt;T&gt;)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td><code>SetTagValueUndefined</code></td>
<td>Sets the value of the specified tag as undefined.</td>
</tr>
<tr>
<td><code>TagExists</code></td>
<td>Returns whether the specified tag exists.</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the model of the <code>MetadataModel</code> object to its equivalent string representation.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- `MDM_GEOTIFF Class`
- `FreelImageAPI.Metadata Namespace`

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MDM_GEOTIFF Fields

The **MDM_GEOTIFF** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt=" " /> dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
- **MDM_GEOTIFF Class**
- **FreelImageAPI.Metadata Namespace**

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MDM_INTEROP Class

 Represents a collection of all tags contained in the metadata model FIMD_EXIF_INTEROP.

 Inheritance Hierarchy

 System
  \- Object
  \- FreeImageAPI.Metadata
  \- MetadataModel
  \- FreeImageAPI.Metadata
  \- MDM_INTEROP

 Namespace: FreeImageAPI.Metadata
 Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

 Syntax

 ```csharp
 public class MDM_INTEROP : MetadataModel
 ```

 The MDM_INTEROP type exposes the following members.

 Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_INTEROP</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

 Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata</td>
</tr>
<tr>
<td>Method Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. Key will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>AddTag(IEnumerableMetadataTag)</td>
<td>Adds a list of</td>
</tr>
</tbody>
</table>
tags to the bitmap or updates their values in case they already exist. **Key** will be used as key. (Inherited from **MetadataModel**.)

<p>| <strong>DestoryModel</strong> | Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from <strong>MetadataModel</strong>.) |
| <strong>Equals</strong> | Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Inherited from <strong>Object</strong>.) |
| <strong>Finalize</strong> | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <strong>Object</strong>.) |</p>
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
<td></td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the</td>
</tr>
</tbody>
</table>
MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="dib" /></td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

### See Also

Reference

FreelmageAPI.Metadata Namespace

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MDM_INTEROP Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public MDM_INTEROP(
    FIBITMAP dib
)
```

### Parameters

*dib*  
Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

## See Also

**Reference**  
MDM_INTEROP Class  
FreeImageAPI.Metadata Namespace
The **MDM_INTEROP** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td>Identification</td>
<td>Gets or sets the identification of the Interoperability rule.</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Overrides <strong>MetadataModelModel</strong>.)</td>
</tr>
</tbody>
</table>
Reference
MDM_INTEROP Class
FreelmageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_INTEROPIdentification Property

Gets or sets the identification of the Interoperability rule.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Nullable<MetadataModelInteroperabilityMode>
```

### Property Value

Type: Nullable<MetadataModelInteroperabilityMode>

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
[MDM_INTEROP Class](#)  
[FreeImageAPI.Metadata Namespace](#)

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MDM_INTEROPModel Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: `FREE_IMAGE_MDMODEL`

### See Also

- Reference  
  MDM_INTEROP Class  
  FreeImageAPI.Metadata Namespace

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MDM_INTEROP Methods

The **MDM_INTEROP** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AddTag(MetadataTag)</strong></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><strong>AddTag(IEnumerableMetadataTag)</strong></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><strong>DestoryModel</strong></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. <em>(Inherited from</em></td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup</td>
</tr>
<tr>
<td></td>
<td>operations before it is reclaimed by garbage collection.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual MetadataTags in</td>
</tr>
<tr>
<td></td>
<td>this MetadataModel.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
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<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
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<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
</tbody>
</table>
### Containing the Data of the Specified Tag as Unsigned 32 Bit Integer

**GetUInt32Value**

Returns the value of the tag as unsigned 32 bit integer.

(Inherited from [MetadataModel](#).)

### MemberwiseClone

**MemberwiseClone**

Creates a shallow copy of the current [Object](#).

(Inherited from [Object](#).)

### RegexSearch

**RegexSearch**

Searches for a pattern in each metadata tag and returns the result as a list.

(Inherited from [MetadataModel](#).)

### RemoveTag

**RemoveTag**

Removes the specified tag from the bitmap.

(Inherited from [MetadataModel](#).)

### SetTagValue(String, Object)

**SetTagValue(String, Object)**

Sets the value of the specified tag.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference
- MDM_INTEROP Class
- FreelImageAPI.Metadata Namespace

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MDM_INTEROP Fields

The MDM_INTEROP type exposes the following members.

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="dib" /></td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference
- MDM_INTEROP Class
- FreelImageAPI.Metada Namespace

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MDM_IPTC Class

Represents a collection of all tags contained in the metadata model FIMD_IPTC.

Inheritance Hierarchy

- System
  - Object
    - FreeImageAPI.MetadataMetadataModel
      - FreeImageAPI.MetadataMDM_IPTC

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public class MDM_IPTC : MetadataModel
```

The MDM_IPTC type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_IPTC</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ActionAdvised</td>
<td>Gets or sets the value</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ApplicationRecordVersion</td>
<td>Gets the Application Record Version.</td>
</tr>
<tr>
<td>AudioDuration</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Duration.</td>
</tr>
<tr>
<td>AudioOutcue</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Outcue.</td>
</tr>
<tr>
<td>AudioSamplingRate</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Sampling Rate.</td>
</tr>
<tr>
<td>AudioSamplingResolution</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Sampling Resolution.</td>
</tr>
<tr>
<td>AudioType</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Type.</td>
</tr>
<tr>
<td>ByLine</td>
<td>Gets or sets the value of the IPTC/NAA tag By Line. This is the author's name.</td>
</tr>
<tr>
<td>ByLineTitle</td>
<td>Gets or sets the value of the IPTC/NAA tag By Line Title. This is the author's position.</td>
</tr>
<tr>
<td>CaptionAbstract</td>
<td>Gets or sets the value of the IPTC/NAA tag</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Category</td>
<td>Gets or sets the value of the IPTC/NAA tag Category.</td>
</tr>
<tr>
<td>City</td>
<td>Gets or sets the value of the IPTC/NAA tag City.</td>
</tr>
<tr>
<td>ClassifyState</td>
<td>Gets or sets the value of the IPTC/NAA tag Classify State.</td>
</tr>
<tr>
<td>Contact</td>
<td>Gets or sets the value of the IPTC/NAA tag Contact.</td>
</tr>
<tr>
<td>ContentLocationCode</td>
<td>Gets or sets the value of the IPTC/NAA tag Content Location Code.</td>
</tr>
<tr>
<td>ContentLocationName</td>
<td>Gets or sets the value of the IPTC/NAA tag Content Location Name.</td>
</tr>
<tr>
<td>CopyrightNotice</td>
<td>Gets or sets the value of the IPTC/NAA tag Copyright Notice.</td>
</tr>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>CountryPrimaryLocationCode</td>
<td>Gets or sets the value</td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CountryPrimaryLocationName</td>
<td>Gets or sets the value of the IPTC/NAA tag Country Primary Location Name.</td>
</tr>
<tr>
<td>Credit</td>
<td>Gets or sets the value of the IPTC/NAA tag Credit.</td>
</tr>
<tr>
<td>DateCreated</td>
<td>Gets or sets the value of the IPTC/NAA tag Date Created.</td>
</tr>
<tr>
<td>DigitalCreationDate</td>
<td>Gets or sets the value of the IPTC/NAA tag Digital Creation Date.</td>
</tr>
<tr>
<td>DigitalCreationTime</td>
<td>Gets or sets the value of the IPTC/NAA tag Digital Creation Time.</td>
</tr>
<tr>
<td>DocumentHistory</td>
<td>Gets or sets the value of the IPTC/NAA tag Document History.</td>
</tr>
<tr>
<td>DocumentNotes</td>
<td>Gets or sets the value of the IPTC/NAA tag Document Notes.</td>
</tr>
<tr>
<td>EditorialUpdate</td>
<td>Gets or sets the value of the IPTC/NAA tag Editorial Update.</td>
</tr>
<tr>
<td>EditStatus</td>
<td>Gets or sets the value of the IPTC/NAA tag</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Edit Status.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ExifCameraInfo</strong></td>
<td>Gets or sets the value of the IPTC/NAA tag Exif Camera Info.</td>
</tr>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>ExpirationDate</strong></td>
<td>Gets or sets the value of the IPTC/NAA tag Expiration Date.</td>
</tr>
<tr>
<td><strong>ExpirationTime</strong></td>
<td>Gets or sets the value of the IPTC/NAA tag Expiration Time.</td>
</tr>
<tr>
<td><strong>FixtureIdentifier</strong></td>
<td>Gets or sets the value of the IPTC/NAA tag Fixture Identifier.</td>
</tr>
<tr>
<td><strong>Headline</strong></td>
<td>Gets or sets the value of the IPTC/NAA tag Headline.</td>
</tr>
<tr>
<td><strong>ImageOrientation</strong></td>
<td>Gets or sets the value of the IPTC/NAA tag Image Orientation.</td>
</tr>
<tr>
<td><strong>ImageType</strong></td>
<td>Gets or sets the value of the IPTC/NAA tag Image Type.</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>JobID</td>
<td>Gets or sets the value of the IPTC/NAA tag Job I D.</td>
</tr>
<tr>
<td>Keywords</td>
<td>Gets or sets the value of the IPTC/NAA tag Keywords.</td>
</tr>
<tr>
<td>LanguageIdentifier</td>
<td>Gets or sets the value of the IPTC/NAA tag Language Identifier.</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MasterDocumentID</td>
<td>Gets or sets the value of the IPTC/NAA tag Master Document I D.</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModelModel.)</td>
</tr>
<tr>
<td>ObjectAttributeReference</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Attribute Reference.</td>
</tr>
</tbody>
</table>

This operation is slow when accessing all tags. (Inherited from MetadataModel.)
<p>| <strong>ObjectName</strong> | Gets or sets the value of the IPTC/NAA tag Object Name. This is also referred to as Title. |
| <strong>ObjectCycle</strong> | Gets or sets the value of the IPTC/NAA tag Object Cycle. |
| <strong>ObjectPreviewData</strong> | Gets or sets the value of the IPTC/NAA tag Object Preview Data. This is also referred to as Audio Outcue. |
| <strong>ObjectPreviewFileVersion</strong> | Gets or sets the value of the IPTC/NAA tag Object Preview File Format. |
| <strong>ObjectPreviewFileFormat</strong> | Gets or sets the value of the IPTC/NAA tag Object Preview File Version. |
| <strong>ObjectTypeReference</strong> | Gets or sets the value of the IPTC/NAA tag Object Type Reference. |
| <strong>OriginalTransmissionReference</strong> | Gets or sets the value of the IPTC/NAA tag Original Transmission Reference. |
| <strong>OriginatingProgram</strong> | Gets or sets the value of the IPTC/NAA tag Originating Program. |</p>
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OwnerID</td>
<td>Gets or sets the value of the IPTC/NAA tag Owner ID.</td>
</tr>
<tr>
<td>Prefs</td>
<td>Gets or sets the value of the IPTC/NAA tag Prefs. This is also referred to as photo-mechanic preferences.</td>
</tr>
<tr>
<td>ProgramVersion</td>
<td>Gets or sets the value of the IPTC/NAA tag Program Version.</td>
</tr>
<tr>
<td>ProvinceState</td>
<td>Gets or sets the value of the IPTC/NAA tag Province State.</td>
</tr>
<tr>
<td>RasterizedCaption</td>
<td>Gets or sets the value of the IPTC/NAA tag Rasterized Caption.</td>
</tr>
<tr>
<td>ReferenceDate</td>
<td>Gets or sets the value of the IPTC/NAA tag Reference Date.</td>
</tr>
<tr>
<td>ReferenceNumber</td>
<td>Gets or sets the value of the IPTC/NAA tag Reference Number.</td>
</tr>
<tr>
<td>ReferenceService</td>
<td>Gets or sets the value of the IPTC/NAA tag Reference Service.</td>
</tr>
<tr>
<td>ReleaseDate</td>
<td>Gets or sets the value of the IPTC/NAA tag Release Date.</td>
</tr>
<tr>
<td>ReleaseTime</td>
<td>Gets or sets the value</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>ShortDocumentID</td>
<td>Gets or sets the value of the IPTC/NAA tag Short Document ID.</td>
</tr>
<tr>
<td>SimilarityIndex</td>
<td>Gets or sets the value of the IPTC/NAA tag Similarity Index.</td>
</tr>
<tr>
<td>Source</td>
<td>Gets or sets the value of the IPTC/NAA tag Source.</td>
</tr>
<tr>
<td>SpecialInstructions</td>
<td>Gets or sets the value of the IPTC/NAA tag Special Instructions.</td>
</tr>
<tr>
<td>SubjectReference</td>
<td>Gets or sets the value of the IPTC/NAA tag Subject Reference.</td>
</tr>
<tr>
<td>SubLocation</td>
<td>Gets or sets the value of the IPTC/NAA tag Sub Location.</td>
</tr>
<tr>
<td>SupplementalCategories</td>
<td>Gets or sets the value of the IPTC/NAA tag Supplemental Categories.</td>
</tr>
<tr>
<td>TimeCreated</td>
<td>Gets or sets the value of the IPTC/NAA tag Time Created.</td>
</tr>
<tr>
<td>UniqueDocumentID</td>
<td>Gets or sets the value of the IPTC/NAA tag Unique Document ID.</td>
</tr>
</tbody>
</table>
### Urgency

Gets or sets the value of the IPTC/NAA tag Urgency.

### WriterEditor

Gets or sets the value of the IPTC/NAA tag Writer Editor. This is also referred to as Caption Writer.

#### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="100x100" alt="AddTag" /> AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="100x100" alt="AddTag" /> AddTag(IEnumerableMetadataTag)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="100x100" alt="DestoryModel" /> DestoryModel</td>
<td>Destroys the metadata model which will</td>
</tr>
</tbody>
</table>
remove all tags of this model from the bitmap. (Inherited from MetadataModel.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified Object is equal to the current Object.</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup</td>
</tr>
<tr>
<td></td>
<td>operations before it is reclaimed by garbage collection.</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in</td>
</tr>
<tr>
<td></td>
<td>this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag.</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32-bit integer.</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32-bit integer.</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object.</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list.</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><code>SetTagValue(String, Object)</code></td>
<td>Sets the value of the specified tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>SetTagValueT(String, Nullable{T})</code></td>
<td>Sets the value of the specified tag. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>SetTagValueUndefined</code></td>
<td>Sets the value of the specified tag as undefined. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>TagExists</code></td>
<td>Returns whether the specified tag exists. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Converts the model of the <code>MetadataModel</code> object to its equivalent string representation. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
</tbody>
</table>

**Top**

**Fields**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>

dib

Handle to the encapsulated FreeImage-bitmap.
(Inherited from MetadataModel.)

See Also

Reference
FreelImageAPI.Metadata Namespace

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MDM_IPTC Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_IPTC(
    FIBITMAP  dib
)
```

### Parameters

- **dib**  
  Type: FreeImageAPI.FIBITMAP  
  Handle to a FreeImage bitmap.

### See Also

**Reference**
- MDM_IPTC Class  
- FreeImageAPI.Metadata Namespace

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The `MDM_IPTC` type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ActionAdvised</td>
<td>Gets or sets the value of the IPTC/NAA tag Action Advised.</td>
</tr>
<tr>
<td>ApplicationRecordVersion</td>
<td>Gets the Application Record Version.</td>
</tr>
<tr>
<td>AudioDuration</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Duration.</td>
</tr>
<tr>
<td>AudioOutcue</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Outcue.</td>
</tr>
<tr>
<td>AudioSamplingRate</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Sampling Rate.</td>
</tr>
<tr>
<td>AudioSamplingResolution</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Sampling Resolution.</td>
</tr>
<tr>
<td>AudioType</td>
<td>Gets or sets the value of the IPTC/NAA tag Audio Type.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ByLine</td>
<td>Gets or sets the value of the IPTC/NAA tag By Line. This is the author's name.</td>
</tr>
<tr>
<td>ByLineTitle</td>
<td>Gets or sets the value of the IPTC/NAA tag By Line Title. This is the author's position.</td>
</tr>
<tr>
<td>CaptionAbstract</td>
<td>Gets or sets the value of the IPTC/NAA tag Caption Abstract.</td>
</tr>
<tr>
<td>Category</td>
<td>Gets or sets the value of the IPTC/NAA tag Category.</td>
</tr>
<tr>
<td>City</td>
<td>Gets or sets the value of the IPTC/NAA tag City.</td>
</tr>
<tr>
<td>ClassifyState</td>
<td>Gets or sets the value of the IPTC/NAA tag Classify State.</td>
</tr>
<tr>
<td>Contact</td>
<td>Gets or sets the value of the IPTC/NAA tag Contact.</td>
</tr>
<tr>
<td>ContentLocationCode</td>
<td>Gets or sets the value of the IPTC/NAA tag Content Location Code.</td>
</tr>
<tr>
<td>ContentLocationName</td>
<td>Gets or sets the value of the IPTC/NAA tag Content Location Name.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CopyrightNotice</td>
<td>Gets or sets the value of the IPTC/NAA tag Copyright Notice.</td>
</tr>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>CountryPrimaryLocationCode</td>
<td>Gets or sets the value of the IPTC/NAA tag Country Primary Location Code.</td>
</tr>
<tr>
<td>CountryPrimaryLocationName</td>
<td>Gets or sets the value of the IPTC/NAA tag Country Primary Location Name.</td>
</tr>
<tr>
<td>Credit</td>
<td>Gets or sets the value of the IPTC/NAA tag Credit.</td>
</tr>
<tr>
<td>DateCreated</td>
<td>Gets or sets the value of the IPTC/NAA tag Date Created.</td>
</tr>
<tr>
<td>DigitalCreationDate</td>
<td>Gets or sets the value of the IPTC/NAA tag Digital Creation Date.</td>
</tr>
<tr>
<td>DigitalCreationTime</td>
<td>Gets or sets the value of the IPTC/NAA tag Digital Creation Time.</td>
</tr>
<tr>
<td>DocumentHistory</td>
<td>Gets or sets the value of the IPTC/NAA tag Document History.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DocumentNotes</td>
<td>Gets or sets the value of the IPTC/NAA tag Document Notes.</td>
</tr>
<tr>
<td>EditorialUpdate</td>
<td>Gets or sets the value of the IPTC/NAA tag Editorial Update.</td>
</tr>
<tr>
<td>EditStatus</td>
<td>Gets or sets the value of the IPTC/NAA tag Edit Status.</td>
</tr>
<tr>
<td>ExifCameraInfo</td>
<td>Gets or sets the value of the IPTC/NAA tag Exif Camera Info.</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td>ExpirationDate</td>
<td>Gets or sets the value of the IPTC/NAA tag Expiration Date.</td>
</tr>
<tr>
<td>ExpirationTime</td>
<td>Gets or sets the value of the IPTC/NAA tag Expiration Time.</td>
</tr>
<tr>
<td>FixtureIdentifier</td>
<td>Gets or sets the value of the IPTC/NAA tag Fixture Identifier.</td>
</tr>
<tr>
<td>Headline</td>
<td>Gets or sets the value of the IPTC/NAA tag Headline.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ImageOrientation</td>
<td>Gets or sets the value of the IPTC/NAA tag Image Orientation.</td>
</tr>
<tr>
<td>ImageType</td>
<td>Gets or sets the value of the IPTC/NAA tag Image Type.</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>JobID</td>
<td>Gets or sets the value of the IPTC/NAA tag Job I D.</td>
</tr>
<tr>
<td>Keywords</td>
<td>Gets or sets the value of the IPTC/NAA tag Keywords.</td>
</tr>
<tr>
<td>LanguageIdentifier</td>
<td>Gets or sets the value of the IPTC/NAA tag Language Identifier.</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MasterDocumentID</td>
<td>Gets or sets the value of the IPTC/NAA tag Master Document I D.</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ObjectAttributeReference</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Attribute Reference.</td>
</tr>
<tr>
<td>ObjectCycle</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Cycle.</td>
</tr>
<tr>
<td>ObjectName</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Name. This is also referred to as Title.</td>
</tr>
<tr>
<td>ObjectPreviewData</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Preview Data. This is also referred to as Audio Outcue.</td>
</tr>
<tr>
<td>ObjectPreviewFileFormat</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Preview File Format.</td>
</tr>
<tr>
<td>ObjectPreviewFileVersion</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Preview File Version.</td>
</tr>
<tr>
<td>ObjectTypeReference</td>
<td>Gets or sets the value of the IPTC/NAA tag Object Type</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>OriginalTransmissionReference</td>
<td>Gets or sets the value of the IPTC/NAA tag Original Transmission Reference.</td>
</tr>
<tr>
<td>OriginatingProgram</td>
<td>Gets or sets the value of the IPTC/NAA tag Originating Program.</td>
</tr>
<tr>
<td>OwnerID</td>
<td>Gets or sets the value of the IPTC/NAA tag Owner ID.</td>
</tr>
<tr>
<td>Prefs</td>
<td>Gets or sets the value of the IPTC/NAA tag Prefs. This is also referred to as photo-mechanic preferences.</td>
</tr>
<tr>
<td>ProgramVersion</td>
<td>Gets or sets the value of the IPTC/NAA tag Program Version.</td>
</tr>
<tr>
<td>ProvinceState</td>
<td>Gets or sets the value of the IPTC/NAA tag Province State.</td>
</tr>
<tr>
<td>RasterizedCaption</td>
<td>Gets or sets the value of the IPTC/NAA tag Rasterized Caption.</td>
</tr>
<tr>
<td>ReferenceDate</td>
<td>Gets or sets the value of the IPTC/NAA tag Reference Date.</td>
</tr>
<tr>
<td>ReferenceNumber</td>
<td>Gets or sets the value of the IPTC/NAA tag Reference Number.</td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ReferenceService</td>
<td>Gets or sets the value of the IPTC/NAA tag Reference Service.</td>
</tr>
<tr>
<td>ReleaseDate</td>
<td>Gets or sets the value of the IPTC/NAA tag Release Date.</td>
</tr>
<tr>
<td>ReleaseTime</td>
<td>Gets or sets the value of the IPTC/NAA tag Release Time.</td>
</tr>
<tr>
<td>ShortDocumentID</td>
<td>Gets or sets the value of the IPTC/NAA tag Short Document ID.</td>
</tr>
<tr>
<td>SimilarityIndex</td>
<td>Gets or sets the value of the IPTC/NAA tag Similarity Index.</td>
</tr>
<tr>
<td>Source</td>
<td>Gets or sets the value of the IPTC/NAA tag Source.</td>
</tr>
<tr>
<td>SpecialInstructions</td>
<td>Gets or sets the value of the IPTC/NAA tag Special Instructions.</td>
</tr>
<tr>
<td>SubjectReference</td>
<td>Gets or sets the value of the IPTC/NAA tag Subject Reference.</td>
</tr>
<tr>
<td>SubLocation</td>
<td>Gets or sets the value of the IPTC/NAA tag Sub Location.</td>
</tr>
<tr>
<td>SupplementalCategories</td>
<td>Gets or sets the value of the IPTC/NAA tag Supplemental Categories.</td>
</tr>
</tbody>
</table>
**Supplemental Categories.**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TimeCreated</td>
<td>Gets or sets the value of the IPTC/NAA tag Time Created.</td>
</tr>
<tr>
<td>UniqueDocumentID</td>
<td>Gets or sets the value of the IPTC/NAA tag Unique Document ID.</td>
</tr>
<tr>
<td>Urgency</td>
<td>Gets or sets the value of the IPTC/NAA tag Urgency.</td>
</tr>
<tr>
<td>WriterEditor</td>
<td>Gets or sets the value of the IPTC/NAA tag Writer Editor. This is also referred to as Caption Writer.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- `MDM_IPTC Class`
- `FreelImageAPI.Metadata Namespace`

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Help improve this Documentation: Join the Project
MDM_IPTCActionAdvised Property

Gets or sets the value of the IPTC/NAA tag Action Advised.

**Namespace:** FreiImageAPI.Metadata  
**Assembly:** FreiImageNET (in FreiImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string ActionAdvised { get; set; }
```

### Property Value

**Type:** String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreiImageAPI.Metadata Namespace

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MDM_IPTCApplicationRecordVersion Property

Gets the Application Record Version.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

```csharp
public Nullable<short> ApplicationRecordVersion {
    get
    }
```

Property Value  
Type: NullableInt16

Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MNM_IPTC.AudioDuration Property

Gets or sets the value of the IPTC/NAA tag Audio Duration.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string AudioDuration { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
- MDM_IPTC Class  
- FreelImageAPI.Metadata Namespace

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MDM_IPTCAudioOutcue Property

Gets or sets the value of the IPTC/NAA tag Audio Outcue.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string AudioOutcue { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTC_AUDIO_SAMPLING_RATE Property

Gets or sets the value of the IPTC/NAA tag Audio Sampling Rate.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string AudioSamplingRate { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace

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MDM_IPTC.AudioSamplingResolution Property

Gets or sets the value of the IPTC/NAA tag Audio Sampling Resolution.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

---

**Syntax**

```csharp
public string AudioSamplingResolution { get; set; }
```

---

**Property Value**

Type: String

---

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

---

**See Also**

Reference  
MDM_IPTC Class  
FreeImageAPI.Metdata Namespace
MDM_IPTC.AudioType Property

Gets or sets the value of the IPTC/NAA tag Audio Type.

**Namespace:** FreewareAPI.Metadata

**Assembly:** FreewareNET (in FreewareNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string AudioType { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class
FreewareAPI.Metadata Namespace

Contact/Feedback: Freeware.NET Homepage

Help improve this Documentation: Join the Project
MDM_IPTCByLine Property

Gets or sets the value of the IPTC/NAA tag By Line. This is the author's name.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ByLine { get; set; }
```

**Property Value**  
Type: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCByLineTitle

Property

Gets or sets the value of the IPTC/NAA tag By Line Title. This is the author's position.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```csharp
public string ByLineTitle { get; set; }
```

Property Value

Type: String

⚠️ Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

⚠️ See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
MDM_IPTCCaptionAbstract Property

Gets or sets the value of the IPTC/NAA tag Caption Abstract.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string CaptionAbstract { get; set; }
```

### Property Value

**Type:** String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTC Category Property

Gets or sets the value of the IPTC/NAA tag Category.

**Namespace:** FreeImageAPI.Metada

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public string Category { get; set; }
```

**Property Value**

Type: **String**

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_IPTC Class

FreelmageAPI.Metada Namespace
MDM_IPTC City Property

Gets or sets the value of the IPTC/NAA tag City.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string City { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class

FreeImageAPI.Metadata Namespace

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MDM_IPTCClassifyState

Property

Gets or sets the value of the IPTC/NAA tag Classify State.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ClassifyState { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
- MDM_IPTC Class
- FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_IPTCContact Property

Gets or sets the value of the IPTC/NAA tag Contact.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string Contact { get; set; }
```

**Property Value**

Type: String

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_IPTCContentLocationCode Property

Gets or sets the value of the IPTC/NAA tag Content Location Code.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ContentLocationCode { get; set; }
```

**Property Value**

**Type:** String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace

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MDM_IPTCContentLocationName Property

Gets or sets the value of the IPTC/NAA tag Content Location Name.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public string ContentLocationName { get; set; }
```

## Property Value

Type: String

## Remarks

### Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference
- MDM_IPTC Class
- FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_IPTCCopyrightNotice Property

Gets or sets the value of the IPTC/NAA tag Copyright Notice.

**Namespace**: FreeImageAPI.Metada

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string CopyrightNotice { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class

FreeImageAPI.Metada Namespace

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MDM_IPTC
CountryPrimaryLocation
Property

Gets or sets the value of the IPTC/NAA tag Country Primary Location Code.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string CountryPrimaryLocationCode { get; set; }
```

**Property Value**
Type: **String**

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTC.CountryPrimaryLocationName Property

Gets or sets the value of the IPTC/NAA tag Country Primary Location Name.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string CountryPrimaryLocationName { get; set; }
```

**Property Value**  
Type: String

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_IPTC Class  
FreelImageAPI.Metadata Namespace
MDM_IPTC Credit Property

Gets or sets the value of the IPTC/NAA tag Credit.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public string Credit { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**

- MDM_IPTC Class
- FreeImageAPI.Metadata Namespace

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MDM_IPTC DateCreated Property

Gets or sets the value of the IPTC/NAA tag Date Created.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string DateCreated { get; set; }
```

**Property Value**  
**Type:** String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace
MDM_IPTC.DigitalCreationDate Property

Gets or sets the value of the IPTC/NAA tag Digital Creation Date.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public string DigitalCreationDate { get; set; }
```

## Property Value

**Type:** String

## Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference
- MDM_IPTC Class
- FreeImageAPI.Metadata Namespace

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MDM_IPTC DigitalCreationTime Property

Gets or sets the value of the IPTC/NAA tag Digital Creation Time.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string DigitalCreationTime { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
- MDM_IPTC Class  
- FreeImageAPI.Metadata Namespace

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MDM_IPTC.DocumentHistory Property

Gets or sets the value of the IPTC/NAA tag Document History.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public string DocumentHistory { get; set; }
```

Property Value
Type: String

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_IPTC Class
FreeImageAPI.Metadata Namespace
**MDM_IPTCDocumentNotes Property**

 Gets or sets the value of the IPTC/NAA tag Document Notes.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string DocumentNotes { get; set; }
```

**Property Value**

Type: String

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

- MDM_IPTC Class
- FreeImageAPI.Metadata Namespace

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MDM_IPTCEditorialUpdate Property

Gets or sets the value of the IPTC/NAA tag Editorial Update.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string EditorialUpdate { get; set; }
```

**Property Value**  
Type: String

**Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTCEditStatus Property

Gets or sets the value of the IPTC/NAA tag Edit Status.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public string EditStatus { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference  
  MDM_IPTC Class  
  FreeImageAPI.Metadata Namespace

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MDM_IPTCExifCameraInfo Property

Gets or sets the value of the IPTC/NAA tag Exif Camera Info.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ExifCameraInfo { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadaa Namespace

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**MDM_IPTCExpirationDate Property**

Gets or sets the value of the IPTC/NAA tag Expiration Date.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ExpirationDate { get; set; }
```

#### Property Value

Type: `String`

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
- MDM_IPTC Class  
- FreeImageAPI.Metadata Namespace

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MDM_IPTCExpirationTime Property

Gets or sets the value of the IPTC/NAA tag Expiration Time.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string ExpirationTime { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property’s value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
- MDM_IPTC Class
- FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_IPTCFixtureIdentifier Property

Gets or sets the value of the IPTC/NAA tag Fixture Identifier.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public string FixtureIdentifier { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCHeadline Property

Gets or sets the value of the IPTC/NAA tag Headline.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string Headline { get; set; }
```

### Property Value

Type: String

### Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTCImageOrientation Property

Gets or sets the value of the IPTC/NAA tag Image Orientation.

**Namespace:**  FreeImageAPI.Metadata  
**Assembly:**  FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ImageOrientation { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace
MDM_IPTCImageType Property

Gets or sets the value of the IPTC/NAA tag Image Type.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public string ImageType { get; set; }
```

## Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCJobID Property

Gets or sets the value of the IPTC/NAA tag Job ID.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string JobID { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTCKeywords Property

Gets or sets the value of the IPTC/NAA tag Keywords.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string Keywords { get; set; }
```

**Property Value**

Type: String

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_IPTC Class  
FreImageAPI.Metadata Namespace

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Properties

```
public string LanguageIdentifier { get; set; }
```

Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference

**MDM_IPTC Class**
**FreeImageAPI.Metadata Namespace**
MDM_IPTC MasterDocumentID Property

Gets or sets the value of the IPTC/NAA tag Master Document ID.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string MasterDocumentID { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference  
  MDM_IPTC Class  
  FreeImageAPI.Metadata Namespace
MDM_IPTCModel Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: **FREE_IMAGE_MDMODEL**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCObjectAttributeReference

Property

Gets or sets the value of the IPTC/NAA tag Object Attribute Reference.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string ObjectAttributeReference { get; set; }
```

**Property Value**

Type: `String`

**Remarks**

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference

MDM_IPTC Class

FreeImageAPI.Metadata Namespace

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MDM_IPTCObjectCycle

Property

Gets or sets the value of the IPTC/NAA tag Object Cycle.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public string ObjectCycle { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class

FreeImageAPI.Metadata Namespace
MDM_IPTCObjectName Property

Gets or sets the value of the IPTC/NAA tag Object Name. This is also referred to as Title.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ObjectName { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreimageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
MDM_IPTC ObjectPreviewData Property

Gets or sets the value of the IPTC/NAA tag Object Preview Data. This is also referred to as Audio Outcue.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ **Syntax**

```csharp
public string ObjectPreviewData { get; set; }
```

**Property Value**  
Type: String

⚠️ **Remarks**

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

⚠️ **See Also**

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTC ObjectPreviewFileFormat Property

Gets or sets the value of the IPTC/NAA tag Object Preview File Format.

**Namespace**: FreeImageAPI.Metadata  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ObjectPreviewFileFormat { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
Property

Gets or sets the value of the IPTC/NAA tag Object Preview File Version.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ObjectPreviewFileVersion { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreelImageAPI.Metadata Namespace
MDM_IPTC ObjectTypeReference Property

Gets or sets the value of the IPTC/NAA tag Object Type Reference.

**Namespace:**  FreeImageAPI.Metadata  
**Assembly:**  FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string ObjectTypeReference { get; set; }
```

Property Value  
Type: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCOriginalTransmission

Property

Gets or sets the value of the IPTC/NAA tag Original Transmission Reference.

**Namespace:** FreelImageAPI.Metadata
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string OriginalTransmissionReference { get }
```

Property Value

Type: `String`

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class
FreelImageAPI.Metadata Namespace
MDM_IPTCOriginatingProgram Property

Gets or sets the value of the IPTC/NAA tag Originating Program.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string OriginatingProgram { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreImageAPI.Metadata Namespace
FreeImage.NET Class Library Reference

MDM_IPTCOwnerID Property

Gets or sets the value of the IPTC/NAA tag Owner I D.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```c#
public string OwnerID { get; set; }
```

**Property Value**

Type: **String**

▲ Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

▲ See Also

Reference

MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTCPrefs Property

Gets or sets the value of the IPTC/NAA tag Prefs. This is also referred to as photo-mechanic preferences.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public string Prefs { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace

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MDM_IPTCProgramVersion Property

Gets or sets the value of the IPTC/NAA tag Program Version.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string ProgramVersion { get; set; }
```

**Property Value**

Type: *String*

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace

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MDM_IPTCProvinceState Property

Gets or sets the value of the IPTC/NAA tag Province State.

**Namespace**: FreeImageAPI.Metadata  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ProvinceState { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
**MDM_IPTC.RasterizedCaption Property**

Gets or sets the value of the IPTC/NAA tag Rasterized Caption.

**Namespace**: FreeImageAPI.Metadata  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string RasterizedCaption { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCReferenceDate Property

Gets or sets the value of the IPTC/NAA tag Reference Date.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string ReferenceDate { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class

FreelmageAPI.Metadata Namespace

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MDM_IPTCReferenceNumber Property

Gets or sets the value of the IPTC/NAA tag Reference Number.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ReferenceNumber { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference
- MDM_IPTC Class
- FreeImageAPI.Metadata Namespace

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MDM_IPTCReferenceService Property

Gets or sets the value of the IPTC/NAA tag Reference Service.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ReferenceService { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

- Reference
  - MDM_IPTC Class
  - FreeImageAPI.Metadata Namespace

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MDM_IPTCReleaseDate Property

Gets or sets the value of the IPTC/NAA tag Release Date.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ReleaseDate { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class
FreeImageAPI.Metadata Namespace

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MDM_IPTCReleaseTime Property

Gets or sets the value of the IPTC/NAA tag Release Time.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string ReleaseTime { get; set; }
```

**Property Value**  
Type: String

**Remarks**

Handling of null values  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property’s value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTCShortDocumentID Property

Gets or sets the value of the IPTC/NAA tag Short Document ID.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ShortDocumentID { get; set; }
```

### Property Value

Type: `String`

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

- [MDM_IPTC Class](#)
- [FreeImageAPI.Metadata Namespace](#)

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Help improve this Documentation: Join the Project
MDM_IPTCSimilarityIndex Property

Gets or sets the value of the IPTC/NAA tag Similarity Index.

**Namespace**: FreeImageAPI.Metadata  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public string SimilarityIndex { get; set; }
```

## Property Value

Type: String

## Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

## See Also

Reference  
**MDM_IPTC Class**  
**FreeImageAPI.Metadata Namespace**

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MDM_IPTCSource Property

Gets or sets the value of the IPTC/NAA tag Source.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string Source { get; set; }
```

**Property Value**

Type: **String**

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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Help improve this Documentation: [Join the Project](http://jointheproject.net)
MDM_IPTC SpecialInstructions Property

Gets or sets the value of the IPTC/NAA tag Special Instructions.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string SpecialInstructions { get; set; }
```

### Property Value

**Type:** String

### Remarks

#### Handling of null values

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTCSubjectReference Property

Gets or sets the value of the IPTC/NAA tag Subject Reference.

**Namespace**: FreeImageAPI.Metadata  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string SubjectReference {
    get;
    set;
}
```

**Property Value**  
**Type**: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCSubLocation Property

Gets or sets the value of the IPTC/NAA tag Sub Location.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```csharp
public string SubLocation { get; set; }
```

▲ Remarks

**Handling of null values**
A null value indicates that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

▲ See Also

Reference

MDM_IPTC Class
FreImageAPI.Metadata Namespace

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MDM_IPTC SupplementalCategories Property

Gets or sets the value of the IPTC/NAA tag Supplemental Categories.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string SupplementalCategories {
    get;
    set;
}
```

**Property Value**
Type: String

**Remarks**

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

**See Also**

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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MDM_IPTC TimeCreated Property

Gets or sets the value of the IPTC/NAA tag Time Created.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string TimeCreated { get; set; }
```

### Property Value

**Type:** String

### Remarks

**Handling of null values**

A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

**Reference**  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace
MDM_IPTCUniqueDocumentID Property

Gets or sets the value of the IPTC/NAA tag Unique Document ID.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public string UniqueDocumentID { get; set; }
```

Property Value
Type: String

Remarks

Handling of null values
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

See Also

Reference
MDM_IPTC Class
FreeImageAPI_Metadata Namespace

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MDM_IPTC Urgency Property

Gets or sets the value of the IPTC/NAA tag Urgency.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public string Urgency { get; set; }
```

### Property Value

Type: **String**

### Remarks

**Handling of null values**
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference

MDM_IPTC Class

FreeImageAPI.Metadata Namespace

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MDM_IPTCWriterEditor Property

Gets or sets the value of the IPTC/NAA tag Writer Editor. This is also referred to as Caption Writer.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string WriterEditor { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_IPTC Class  
FreeImageAPI.Metadata Namespace

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### MDM_IPTC Methods

The **MDM_IPTC** type exposes the following members.

#### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AddTag(MetadataTag)</strong></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><strong>AddTag(IEnumerable&lt;MetadataTag&gt;)</strong></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><strong>DestroyModel</strong></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. <em>(Inherited from</em></td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
</tbody>
</table>
containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)

GetUInt32Value

Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)

MemberwiseClone

Creates a shallow copy of the current Object. (Inherited from Object.)

RegexSearch

Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)

RemoveTag

Removes the specified tag from the bitmap. (Inherited from MetadataModel.)

SetTagValue(String, Object)

Sets the value of the specified tag.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

**See Also**

Reference
MDM_IPTC Class
FreelImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
The `MDM_IPTC` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![ ](image) dib | Handle to the encapsulated FreeImage-bitmap.  
(Inherited from `MetadataModel`.) |

### See Also

**Reference**
- `MDM_IPTC Class`
- `FreelImageAPI.Metadata Namespace`

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MDM_MAKERNOTE Class

Represents a collection of all tags contained in the metadata model FIMD_EXIF_MAKERNOTE.

Inheritance Hierarchy

SystemObject  FreeImageAPI.MetadataMetadataModel  FreeImageAPI.MetadataMDM_MAKERNOTE

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public class MDM_MAKERNOTE : MetadataModel
```

The MDM_MAKERNOTE type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_MAKERNOTE</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags</td>
</tr>
</tbody>
</table>
this instance represents. (Inherited from MetadataModel.)

<table>
<thead>
<tr>
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<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
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<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
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<tr>
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<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
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<td>DestroyModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from <code>MetadataModel</code>.)</td>
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<tr>
<td>Equals</td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
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<tr>
<td>Finalize</td>
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<td>GetEnumerator</td>
<td>Retrieves an object that can</td>
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<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
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<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
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<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
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<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
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<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
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<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
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<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
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<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
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<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
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<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
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<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the</td>
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<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
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<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
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<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
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<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
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<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
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<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string</td>
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Fields

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<tr>
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</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference

FreImageAPI.Metadata Namespace

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MDM_MAKERNOTE Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public MDM_MAKERNOTE(
    FIBITMAP dib
)
```

**Parameters**

*dib*  
Type: FreImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

**See Also**

Reference  
MDM_MAKERNOTE Class  
FreeImageAPI.Metadata Namespace
The `MDM_MAKERNOTE` type exposes the following members.

## Properties

<table>
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<tr>
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<td><strong>Count</strong></td>
<td>Returns the number of metadata tags this instance represents. (Inherited from <code>MetadataModel</code>.)</td>
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<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from <code>MetadataModel</code>.)</td>
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<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from <code>MetadataModel</code>.)</td>
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<td>Returns a list of all metadata tags this instance represents. (Inherited from <code>MetadataModel</code>.)</td>
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<tr>
<td><strong>Model</strong></td>
<td>Retrieves the datamodel that this instance represents. (Overrides <code>MetadataModel.Model</code>.)</td>
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MDM_MAKERNOTEModel Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public override FREE_IMAGE_MDMODEL Model {
    get;
}
```

### Property Value

Type: **FREE_IMAGE_MDMODEL**

### See Also

Reference  
MDM_MAKERNOTE Class  
FreeImageAPI.Metadata Namespace

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MDM_MAKERNOTE Methods

The **MDM_MAKERNOTE** type exposes the following members.

### Methods

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><img src="AddTag(MetadataTag)" alt=" " /></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="AddTag(IEnumerable%3CMetadataTag%3E)" alt=" " /></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><img src="DestoryModel" alt=" " /></td>
<td>Destroys the metadata model which will remove all tags of this model</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
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</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from <strong>MetadataModel</strong>.)</td>
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<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <strong>MetadataModel</strong>.)</td>
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<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
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<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
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<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
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<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
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<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
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</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32-bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32-bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
</tbody>
</table>
## SetTagValue(String, Nullable<T>)

Sets the value of the specified tag.
(Inherited from [MetadataModel](#).)

## SetTagValueUndefined

Sets the value of the specified tag as undefined.
(Inherited from [MetadataModel](#).)

## TagExists

Returns whether the specified tag exists.
(Inherited from [MetadataModel](#).)

## ToString

Converts the model of the MetadataModel object to its equivalent string representation.
(Inherited from [MetadataModel](#).)

---

### See Also

**Reference**
[MDM MAKERNOTE Class](#)
[FreelmageAPI.Metadata Namespace](#)
The **MDM_MAKERNOTE** type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="flag.png" alt="flag" /> dib</td>
<td>Handle to the encapsulated Freestyle-bitmap. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
</tbody>
</table>

### See Also

**Reference**

- [MDM_MAKERNOTE Class](#)
- [FreestyleAPI.Metadata Namespace](#)

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MDM_NODATA Class

Represents a collection of all tags contained in the metadata model FIMD_NODATA.

**Inheritance Hierarchy**

```
System Object  FreeImageAPI.MetadataMetadataModel
               FreeImageAPI.MetadataMDM_NODATA
```

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll)  
**Version:** 3.17.0.4  
(3.17.0)

**Syntax**

```c#
public class MDM_NODATA : MetadataModel
```

The `MDM_NODATA` type exposes the following members.

**Constructors**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_NODATA</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

**Properties**

<table>
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<tr>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Count</td>
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</table>
this instance represents. (Inherited from `MetadataModel`.)

<table>
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<tr>
<th>Method</th>
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<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from <code>MetadataModel</code>.)</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from <code>MetadataModel</code>.)</td>
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<td><strong>List</strong></td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from <code>MetadataModel</code>.)</td>
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<td><strong>Model</strong></td>
<td>Retrieves the datamodel that this instance represents. (Overrides <code>MetadataModelModel</code>.)</td>
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### Methods

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<td><code>AddTag(MetadataTag)</code></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <code>Key</code> will be used as key. (Inherited from <code>MetadataModel</code>.)</td>
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<tr>
<td><code>AddTag(IEnumerable&lt;MetadataTag&gt;)</code></td>
<td>Adds a list of tags to the bitmap or updates their...</td>
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<td>Method</td>
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<tr>
<td>DestroyModel</td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
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<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
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<td>Finalize</td>
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<td>GetType</td>
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<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
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<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
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<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
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<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
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<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
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<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
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<tr>
<td>dib</td>
<td>Handle to the encapsulated FreImage-bitmap. (Inherited from MetadataModel.)</td>
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</table>

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See Also

Reference
FreelImageAPI.Metadata Namespace

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MDM_NODATA Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MDM_NODATA(FIBITMAP dib)
```

### Parameters

- **dib**
  
  Type: FreeImageAPI.FIBITMAP
  
  Handle to a FreeImage bitmap.

### See Also

**Reference**

MDM_NODATA Class  
FreeImageAPI.Metadata Namespace
The MDM_NODATA type exposes the following members.

### Properties

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<td>Count</td>
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<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModel.Model.)</td>
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</table>

See Also

Reference

MDM_NODATA Class
MDM_NODATAModel Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: `FREE_IMAGE_MDMODEL`

### See Also

Reference  
MDM_NODATA Class  
FreeImageAPI.Metadata Namespace

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The **MDM_NODATA** type exposes the following members.

## Methods

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<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
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<td>GetTagValueType</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
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<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
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<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
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<tr>
<td>Method</td>
<td>Description</td>
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<td>-------------</td>
</tr>
<tr>
<td><strong>GetUInt32Value</strong></td>
<td>Returns the value of the tag as unsigned 32bit integer. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><strong>MemberwiseClone</strong></td>
<td>Creates a shallow copy of the current Object. <em>(Inherited from Object.)</em></td>
</tr>
<tr>
<td><strong>RegexSearch</strong></td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><strong>RemoveTag</strong></td>
<td>Removes the specified tag from the bitmap. <em>(Inherited from MetadataModel.)</em></td>
</tr>
<tr>
<td><strong>SetTagValue(String, Object)</strong></td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SetTagValueT(String, NullableT)</td>
<td>Sets the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>SetTagValueUndefined</td>
<td>Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>TagExists</td>
<td>Returns whether the specified tag exists. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference
MDM_NODATA Class
FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
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MDM_NODATA Fields

The MDM_NODATA type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated Freelite-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

### See Also

Reference
- MDM_NODATA Class
- FreeliteAPI.Metadata Namespace

Contact/Feedback: Freelite.NET Homepage
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MDM_XMP Class

Represents a collection of all tags contained in the metadata model FIMD_XMP.

Inheritance Hierarchy

- System
  - Object
  - FreeImageAPI.MetadataMetadataModel
    - FreeImageAPI.MetadataMDM_XMP

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public class MDM_XMP : MetadataModel
```

The MDM_XMP type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM_XMP</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata</td>
</tr>
</tbody>
</table>
tags this instance represents. (Inherited from MetadataModel.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exists</strong></td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>List</strong></td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>Retrieves the datamodel that this instance represents. (Overrides MetadataModel.Model.)</td>
</tr>
<tr>
<td><strong>Xml</strong></td>
<td>Gets or sets the XMP XML content.</td>
</tr>
<tr>
<td><strong>XmlReader</strong></td>
<td>Gets an XmlReader initialized to read the XMP XML content. Returns null, if the metadata tag XMLPacket is not present in this model.</td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AddTag(MetadataTag)</strong></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>AddTag(IEnumerable&lt;MetadataTag&gt;)</strong></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>DestoryModel</strong></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <strong>Object</strong> is equal to the current <strong>Object</strong>. (Inherited from Object.)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetEnumerator</td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current Object.</td>
</tr>
</tbody>
</table>
### RegexSearch
Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)

### RemoveTag
Removes the specified tag from the bitmap. (Inherited from MetadataModel.)

### SetTagValue(String, Object)
Sets the value of the specified tag. (Inherited from MetadataModel.)

### SetTagValueT(String, NullableT)
Sets the value of the specified tag. (Inherited from MetadataModel.)

### SetTagValueUndefined
Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)

### TagExists
Returns whether the specified tag exists. (Inherited from Object.)
**MetadataModel.**

**ToString**

Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

### See Also

**Reference**
FreeImageAPI.Metadata Namespace

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MDM_XMP Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public MDM_XMP(FIBITMAP dib)
```

### Parameters

`dib`  
Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

### See Also

Reference  
MDM_XMP Class  
FreeImageAPI.Metadata Namespace
The **MDM_XMP** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents. (Overrrides MetadataModelModel.)</td>
</tr>
<tr>
<td>Xml</td>
<td>Gets or sets the XMP XML content.</td>
</tr>
<tr>
<td>XmlReader</td>
<td>Gets an XmlReader initialized to read the XMP XML content. Returns null, if the metadata tag XMLPacket is not present in this model.</td>
</tr>
</tbody>
</table>
MDM_XMPModel Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override FREE_IMAGE_MDMODEL Model { get; }
```

### Property Value

Type: `FREE_IMAGE_MDMODEL`

### See Also

Reference
- MDM_XMP Class
- FreeImageAPI.Metadata Namespace

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MDM_XMPXml Property

Gets or sets the XMP XML content.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string Xml { get; set; }
```

### Property Value

Type: String

### Remarks

**Handling of null values**  
A null value indicates, that the corresponding metadata tag is not present in the metadata model. Setting this property's value to a non-null reference creates the metadata tag if necessary. Setting this property's value to a null reference deletes the metadata tag from the metadata model.

### See Also

Reference  
MDM_XMP Class  
FreeImageAPI.Metadata Namespace

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MDM_XMPXmlReader Property

Gets an XmlReader initialized to read the XMP XML content. Returns null, if the metadata tag XMLPacket is not present in this model.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public XmlReader XmlReader { get; }
```

Property Value
Type: XmlReader

See Also

Reference
MDM_XMP Class
FreeImageAPI.Metadata Namespace

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The **MDM_XMP** type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="AddTag(MetadataTag)" /></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><img src="image2" alt="AddTag(IEnumerableMetadataTag)" /></td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td><img src="image3" alt="DestoryModel" /></td>
<td>Destroys the metadata model which will remove all tags of this model from the bitmap. (Inherited from <strong>MetadataModel</strong>.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Equals</strong></td>
<td>Determines whether the specified <a href="#">Object</a> is equal to the current <a href="#">Object</a>. (Inherited from <a href="#">Object</a>)</td>
</tr>
<tr>
<td><strong>Finalize</strong></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <a href="#">Object</a>)</td>
</tr>
<tr>
<td><strong>GetEnumerator</strong></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>GetHashCode</strong></td>
<td>Serves as a hash function for a particular type. (Inherited from <a href="#">Object</a>)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagFromIndex</td>
<td>Returns the tag at the given index. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>GetUInt32Value</strong></td>
<td>Returns the value of the tag as unsigned 32bit integer. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>MemberwiseClone</strong></td>
<td>Creates a shallow copy of the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td><strong>RegexSearch</strong></td>
<td>Searches for a pattern in each metadata tag and returns the result as a list. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>RemoveTag</strong></td>
<td>Removes the specified tag from the bitmap. (Inherited from MetadataModel.)</td>
</tr>
<tr>
<td><strong>SetTagValue(String, Object)</strong></td>
<td>Sets the value of the specified tag.</td>
</tr>
</tbody>
</table>
### SetTagValueT(String, NullableT)
Sets the value of the specified tag. (Inherited from MetadataModel.)

### SetTagValueUndefined
Sets the value of the specified tag as undefined. (Inherited from MetadataModel.)

### TagExists
Returns whether the specified tag exists. (Inherited from MetadataModel.)

### ToString
Converts the model of the MetadataModel object to its equivalent string representation. (Inherited from MetadataModel.)

---

**See Also**

- Reference
  - MDM_XMP Class
  - FreelImageAPI.Metadata Namespace

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MDM_XMP Fields

The MDM_XMP type exposes the following members.

Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dib</td>
<td>Handle to the encapsulated FreeImage-bitmap. (Inherited from MetadataModel.)</td>
</tr>
</tbody>
</table>

See Also

Reference

MDM_XMP Class
FreelImageAPI.Metadata Namespace

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MetadataModel Class

Base class that represents a collection of all tags contained in a metadata model.

Inheritance Hierarchy

```
System
   Object
   FreeImageAPI.MetadataMetadataModel
```

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public abstract class MetadataModel : IEnumerable
```

The MetadataModel type exposes the following members.

Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MetadataModel</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>
## Top

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="100x707" alt="Count" /> Count</td>
<td>Returns the number of metadata tags this instance represents.</td>
</tr>
<tr>
<td><img src="100x659" alt="Exists" /> Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure.</td>
</tr>
<tr>
<td><img src="100x611" alt="Item" /> Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags.</td>
</tr>
<tr>
<td><img src="100x510" alt="List" /> List</td>
<td>Returns a list of all metadata tags this instance represents.</td>
</tr>
<tr>
<td><img src="80x409" alt="Model" /> Model</td>
<td>Retrieves the datamodel that this instance represents.</td>
</tr>
<tr>
<td><img src="100x353" alt="AddTag" /> AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists.</td>
</tr>
<tr>
<td><img src="100x288" alt="AddTag" /> AddTag(IEnumerable_METADATA_TAG)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist.</td>
</tr>
<tr>
<td><img src="100x207" alt="DestroyModel" /> DestroyModel</td>
<td>DestoryModel will remove all tags of this model from the bitmap.</td>
</tr>
<tr>
<td><img src="100x142" alt="Equals" /> Equals</td>
<td>Determines whether the specified Object (Inherited from IComparable) equals another Object.</td>
</tr>
<tr>
<td><img src="100x707" alt="Count" /> Count</td>
<td>Returns the number of metadata tags this instance represents.</td>
</tr>
<tr>
<td><img src="100x659" alt="Exists" /> Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure.</td>
</tr>
<tr>
<td><img src="100x611" alt="Item" /> Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags.</td>
</tr>
<tr>
<td><img src="100x510" alt="List" /> List</td>
<td>Returns a list of all metadata tags this instance represents.</td>
</tr>
<tr>
<td><img src="80x409" alt="Model" /> Model</td>
<td>Retrieves the datamodel that this instance represents.</td>
</tr>
<tr>
<td><img src="100x353" alt="AddTag" /> AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists.</td>
</tr>
<tr>
<td><img src="100x288" alt="AddTag" /> AddTag(IEnumerable_METADATA_TAG)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist.</td>
</tr>
<tr>
<td><img src="100x207" alt="DestroyModel" /> DestroyModel</td>
<td>DestoryModel will remove all tags of this model from the bitmap.</td>
</tr>
<tr>
<td><img src="100x142" alt="Equals" /> Equals</td>
<td>Determines whether the specified Object (Inherited from IComparable) equals another Object.</td>
</tr>
</tbody>
</table>
Finalize

Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection.

(GetInherited from GetEnumerator
Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel.

GetHashCode
Serves as a hash function for a particular type.

(GetInherited from GetTag
Returns the specified metadata tag.

GetTagArray<T>
Returns an array containing the data of the specified tag.

GetTagFromIndex
Returns the tag at the given index.

GetTagText
Returns the string contained by the specified tag.

GetTagValue<T>
Returns the value of the specified tag.

GetType
Gets the instance.

(GetInherited from GetUInt32Array
Returns an array containing the data of the specified tag as unsigned 32-bit integer.

GetUInt32Value
Returns the value of the tag as unsigned 32-bit integer.

MemberwiseClone
Creates a shallow copy of the current
**RegexSearch**
Searches metadata tag as a pattern.

**RemoveTag**
Removes specified tag from the bitmap.

**SetTagValue(String, Object)**
Sets the value of the specified tag.

**SetTagValueT(String, NullableT)**
Sets the value of the specified tag.

**SetTagValueUndefined**
Sets the value of the specified tag as undefined.

**TagExists**
Returns whether the specified tag exists.

**ToDirectionType**
Returns the equivalent MetadataModel for the specified direction.

**ToInteroperabilityType**
Returns the equivalent MetadataModel for the specified interoperability.

**ToLatitudeType**
Returns the equivalent MetadataModel for the specified latitude.

**ToLongitudeType**
Returns the equivalent MetadataModel for the specified longitude.

**ToString**
Converts the model of the MetadataModel object to its equivalent string representation.

*(Inherits from Message)*
**Remarks**

The **MetadataModel** class is an abstract base class, which is inherited by several derived classes, one for each existing metadata
model.

See Also

Reference
FreiImageAPI.Metadata Namespace

Inheritance Hierarchy

SystemObject
FreiImageAPI.MetadataMetadataModel
  FreiImageAPI.MetadataMDM_ANIMATION
  FreiImageAPI.MetadataMDM_COMMENTS
  FreiImageAPI.MetadataMDM_CUSTOM
  FreiImageAPI.MetadataMDM_EXIF_EXIF
  FreiImageAPI.MetadataMDM_EXIF_GPS
  FreiImageAPI.MetadataMDM_EXIF_MAIN
  FreiImageAPI.MetadataMDM_GEOTIFF
  FreiImageAPI.MetadataMDM_INTEROP
  FreiImageAPI.MetadataMDM_IPTC
  FreiImageAPI.MetadataMDM_MAKERNOTE
  FreiImageAPI.MetadataMDM_NODATA
  FreiImageAPI.MetadataMDM_XMP

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MetadataModel Constructor

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected MetadataModel(FIBITMAP dib)
```

### Parameters

- **dib**
  - Type: FreeImageAPI.FIBITMAP
  - Handle to a FreeImage bitmap.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>dib</code> is null.</td>
</tr>
</tbody>
</table>

### See Also

- **Reference**  
  MetadataModel Class  
  FreeImageAPI.Metadata Namespace

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The **MetadataModel** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Returns the number of metadata tags this instance represents.</td>
</tr>
<tr>
<td>Exists</td>
<td>Returns whether this model exists in the bitmaps metadata structure.</td>
</tr>
<tr>
<td>Item</td>
<td>Returns the metadata tag at the given index. This operation is slow when accessing all tags.</td>
</tr>
<tr>
<td>List</td>
<td>Returns a list of all metadata tags this instance represents.</td>
</tr>
<tr>
<td>Model</td>
<td>Retrieves the datamodel that this instance represents.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- **MetadataModel Class**
- **FreeImageAPI.Metadata Namespace**
MetadataModelCount Property

Returns the number of metadata tags this instance represents.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public int Count { get; }
```

### Property Value

Type: Int32

### See Also

Reference

- MetadataModel Class
- FreeImageAPI.Metadata Namespace

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MetadataModelExists Property

Returns whether this model exists in the bitmaps metadata structure.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Exists { get; }
```

**Property Value**

Type: Boolean

### See Also

Reference
- MetadataModel Class
- FreeImageAPI.Metadata Namespace

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MetadataModel Item Property

Returns the metadata tag at the given index. This operation is slow when accessing all tags.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MetadataTag this[int index] { get; }
```

### Parameters

**index**  
Type: `System.Int32`  
Index of the tag.

### Return Value

Type: `MetadataTag`  
The metadata tag.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ArgumentOutOfRangeException</code></td>
<td><code>index</code> is greater or equal <code>Count</code> or <code>index</code> is less than zero.</td>
</tr>
</tbody>
</table>
MetadataModelList Property

Returns a list of all metadata tags this instance represents.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public List<MetadataTag> List { get; }
```

**Property Value**

Type: List<MetadataTag>

## See Also

**Reference**
- MetadataModel Class
- FreelImageAPI.Metadata Namespace

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MetadataModel

Property

Retrieves the datamodel that this instance represents.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public abstract FREE_IMAGE_MDMODEL Model { get; }
```

**Property Value**

Type: **FREE_IMAGE_MDMODEL**

## See Also

- Reference
  - MetadataModel Class
  - FreeImageAPI.Metadata Namespace

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The `MetadataModel` type exposes the following members.

## Methods

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<thead>
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<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>AddTag(MetadataTag)</code></td>
<td>Adds new tag to the bitmap or updates its value in case it already exists.</td>
</tr>
<tr>
<td><code>AddTag(IEnumerable&lt;MetadataTag&gt;)</code></td>
<td>Adds a list of tags to the bitmap or updates their values if they already exist.</td>
</tr>
<tr>
<td><code>DestroyModel</code></td>
<td>Destroys the metadata model, which will remove all tags of this model from the bitmap.</td>
</tr>
<tr>
<td><code>Equals</code></td>
<td>Determines whether the specified object is equal to this MetadataModel.</td>
</tr>
<tr>
<td><code>Finalize</code></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection.</td>
</tr>
<tr>
<td><code>GetEnumerator</code></td>
<td>Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel.</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Serves as a hash function for a MetadataModel.</td>
</tr>
<tr>
<td><code>GetEnumerable</code></td>
<td>Returns a MetadataTagEnumerable of this MetadataModel.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetTag</td>
<td>Returns the specified metadata tag.</td>
</tr>
<tr>
<td>GetTagArrayT</td>
<td>Returns an array containing the data of the specified tag.</td>
</tr>
<tr>
<td>GetTagFromArrayIndex</td>
<td>Returns the tag at the given index.</td>
</tr>
<tr>
<td>GetTagText</td>
<td>Returns the string contained by the specified tag.</td>
</tr>
<tr>
<td>GetTagValueT</td>
<td>Returns the value of the specified tag.</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the instance.</td>
</tr>
<tr>
<td>GetUInt32Array</td>
<td>Returns an array containing the data of the specified tag as 32bit integer.</td>
</tr>
<tr>
<td>GetUInt32Value</td>
<td>Returns the value of the tag as unsigned 32bit integer.</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current instance.</td>
</tr>
<tr>
<td>RegexSearch</td>
<td>Searches for a pattern in each metadata tag and returns the result as a list.</td>
</tr>
<tr>
<td>RemoveTag</td>
<td>Removes the specified tag from the bitmap.</td>
</tr>
<tr>
<td>SetTagValue(String, Object)</td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><code>SetTagValue&lt;T&gt;(String, Nullable&lt;T&gt;)</code></td>
<td>Set the value of the specified tag.</td>
</tr>
<tr>
<td><code>SetTagValueUndefined</code></td>
<td>Set the value of the specified tag as undefined.</td>
</tr>
<tr>
<td><code>TagExists</code></td>
<td>Return whether the specified tag exists.</td>
</tr>
<tr>
<td><code>ToDirectionType</code></td>
<td>Return the equivalent <code>MetadataModel</code> for the specified <code>DirectionReference</code>.</td>
</tr>
<tr>
<td><code>ToInteroperabilityType</code></td>
<td>Return the equivalent <code>MetadataModel</code> for the specified <code>InteroperabilityMode</code>.</td>
</tr>
<tr>
<td><code>ToLatitudeType</code></td>
<td>Return the equivalent <code>MetadataModel</code> for the specified <code>LatitudeType</code>.</td>
</tr>
<tr>
<td><code>ToLongitudeType</code></td>
<td>Return the equivalent <code>MetadataModel</code> for the specified <code>LongitudeType</code>.</td>
</tr>
<tr>
<td><code>ToString</code></td>
<td>Convert the model of the <code>MetadataModel</code> object to its equivalent string representation. (Overrides <code>ToString(Nullable&lt;MetadataModel&gt;)</code> which returns the equivalent specified <code>MetadataModel</code> for the specified <code>DirectionReference</code>).</td>
</tr>
<tr>
<td><code>ToString(Nullable&lt;MetadataModel&gt;DirectionReference)</code></td>
<td>Return the specified <code>MetadataModel</code>.</td>
</tr>
<tr>
<td><code>ToString(Nullable&lt;MetadataModel&gt;InteroperabilityMode)</code></td>
<td>Return the specified <code>MetadataModel</code>.</td>
</tr>
<tr>
<td><code>ToString(Nullable&lt;MetadataModel&gt;LatitudeType)</code></td>
<td>Return the specified <code>MetadataModel</code>.</td>
</tr>
</tbody>
</table>
See Also

Reference
MetadataModel Class
FreelImageAPI.Metadata Namespace
# MetadataModel AddTag Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddTag(MetadataTag)</td>
<td>Adds new tag to the bitmap or updates its value in case it already exists. <strong>Key</strong> will be used as key.</td>
</tr>
<tr>
<td>AddTag(IEnumerable&lt;MetadataTag&gt;)</td>
<td>Adds a list of tags to the bitmap or updates their values in case they already exist. <strong>Key</strong> will be used as key.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- MetadataModel Class
- FreelmageAPI.Metadata Namespace
**MetadataModel.AddTag Method (MetadataTag)**

Adds new tag to the bitmap or updates its value in case it already exists. **Key** will be used as key.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool AddTag(MetadataTag tag)
```

### Parameters

**tag**
Type: FreeImageAPI.MetadataMetadataTag  
The tag to add or update.

### Return Value
Type: Boolean  
Returns true on success, false on failure.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>tag is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>The tags model differs from this</td>
</tr>
</tbody>
</table>
instances model.

See Also

Reference
MetadataModel Class
AddTag Overload
FreeImageAPI.Metadata Namespace

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MetadataModel

Method

>AddTag (IEnumerable<MetadataTag>)

Adds a list of tags to the bitmap or updates their values in case they already exist. Key will be used as key.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int AddTag(
    IEnumerable<MetadataTag> list
)
```

### Parameters

**list**
- Type: System.Collections.Generic.IEnumerable<MetadataTag>
- A list of tags to add or update.

### Return Value

- Type: Int32
- Returns the number of successfully added tags.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>list is null.</td>
</tr>
</tbody>
</table>
See Also

Reference
- MetadataModel Class
- AddTag Overload
- FreeImageAPI.Metadata Namespace

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MetadataModelDestoryModel Method

Destroys the metadata model which will remove all tags of this model from the bitmap.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool DestoryModel()
```

### Return Value
- **Type:** Boolean  
  Returns true on success, false on failure.

### See Also

Reference  
MetadataModel Class  
FreeImageAPI.Metadata Namespace

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MetadataModel.GetEnumerator Method

Retrieves an object that can iterate through the individual MetadataTags in this MetadataModel.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public IEnumerator GetEnumerator()
```

**Return Value**

Type: `IEnumerator`  
An `IEnumerator` for the `MetadataModel`.

**Implements**

`IEnumerableGetEnumerator`

### See Also

- Reference  
  - `MetadataModel Class`  
  - `FreeImageAPI.Metadata Namespace`

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MetadataModel.GetTag Method

Returns the specified metadata tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MetadataTag GetTag(
    string key
)
```

### Parameters

- **key**
  - Type: `System.String`  
  - The key of the tag.

### Return Value

- Type: `MetadataTag`  
  - The metadata tag.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>key is null.</td>
</tr>
</tbody>
</table>

### See Also
Reference

MetadataModel Class
FreelImageAPI.Metadata Namespace

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MetadataModel.GetTagArray<T> Method

Returns an array containing the data of the specified tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected T[] GetTagArray<T>(
    string key
)
where T : struct, new()
```

### Parameters

**key**
- Type: `System.String`  
The key of the tag.

### Type Parameters

**T**  
The type of the tag's data.

### Return Value

Type: `T`  
An array containing the data of the specified tag.

### See Also
MetadataModel.GetTagFromIndex Method

Returns the tag at the given index.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected MetadataTag GetTagFromIndex(
    int index
)
```

**Parameters**

*int index*

Type: System.Int32  
Index of the tag to return.

**Return Value**

Type: MetadataTag  
The tag at the given index.

**See Also**

Reference:  
MetadataModel Class  
FreelImageAPI.Metadata Namespace

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MetadataModel.GetTagText Method

Returns the string contained by the specified tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected string GetTagText(
    string key
)
```

**Parameters**

- `key`  
  Type: System.String  
  The key of the tag.

**Return Value**

- Type: String  
  The string contained by the specified tag.

**See Also**

Reference  
MetadataModel Class  
FreeImageAPI.Metadata Namespace

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MetadataModel

**GetTagValue**

Returns the value of the specified tag.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected Nullable<T> GetTagValue<T>(
    string key
) where T : struct, new()
```

**Parameters**

- **key**
  Type: `System.String`
  The key of the tag.

**Type Parameters**

- **T**
  Type of the tag's data.

**Return Value**

Type: `Nullable<T>`
The value of the specified tag.

**See Also**
MetadataModel

GetUInt32Array Method

Returns an array containing the data of the specified tag as unsigned 32bit integer.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected uint[] GetUInt32Array(
    string key
)
```

**Parameters**

- **key**  
  Type: System.String  
  The key of the tag.

**Return Value**

Type: UInt32  
An array containing the data of the specified tag as unsigned 32bit integer.

**See Also**

Reference  
MetadataModel Class  
FreeImageAPI.Metadata Namespace
MetadataModel.GetUInt32Value Method

Returns the value of the tag as unsigned 32bit integer.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected Nullable<uint> GetUInt32Value(string key)
```

### Parameters

**key**  
Type: System.String  
The key of the tag.

### Return Value

Type: Nullable(UInt32)  
The value of the tag as unsigned 32bit integer.

### See Also

- Reference
  - MetadataModel Class
  - FreeImageAPI.Metadata Namespace

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**MetadataModelRegexSearch Method**

Searches for a pattern in each metadata tag and returns the result as a list.

**Namespace:** `FreeImageAPI.Metadata`  
**Assembly:** `FreeImageNET (in FreeImageNET.dll)` Version: 3.17.0.4  
(3.17.0)

**Syntax**

```csharp
public List<MetadataTag> RegexSearch(string searchPattern, MD_SEARCH_FLAGS flags)
```

**Parameters**

`searchPattern`  
Type: `System.String`  
The regular expression to use for the search.

`flags`  
Type: `FreeImageAPI.MD_SEARCH_FLAGS`  
A bitfield that controls which fields should be searched in.

**Return Value**  
Type: `List<MetadataTag>`  
A list containing all found metadata tags.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
</table>


ArgumentNullException
searchPattern is null.

ArgumentException
searchPattern is empty.

See Also

Reference
MetadataModel Class
FreelimageAPI_Metadata Namespace

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MetadataModelRemoveTag Method

Removes the specified tag from the bitmap.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool RemoveTag(string key)
```

Parameters

- `key`
  Type: `System.String`
  The key of the tag.

Return Value

Type: `Boolean`
Returns true on success, false on failure.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>key is null.</td>
</tr>
</tbody>
</table>

See Also
Reference

MetadataModel Class
FreelImageAPI.Metadata Namespace

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### MetadataModel\_SetTagValue Method

#### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>SetTagValueT(String, NullableT)</code></td>
<td>Sets the value of the specified tag.</td>
</tr>
<tr>
<td><code>SetTagValue(String, Object)</code></td>
<td>Sets the value of the specified tag.</td>
</tr>
</tbody>
</table>

### See Also

Reference
- MetadataModel Class
- FreelImageAPI.Metadata Namespace

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MetadataModel

SetTagValue\(T\) Method (String, Nullable\(T\))

Sets the value of the specified tag.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
protected void SetTagValue<T>(
    string key,
    Nullable<T> value
)

where T : struct, new()
```

### Parameters

- **key**
  - Type: `System.String`
  - The key of the tag.

- **value**
  - Type: `System.Nullable<T>`
  - The new value of the specified tag or null.

### Type Parameters

- **T**
  - The type of the tag's data.

### See Also
Reference
MetadataModel Class
SetTagValue Overload
FreelImageAPI.Metadata Namespace

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MetadataModel.SetTagValue Method (String, Object)

Sets the value of the specified tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected void SetTagValue(
    string key,
    Object value
)
```

### Parameters

- **key**
  - Type: System.String
  - The key of the tag.

- **value**
  - Type: System.Object
  - The new value of the specified tag or null.

### See Also

- Reference
  - MetadataModel Class
  - SetTagValue Overload
  - FreeImageAPI.Metadata Namespace
**MetadataModel::SetTagValueUndefined**

Sets the value of the specified tag as undefined.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected void SetTagValueUndefined(
    string key,
    byte[] value
)
```

**Parameters**

- **key**
  - Type: System.String  
  - The key of the tag.

- **value**
  - Type: System.Byte  
  - The new value of the specified tag or null.

**See Also**

- Reference  
  - MetadataModel Class  
  - FreeImageAPI.Metadata Namespace

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MetadataModel.TagExists Method

Returns whether the specified tag exists.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public bool TagExists(
    string key
)
```

### Parameters

- **key**  
  Type: `System.String`  
  The key of the tag.

### Return Value

Type: `Boolean`  
True in case the tag exists, else false.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>key is null.</td>
</tr>
</tbody>
</table>

### See Also
MetadataModelToDirectionType Method

Returns the equivalent MetadataModelDirectionReference for the specified String.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected static Nullable<MetadataModelDirectionReference> string s
```

### Parameters

- **s**  
  Type: `System.String`  
  The string containing the MetadataModelDirectionReference.

### Return Value

Type: `Nullable<MetadataModelDirectionReference>`  
The equivalent MetadataModelDirectionReference for the specified String.

### See Also

Reference  
MetadataModel Class  
FreeImageAPI.Metadata Namespace
MetadataModelToInteroperability Method

Returns the equivalent MetadataModelInteroperabilityMode for the specified String.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected static Nullable<MetadataModelInteroperabilityMode> ToInteroperabilityType(string s)
```

### Parameters

s

Type: **System.String**
The string containing the MetadataModelInteroperabilityMode.

### Return Value

Type: **Nullable<MetadataModelInteroperabilityMode>**
The equivalent MetadataModelInteroperabilityMode for the specified String.

### See Also

Reference
- MetadataModel Class
- FreeImageAPI.Metadata Namespace
MetadataModelToLatitudeType Method

Returns the equivalent MetadataModelLatitudeType for the specified String.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected static Nullable<MetadataModelLatitudeType> ToLatitudeType(string s)
```

**Parameters**

`s
  Type: System.String
  The string containing the MetadataModelLatitudeType.

**Return Value**

Type: Nullable<MetadataModelLatitudeType>
The equivalent MetadataModelLatitudeType for the specified String.

**See Also**

Reference
MetadataModel Class
FreeImageAPI.Metadata Namespace
**MetadataModelToLongitudeType Method**

Returns the equivalent `MetadataModelLongitudeType` for the specified `String`.

**Namespace:** `FreelImageAPI.Metadata`  
**Assembly:** `FreelImageNET` (in `FreelImageNET.dll`) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected static Nullable<MetadataModelLongitudeType>
    ToLongitudeType(string s)

 Parameters

 s 
     Type: `System.String`  
     The string containing the `MetadataModelLongitudeType`.

 Return Value
 Type: `Nullable<MetadataModelLongitudeType>`  
 The equivalent `MetadataModelLongitudeType` for the specified `String`.

### See Also

Reference  
`MetadataModel Class`  
`FreelImageAPI.Metadata Namespace`
# MetadataModelToString Method

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ToString()</code></td>
<td>Converts the model of the MetadataModel object to its equivalent string representation. (Overrides <code>ToString(Nullable MetadataModel)</code>)&lt;br&gt;(Overrides <code>ToString(Nullable MetadataModel DirectionReference)</code>)&lt;br&gt;(Overrides <code>ToString(Nullable MetadataModel InteroperabilityMode)</code>)&lt;br&gt;(Overrides <code>ToString(Nullable MetadataModel LatitudeType)</code>)&lt;br&gt;(Overrides <code>ToString(Nullable MetadataModel LongitudeType)</code>)&lt;br&gt;(Overrides <code>ToString(Nullable MetadataModel VelocityUnit)</code>)&lt;br&gt;(Override <code>ToString(Nullable MetadataModel)</code>)&lt;br&gt;(Override <code>ToString(Nullable MetadataModel DirectionReference)</code>)&lt;br&gt;(Override <code>ToString(Nullable MetadataModel InteroperabilityMode)</code>)&lt;br&gt;(Override <code>ToString(Nullable MetadataModel LatitudeType)</code>)&lt;br&gt;(Override <code>ToString(Nullable MetadataModel LongitudeType)</code>)&lt;br&gt;(Override <code>ToString(Nullable MetadataModel VelocityUnit)</code>)&lt;br&gt;(Override <code>ToString()</code>)&lt;br&gt;(Override)</td>
</tr>
</tbody>
</table>

---

**Top**
See Also

Reference
MetadataModel Class
FreelimageAPI.Metadata Namespace

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MetadataModelToString Method

Converts the model of the MetadataModel object to its equivalent string representation.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public override string ToString()
```

### Return Value

**Type:** String  
The string representation of the value of this instance.

### See Also

**Reference**  
MetadataModel Class  
ToString Overload  
FreeImageAPI.Metadata Namespace

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MetadataModelToString Method
(NullableMetadataModelDirectionReference)

Returns the equivalent String for the specified MetadataModelDirectionReference.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected static string ToString(
    Nullable<MetadataModelDirectionReference>
)
```

**Parameters**

*type*
- Type: System.Nullable<MetadataModelDirectionReference>
- The MetadataModelDirectionReference to convert.

**Return Value**
- Type: String
- The equivalent String for the specified MetadataModelDirectionReference.

**See Also**

Reference
- MetadataModel Class
- ToString Overload
MetadataModelToString Method (NullableMetadataModelInteroperabilityMode)

Returns the equivalent String for the specified MetadataModelInteroperabilityMode.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected static string ToString(
    Nullable<MetadataModelInteroperabilityMode>
)
```

**Parameters**

*type*

Type: SystemNullableMetadataModelInteroperabilityMode  
The MetadataModelInteroperabilityMode to convert.

**Return Value**

Type: String  
The equivalent String for the specified MetadataModelInteroperabilityMode.

**See Also**

Reference  
MetadataModel Class  
ToString Overload
FreelmageAPI.Metadata Namespace

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MetadataModelToString Method (NullableMetadataModelLatitudeType)

Returns the equivalent String for the specified MetadataModelLatitudeType.

**Namespace:** FreelImageAPI.Metadata

**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected static string ToString(
    Nullable<MetadataModelLatitudeType> type
)
```

**Parameters**

*type*

Type: SystemNullableMetadataModelLatitudeType

The MetadataModelLatitudeType to convert.

**Return Value**

Type: String

The equivalent String for the specified MetadataModelLatitudeType.

**See Also**

Reference

MetadataModel Class

ToString Overload

FreelImageAPI.Metadata Namespace
MetadataModelToString Method (NullableMetadataModelLongitudeType)

Returns the equivalent String for the specified MetadataModelLongitudeType.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected static string ToString(
    Nullable<MetadataModelLongitudeType> type
)
```

**Parameters**

*type*  
Type: System.Nullable<MetadataModelLongitudeType>  
The MetadataModelLongitudeType to convert.

**Return Value**  
Type: String  
The equivalent String for the specified MetadataModelLongitudeType.

**See Also**

Reference  
MetadataModel Class  
ToString Overload
MetadataModelToString Method (NullableMetadataModelVelocityUnit)

Returns the equivalent String for the specified MetadataModelVelocityUnit.

Namespace: FreelImageAPI.Metadata
Assembly: FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
protected static string ToString(
    Nullable<MetadataModelVelocityUnit> type
)
```

Parameters

type

Type: System.Nullable<MetadataModelVelocityUnit>
The MetadataModelVelocityUnit to convert.

Return Value

Type: String
The equivalent String for the specified MetadataModelVelocityUnit.

See Also

Reference
MetadataModel Class
ToString Overload
FreelImageAPI.Metadata Namespace
MetadataModelToUnitType Method

Returns the equivalent MetadataModelVelocityUnit for the specified String.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
protected static Nullable<MetadataModelVelocityUnit> ToUnitType(string s)
```

Parameters

`s`
Type: System.String
The string containing the MetadataModelVelocityUnit.

Return Value
Type: Nullable<MetadataModelVelocityUnit>
The equivalent MetadataModelVelocityUnit for the specified String.

See Also

Reference
MetadataModel Class
FreeImageAPI.Metadata Namespace
## MetadataModel Fields

The `MetadataModel` type exposes the following members.

### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>dib</code></td>
<td>Handle to the encapsulated FreeImage-bitmap.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- `MetadataModel Class`
- `FreelImageAPI.Metadata Namespace`

Contact/Feedback: FreelImage.NET Homepage
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MetadataModel dib Field

Handle to the encapsulated FreeImage-bitmap.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected readonly FIBITMAP dib
```

### Field Value

Type: FIBITMAP

### See Also

Reference  
MetadataModel Class  
FreeImageAPI.Metadata Namespace

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MetadataModelAltitudeType Enumeration

Specifies different altitude types.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public enum AltitudeType
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined</td>
<td>0</td>
<td>No or unknown type.</td>
</tr>
<tr>
<td>AboveSeaLevel</td>
<td>1</td>
<td>East.</td>
</tr>
<tr>
<td>BelowSeaLevel</td>
<td>2</td>
<td>West.</td>
</tr>
</tbody>
</table>

### See Also

Reference  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
MetadataModel::DirectionReference Enumeration

Specifies different direction types.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public enum DirectionReference
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined</td>
<td>0</td>
<td>No or unknown direction type.</td>
</tr>
<tr>
<td>TrueDirection</td>
<td>1</td>
<td>True direction.</td>
</tr>
<tr>
<td>MagneticDirection</td>
<td>2</td>
<td>Magnatic direction.</td>
</tr>
</tbody>
</table>

### See Also

Reference  
FreeImageAPI.Metadata Namespace

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MetadataModel\ExifImageOrientation

Enumeration

Specifies orientation of images.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum ExifImageOrientation
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined</td>
<td>0</td>
<td>Undefined orientation.</td>
</tr>
<tr>
<td>TopLeft</td>
<td>1</td>
<td>TopLeft.</td>
</tr>
<tr>
<td>TopRight</td>
<td>2</td>
<td>TopRight.</td>
</tr>
<tr>
<td>BottomRight</td>
<td>3</td>
<td>BottomRight.</td>
</tr>
<tr>
<td>BottomLeft</td>
<td>4</td>
<td>BottomLeft.</td>
</tr>
<tr>
<td>LeftTop</td>
<td>5</td>
<td>LeftTop.</td>
</tr>
<tr>
<td>RightTop</td>
<td>6</td>
<td>RightTop.</td>
</tr>
<tr>
<td>RightBottom</td>
<td>7</td>
<td>RightBottom.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelimageAPI.Metadata Namespace

Contact/Feedback: Freelimage.NET Homepage
Help improve this Documentation: Join the Project
## MetadataModelInteroperabilityMode Enumeration

Specifies interoperability types.

**Namespace:** [FreeImageAPI.Metadata](#)

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum InteroperabilityMode
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined</td>
<td>0</td>
<td>No or unknown type.</td>
</tr>
<tr>
<td>R98</td>
<td>1</td>
<td>Indicates a file conforming to R98 file specification of Recommended Exif Interoperability Rules (ExifR98) or to DCF basic file stipulated by Design Rule for Camera File System.</td>
</tr>
<tr>
<td>THM</td>
<td>2</td>
<td>Indicates a file conforming to DCF thumbnail file stipulated by Design rule for Camera File System.</td>
</tr>
</tbody>
</table>
See Also

Reference
FreelimageAPI.Metadata Namespace

Contact/Feedback: Freelimage.NET Homepage
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MetadataModelLatitudeType Enumeration

Specifies the type of a latitude value.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum LatitudeType
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined</td>
<td>0</td>
<td>No or unknown type.</td>
</tr>
<tr>
<td>North</td>
<td>1</td>
<td>North.</td>
</tr>
<tr>
<td>South</td>
<td>2</td>
<td>South.</td>
</tr>
</tbody>
</table>

### See Also

Reference  
FreeImageAPI.Metadata Namespace

**Contact/Feedback:**  
FreeImage.NET Homepage  
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MetadataModelLongitudeType Enumeration

Specifies the type of a longitude value.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public enum LongitudeType
```

**Members**

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined</td>
<td>0</td>
<td>No or unknown type.</td>
</tr>
<tr>
<td>East</td>
<td>1</td>
<td>East.</td>
</tr>
<tr>
<td>West</td>
<td>2</td>
<td>West.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreeImageAPI.Metadata Namespace

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MetadataModelVelocityUnit Enumeration

Specified different unit types.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public enum VelocityUnit
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefinied</td>
<td>0</td>
<td>No or unknown type.</td>
</tr>
<tr>
<td>Kilometers</td>
<td>1</td>
<td>Kilometers per hour.</td>
</tr>
<tr>
<td>Miles</td>
<td>2</td>
<td>Miles per hour.</td>
</tr>
<tr>
<td>Knots</td>
<td>3</td>
<td>Knots.</td>
</tr>
</tbody>
</table>

### See Also

References:  
FreeImageAPI.Metadata Namespace

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FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
**MetadataTag Class**

Manages metadata objects and operations.

### Inheritance Hierarchy

```
SystemObject  FreeImageAPI.MetadataMetadataTag
```

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public sealed class MetadataTag : IComparable,
                                IComparable<MetadataTag>, ICloneable, IEquatable,
                                IDisposable
```

The `MetadataTag` type exposes the following members.

### Constructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>MetadataTag(FREE_IMAGE_MDMODEL)</code></td>
<td>Initializes a new instance of this class.</td>
</tr>
<tr>
<td><code>MetadataTag(FITAG, FIBITMAP)</code></td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>
MetadataTag(FITAG, FREE_IMAGE_MDMODEL) Initializes a new instance of this class.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Gets the number of elements the metadata object contains.</td>
</tr>
<tr>
<td>Description</td>
<td>Gets or sets the description of the metadata.</td>
</tr>
<tr>
<td>Disposed</td>
<td>Gets whether this instance has already been disposed.</td>
</tr>
<tr>
<td>ID</td>
<td>Gets or sets the ID of the metadata.</td>
</tr>
<tr>
<td>Key</td>
<td>Gets or sets the key of the metadata.</td>
</tr>
<tr>
<td>Length</td>
<td>Gets the length of the value in bytes.</td>
</tr>
<tr>
<td>Model</td>
<td>Gets the model of the metadata.</td>
</tr>
<tr>
<td>Type</td>
<td>Gets the type of the metadata.</td>
</tr>
<tr>
<td>Value</td>
<td>Gets or sets the value of the metadata.</td>
</tr>
</tbody>
</table>

### Methods
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddToImage</td>
<td>Add this metadata to an image.</td>
</tr>
<tr>
<td>Clone</td>
<td>Creates a deep copy of this <code>MetadataTag</code>.</td>
</tr>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td>CompareTo(MetadataTag)</td>
<td>Compares the current instance with another object of the same type.</td>
</tr>
<tr>
<td>Dispose</td>
<td>Releases all resources used by the instance.</td>
</tr>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a <code>MetadataTag</code> instance and is equivalent to this <code>MetadataTag</code> instance.</td>
</tr>
<tr>
<td></td>
<td>(Overrrides <code>Object.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(MetadataTag)</td>
<td>Tests whether the specified <code>MetadataTag</code> instance is equivalent to this <code>MetadataTag</code> instance.</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this <code>MetadataTag</code> structure.</td>
</tr>
<tr>
<td></td>
<td>(Overrrides <code>Object.GetHashCode()</code>.)</td>
</tr>
</tbody>
</table>
GetPropertyItem

Gets a .NET PropertyItem for this metadata tag.

GetType

Gets the Type of the current instance.
(Inherited from Object.)

SetValue(Object)

Sets the value of the metadata. In case value is of byte or byte[,] FIDT_UNDEFINED is assumed. In case value is of uint or uint[,] FIDT_LONG is assumed.

SetValue(Object, FREE_IMAGE_MDTYPE)

Sets the value of the metadata.

ToString

Converts the value of the MetadataTag object to its equivalent string representation.
(Overrides Object.ToString.)

Top

Operators

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Determines whether two specified MetadataTag objects have the same value.</td>
</tr>
<tr>
<td>(MetadataTag)</td>
<td>Extracts the value of a</td>
</tr>
<tr>
<td>Inequality</td>
<td>Determines whether two specified MetadataTag objects have different values.</td>
</tr>
</tbody>
</table>
# MetadataTag Constructor

## Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MetadataTag(FREE_IMAGE_MDMODEL)</td>
<td>Initializes a new instance of this class.</td>
</tr>
<tr>
<td>MetadataTag(FITAG, FIBITMAP)</td>
<td>Initializes a new instance of this class.</td>
</tr>
<tr>
<td>MetadataTag(FITAG, FREE_IMAGE_MDMODEL)</td>
<td>Initializes a new instance of this class.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- MetadataTag Class
- FreelImageAPI.Metadata Namespace

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MetadataTag Constructor
(FREE_IMAGE_MDMODEL)

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MetadataTag(
    FREE_IMAGE_MDMODEL model
)
```

### Parameters

- **model**
  - Type: FreeImageAPI.FREE_IMAGE_MDMODEL
  - The new model the tag should be of.

### See Also

- MetadataTag Class
- MetadataTag Overload
- FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage  
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MetadataTag Constructor
(FITAG, FIBITMAP)

Initializes a new instance of this class.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public MetadataTag(
    FITAG tag,
    FIBITMAP dib
)
```

### Parameters

**tag**  
Type: FreeImageAPI.FITAG  
The FITAG to represent.

**dib**  
Type: FreeImageAPI.FIBITMAP  
The bitmap `tag` was extracted from.

### See Also

**Reference**  
MetadataTag Class  
MetadataTag Overload  
FreeImageAPI.Metadata Namespace
Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MetadataTag Constructor
(FITAG,
FREE_IMAGE_MDMODEL)

Initializes a new instance of this class.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public MetadataTag(
    FITAG tag,
    FREE_IMAGE_MDMODEL model
)
```

Parameters

tag
Type: FreeImageAPIFITAG
The FITAG to represent.

model
Type: FreeImageAPIFREE_IMAGE_MDMODEL
The model of tag.

See Also

Reference
MetadataTag Class
MetadataTag Overload
FreelmageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
The `MetadataTag` type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Gets the number of elements the metadata object contains.</td>
</tr>
<tr>
<td>Description</td>
<td>Gets or sets the description of the metadata.</td>
</tr>
<tr>
<td>Disposed</td>
<td>Gets whether this instance has already been disposed.</td>
</tr>
<tr>
<td>ID</td>
<td>Gets or sets the ID of the metadata.</td>
</tr>
<tr>
<td>Key</td>
<td>Gets or sets the key of the metadata.</td>
</tr>
<tr>
<td>Length</td>
<td>Gets the length of the value in bytes.</td>
</tr>
<tr>
<td>Model</td>
<td>Gets the model of the metadata.</td>
</tr>
<tr>
<td>Type</td>
<td>Gets the type of the metadata.</td>
</tr>
<tr>
<td>Value</td>
<td>Gets or sets the value of the metadata.</td>
</tr>
</tbody>
</table>

### See Also

Reference

`MetadataTag Class`
FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
MetadataTag.Count Property

Gets the number of elements the metadata object contains.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public uint Count { get; }
```

**Property Value**

Type: UInt32

**See Also**

Reference
- MetadataTag Class
- FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage  
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MetadataTag.Description Property

Gets or sets the description of the metadata.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public string Description { get; set; }
```

### Property Value

Type: String

### See Also

Reference  
MetadataTag Class  
FreeImageAPI.Metadata Namespace

Contact/Feedback: FreeImage.NET Homepage  
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MetadataTagDisposed Property

Gets whether this instance has already been disposed.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public bool Disposed { get; }
```

### Property Value

Type: Boolean

### See Also

Reference
- MetadataTag Class
- FreeImageAPI.Metadata Namespace

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Help improve this Documentation: Join the Project
**MetadataTagID Property**

Gets or sets the ID of the metadata.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public ushort ID { get; set; }
```

**Property Value**

Type: UInt16

### See Also

Reference
- MetadataTag Class
- FreeImageAPI.Metadata Namespace

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MetadataTagKey Property

Gets or sets the key of the metadata.

Namespace:  FreeImageAPI.Metadata
Assembly:  FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public string Key { get; set; }
```

Property Value
Type:  String

See Also

Reference
MetadataTag Class
FreelImageAPI.Metadata Namespace

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MetadataTagLength Property

Gets the length of the value in bytes.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public uint Length { get; }
```

Property Value
Type: UInt32

See Also
Reference
- MetadataTag Class
- FreeImageAPI.Metadata Namespace

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MetadataTagModel Property

Gets the model of the metadata.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public FREE_IMAGE_MDMODEL Model { get; }
```

Property Value
Type: FREE_IMAGE_MDMODEL

See Also

Reference
MetadataTag Class
FreeImageAPI.Metadata Namespace

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MetadataTagType Property

Gets the type of the metadata.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

**C#**

```csharp
public FREE_IMAGE_MDTYPE Type { get; }
```

### Property Value

Type: `FREE_IMAGE_MDTYPE`

### See Also

Reference
- MetadataTag Class
- FreeImageAPI.Metada Namespace

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MetadataTagValue Property

Gets or sets the value of the metadata.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Object Value { get; set; }
```

Property Value

Type: Object

See Also

Reference

MetadataTag Class
FreelImageAPI.Metadata Namespace

Contact/Feedback: FreelImage.NET Homepage
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The `MetadataTag` type exposes the following members.

## Methods

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<tbody>
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<td>Add this metadata to an image.</td>
</tr>
<tr>
<td><strong>Clone</strong></td>
<td>Creates a deep copy of this <code>MetadataTag</code>.</td>
</tr>
<tr>
<td><strong>CompareTo(Object)</strong></td>
<td>Compares this instance with a specified <code>Object</code>.</td>
</tr>
<tr>
<td><strong>CompareTo(MetadataTag)</strong></td>
<td>Compares the current instance with another object of the same type.</td>
</tr>
<tr>
<td><strong>Dispose</strong></td>
<td>Releases all resources used by the instance.</td>
</tr>
<tr>
<td><strong>Equals(Object)</strong></td>
<td>Tests whether the specified object is a <code>MetadataTag</code> instance and is equivalent to this <code>MetadataTag</code> instance. (Overrrides <code>Object.Equals(Object)</code>.)</td>
</tr>
</tbody>
</table>
| **Equals(MetadataTag)**  | Tests whether the
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetHashCode</td>
<td>Returns a hash code for this MetadataTag structure. (Overrides Object.GetHashCode.)</td>
</tr>
<tr>
<td>GetPropertyItem</td>
<td>Gets a .NET PropertyItem for this metadata tag.</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>SetValue(Object)</td>
<td>Sets the value of the metadata. In case value is of byte or byte[,] FIDT_UNDEFINED is assumed. In case value is of uint or uint[,] FIDT_LONG is assumed.</td>
</tr>
<tr>
<td>SetValue(Object, FREE_IMAGE_MDTYPE)</td>
<td>Sets the value of the metadata.</td>
</tr>
<tr>
<td>ToString</td>
<td>Converts the value of the MetadataTag object to its equivalent string representation. (Overrides Object.ToString.)</td>
</tr>
</tbody>
</table>
See Also

Reference
MetadataTag Class
FreelImageAPI.Metadata Namespace

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MetadataTag.AddToImage Method

Add this metadata to an image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool AddToImage(FIBITMAP dib)
```

### Parameters

**dib**  
Type: FreeImageAPI.FIBITMAP  
Handle to a FreeImage bitmap.

### Return Value

Type: **Boolean**  
True on success, false on failure.

### See Also

- **Reference**  
  MetadataTag Class  
  FreeImageAPI.Metadata Namespace

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MetadataTagClone Method

Creates a deep copy of this MetadataTag.

Namespace: FreeImageAPI.Metadata  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public Object Clone()
```

Return Value
Type: Object
A deep copy of this MetadataTag.

Implements
ICloneableClone

See Also

Reference
MetadataTag Class  
FreeImageAPI.Metadata Namespace

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MetadataTag CompareTo Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompareTo(Object)</td>
<td>Compares this instance with a specified Object.</td>
</tr>
<tr>
<td>CompareTo(MetadataTag)</td>
<td>Compares the current instance with another object of the same type.</td>
</tr>
</tbody>
</table>

See Also

Reference
MetadataTag Class
FreelImageAPI.Metadata Namespace

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MetadataTag.CompareTo Method (Object)

Compares this instance with a specified Object.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(
    Object obj
)
```

### Parameters

- **obj**  
  Type: `System.Object`  
  An object to compare with this instance.

### Return Value

Type: `Int32`  
A 32-bit signed integer indicating the lexical relationship between the two comparands.

### Implements

`IComparable.CompareTo(Object)`

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ArgumentException

$obj$ is not a MetadataTag.

See Also

Reference

MetadataTag Class
CompareTo Overload
FreeImageAPI.Metadata Namespace

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MetadataTag.CompareTo Method (MetadataTag)

Compares the current instance with another object of the same type.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int CompareTo(MetadataTag other)
```

### Parameters

- **other**
  - Type: `FreeImageAPI.MetadataMetadataTag`
  - An object to compare with this instance.

### Return Value

- Type: `Int32`
  - A 32-bit signed integer that indicates the relative order of the objects being compared.

### Implements

- `IComparable.CompareTo(T)`

### See Also

- Reference
  - `MetadataTag Class`
CompareTo Overload
FreelImageAPI.Metadata Namespace

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MetadataTagDispose Method

Releases all resources used by the instance.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void Dispose()
```

Implements

IDisposableDispose

### See Also

Reference

MetadataTag Class  
FreImageAPI.Metadata Namespace
## MetadataTag.Equals Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals(Object)</td>
<td>Tests whether the specified object is a MetadataTag instance and is equivalent to this MetadataTag instance. (Overrides <code>Object.Equals(Object)</code>.)</td>
</tr>
<tr>
<td>Equals(MetadataTag)</td>
<td>Tests whether the specified MetadataTag instance is equivalent to this MetadataTag instance.</td>
</tr>
</tbody>
</table>

[Top](#)

### See Also

Reference
- MetadataTag Class
- FreelImageAPI.Metadata Namespace

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Help improve this Documentation: [Join the Project](https://github.com/freelimage-net/FreelImage.NET)
MetadataTag Equals Method (Object)

Tests whether the specified object is a MetadataTag instance and is equivalent to this MetadataTag instance.

**Namespace:** FreelImageAPI.Metadata  
**Assembly:** FreelImageNET (in FreelImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public override bool Equals(
    Object obj
)
```

**Parameters**

*obj*

Type: **SystemObject**  
The object to test.

**Return Value**

Type: **Boolean**  
**true** if *obj* is a MetadataTag instance equivalent to this MetadataTag instance; otherwise, **false**.

## See Also

**Reference**
MetadataTag Class  
Equals Overload  
FreelImageAPI.Metadata Namespace
MetadataTag Equals Method (MetadataTag)

Tests whether the specified MetadataTag instance is equivalent to this MetadataTag instance.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool Equals(MetadataTag other)
```

Parameters

`other`
Type: FreeImageAPI.MetadataMetadataTag
A MetadataTag instance to compare to this instance.

Return Value
Type: Boolean
true if obj equivalent to this MetadataTag instance; otherwise, false.

Implements
IEquatable<TEquals(T)

See Also
Reference
MetadataTag Class
**MetadataTag GetHashCode Method**

Returns a hash code for this MetadataTag structure.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override int GetHashCode()
```

**Return Value**

*Type:* Int32  
An integer value that specifies the hash code for this MetadataTag.

**See Also**

Reference  
MetadataTag Class  
FreeImageAPI.Metadata Namespace

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MetadataTag.GetPropertyItem Method

Gets a .NET PropertyItem for this metadata tag.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public PropertyItem GetPropertyItem()
```

#### Return Value

**Type:** PropertyItem  
The .NET PropertyItem.

### See Also

**Reference**  
MetadataTag Class  
FreeImageAPI.Metadata Namespace

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MetadataTagSetValue Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SetValue(Object)</td>
<td>Sets the value of the metadata. In case value is of byte or byte[], <strong>FIDT_UNDEFINED</strong> is assumed. In case value is of uint or uint[], <strong>FIDT_LONG</strong> is assumed.</td>
</tr>
<tr>
<td>SetValue(Object,</td>
<td>Sets the value of the metadata.</td>
</tr>
<tr>
<td>FREE_IMAGE_MDTYPE)</td>
<td></td>
</tr>
</tbody>
</table>

See Also

Reference
MetadataTag Class
FreeImageAPI.Metadata Namespace

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**MetadataTagSetValue Method (Object)**

Sets the value of the metadata.
In case value is of byte or byte[] **FIDT_UNDEFINED** is assumed.
In case value is of uint or uint[] **FIDT_LONG** is assumed.

**Namespace:** FreeImageAPI.Metada
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

C#

```csharp
public bool SetValue(
    Object value
)
```

**Parameters**

`value`
Type: **SystemObject**
New data of the metadata.

**Return Value**
Type: **Boolean**
True on success, false on failure.

**Exceptions**

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NotSupportedException</td>
<td>The data format is not supported.</td>
</tr>
</tbody>
</table>
ArgumentNullException  \textit{value} is null.

\section*{See Also}

\textbf{Reference}

\begin{itemize}
  \item \texttt{MetadataTag Class}
  \item \texttt{SetValue Overload}
  \item \texttt{FreelImageAPI.Metadata Namespace}
\end{itemize}

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MetadataTagSetValue Method (Object, FREE_IMAGE_MDTYPE)

Sets the value of the metadata.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public bool SetValue(
    Object value,
    FREE_IMAGE_MDTYPE type
)
```

### Parameters

- **value**  
  Type: System.Object  
  New data of the metadata.

- **type**  
  Type: FreeImageAPI.FREE_IMAGE_MDTYPE  
  Type of the data.

### Return Value

- Type: Boolean  
  True on success, false on failure.

### Exceptions
<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NotSupportedException</td>
<td>The data type is not supported.</td>
</tr>
<tr>
<td>ArgumentNullException</td>
<td>value is null.</td>
</tr>
<tr>
<td>ArgumentException</td>
<td>value and type to not fit.</td>
</tr>
</tbody>
</table>

**See Also**

**Reference**
- MetadataTag Class
- SetValue Overload
- FreelImageAPI.Metadata Namespace

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MetadataTagToString Method

Converts the value of the MetadataTag object to its equivalent string representation.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public override string ToString()
```

**Return Value**

Type: `String`

The string representation of the value of this instance.

### See Also

Reference

- MetadataTag Class
- FreeImageAPI.Metadata Namespace

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MetadataTag Operators and Type Conversions

The `MetadataTag` type exposes the following members.

### Operators

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<th>Description</th>
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</thead>
<tbody>
<tr>
<td><img src="equality.png" alt="Equality" /></td>
<td>Determines whether two specified <code>MetadataTag</code> objects have the same value.</td>
</tr>
<tr>
<td><img src="metadata_tag_to_fitag.png" alt="MetadataTag to FITAG" /></td>
<td>Extracts the value of a <code>MetadataTag</code> instance to a FITAG handle.</td>
</tr>
<tr>
<td><img src="inequality.png" alt="Inequality" /></td>
<td>Determines whether two specified <code>MetadataTag</code> objects have different values.</td>
</tr>
</tbody>
</table>

See Also

- Reference
  - `MetadataTag Class`
  - `FreeImageAPI.Metadata Namespace`

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**MetadataTagEquality Operator**

Determines whether two specified `MetadataTag` objects have the same value.

**Namespace:** `FreeImageAPI.Metadata`  
**Assembly:** `FreeImageNET (in FreeImageNET.dll)` Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static bool operator ==(MetadataTag left, MetadataTag right)
```

**Parameters**

- **left**  
  Type: `FreeImageAPI.MetadataMetadataTag`  
  A `MetadataTag` or a null reference (`Nothing` in Visual Basic).

- **right**  
  Type: `FreeImageAPI.MetadataMetadataTag`  
  A `MetadataTag` or a null reference (`Nothing` in Visual Basic).

**Return Value**  
Type: `Boolean`  
`true` if the value of `left` is the same as the value of `right`; otherwise, `false`.

**See Also**
MetadataTag Conversion (MetadataTag to FITAG)

Extracts the value of a MetadataTag instance to a FITAG handle.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static implicit operator FITAG (MetadataTag value)
```

### Parameters

**value**  
Type: FreeImageAPI.MetadataMetadataTag  
A MetadataTag instance.

### Return Value

Type: FITAG  
A new instance of FITAG initialized to value.

### See Also

- Reference  
  MetadataTag Class  
  FreeImageAPI.Metadata Namespace

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MetadataTag Inequality Operator

Determines whether two specified MetadataTag objects have different values.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static bool operator !=(
    MetadataTag left,  
    MetadataTag right  
)
```

### Parameters

- **left**
  - Type: FreeImageAPI.MetadataMetadataTag
  - A MetadataTag or a null reference (Nothing in Visual Basic).

- **right**
  - Type: FreeImageAPI.MetadataMetadataTag
  - A MetadataTag or a null reference (Nothing in Visual Basic).

### Return Value

- Type: Boolean
  - true if the value of left is different from the value of right; otherwise, false.

### See Also
WICMetadataHandler Class

Windows Imaging Component Metadata Handler. See BitmapMetadata.

Inheritance Hierarchy

SystemObject FreeImageAPI.MetadataWICMetadataHandler

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public class WICMetadataHandler
```

The WICMetadataHandler type exposes the following members.

Constructors

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<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WICMetadataHandler</td>
<td>Initializes a new instance of the WICMetadataHandler class</td>
</tr>
</tbody>
</table>

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ApplicationName</td>
<td>Gets or sets a value that identifies the name of the application that was used to construct or alter an image file.</td>
</tr>
<tr>
<td>Author</td>
<td>Gets or sets a value that represents the author of an image.</td>
</tr>
<tr>
<td>CameraManufacturer</td>
<td>Gets or sets a value that identifies the camera manufacturer that is associated with an image.</td>
</tr>
<tr>
<td>CameraModel</td>
<td>Gets or sets a value that identifies the camera model that was used to capture the image.</td>
</tr>
<tr>
<td>Comment</td>
<td>Comment Gets or sets a value that represents a comment that is associated with the image file.</td>
</tr>
<tr>
<td>Copyright</td>
<td>Gets or sets a value that indicates copyright information that is associated with the image file.</td>
</tr>
<tr>
<td>DateTaken</td>
<td>Gets or sets a value that indicates the date that the image was taken.</td>
</tr>
<tr>
<td>Keywords</td>
<td>Gets or sets a collection of keywords that describe the bitmap image.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Rating</td>
<td>Gets or sets a value that identifies the image rating.</td>
</tr>
<tr>
<td>Subject</td>
<td>Gets or sets a value that indicates the subject matter of the bitmap image.</td>
</tr>
<tr>
<td>Title</td>
<td>Gets or sets a value that identifies the title of an image file.</td>
</tr>
</tbody>
</table>

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContainsQuery</td>
<td>Determines whether a given query string exists within a BitmapMetadata object.</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetQuery</td>
<td>Provides access to a metadata query reader that can extract metadata from a bitmap image file.</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current <strong>Object</strong>. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>RemoveQuery</td>
<td>Removes a metadata query from an instance of <strong>BitmapMetadata</strong>.</td>
</tr>
<tr>
<td>Save</td>
<td>Saves the metadata to the underlying <strong>FreelImageBitmap</strong>. Modified metadata is not saved until this method is called.</td>
</tr>
<tr>
<td>SetQuery</td>
<td>Provides access to a metadata query writer that can write metadata to a bitmap image file.</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns a string that represents the current object. (Inherited from <strong>Object</strong>.)</td>
</tr>
</tbody>
</table>

**Remarks**

Modified metadata isn't saved to the **FreelImageBitmap** until the **Save**-Method is called.

This class is not supported on Mono.
Examples

```csharp
using (FreeImageBitmap fib = new FreeImageBitmap(path))
{
    WICMetadataHandler metadata = fib.GetWICMetadataHandler();
    metadata.DateTaken = DateTime.Now;
    metadata.Comment = "Hallo";
    object alt = metadata.GetQuery("System.GPS.Latitude");
    metadata.Save();
}
```

See Also

Reference
- [FreeImageAPI.Metadata Namespace](#)

Other Resources
- [Metadata Query Language Overview](#)
- [Native Image Format Metadata Queries](#)
- [Photo Metadata Policies](#)

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WICMetadataHandler Constructor

Initializes a new instance of the WICMetadataHandler class

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public WICMetadataHandler(  
    FreeImageBitmap image  
)
```

### Parameters

- **image**  
  Type: FreeImageAPI.FreeImageBitmap  

[Missing <param name="image"/> documentation for "M:FreeImageAPI.Metadata.WICMetadataHandler.#ctor(FreeImageAPI.FreeImageBitm

### See Also

Reference
- WICMetadataHandler Class  
- FreeImageAPI.Metadata Namespace

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The **WICMetadataHandler** type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ApplicationName</td>
<td>Gets or sets a value that identifies the name of the application that was used to construct or alter an image file.</td>
</tr>
<tr>
<td>Author</td>
<td>Gets or sets a value that represents the author of an image.</td>
</tr>
<tr>
<td>CameraManufacturer</td>
<td>Gets or sets a value that identifies the camera manufacturer that is associated with an image.</td>
</tr>
<tr>
<td>CameraModel</td>
<td>Gets or sets a value that identifies the camera model that was used to capture the image.</td>
</tr>
<tr>
<td>Comment</td>
<td>Comment Gets or sets a value that represents a comment that is associated with the image file.</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Copyright</td>
<td>Gets or sets a value that indicates copyright information that is associated with the image file.</td>
</tr>
<tr>
<td>DateTaken</td>
<td>Gets or sets a value that indicates the date that the image was taken.</td>
</tr>
<tr>
<td>Keywords</td>
<td>Gets or sets a collection of keywords that describe the bitmap image.</td>
</tr>
<tr>
<td>Rating</td>
<td>Gets or sets a value that identifies the image rating.</td>
</tr>
<tr>
<td>Subject</td>
<td>Gets or sets a value that indicates the subject matter of the bitmap image.</td>
</tr>
<tr>
<td>Title</td>
<td>Gets or sets a value that identifies the title of an image file.</td>
</tr>
</tbody>
</table>

See Also

Reference

WICMetadataHandler Class
FreelImageAPI.Metadata Namespace

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WICMetadataHandler ApplicationName Property

Gets or sets a value that identifies the name of the application that was used to construct or alter an image file.

**Namespace:** FreiImageAPI.Metadata  
**Assembly:** FreiImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public string ApplicationName { get; set; }
```

Property Value
Type: String

## See Also

Reference
- WICMetadataHandler Class
- FreiImageAPI.Metadata Namespace

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WICMetadataHandlerAuthor Property

Gets or sets a value that represents the author of an image.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public ReadOnlyCollection<string> Author { get; set; }
```

### Property Value

Type: `ReadOnlyCollection<string>`

### See Also

- Reference
  - WICMetadataHandler Class
  - FreeImageAPI.Metadata Namespace

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WICMetadataHandler.CameraManufacturer Property

Gets or sets a value that identifies the camera manufacturer that is associated with an image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

![Syntax](#)

```csharp
public string CameraManufacturer { get; set; }
```

**Property Value**

Type: **String**

**See Also**

Reference
- WICMetadataHandler Class
- FreeImageAPI.Metadata Namespace

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WICMetadataHandler.CameraModel Property

Gets or sets a value that identifies the camera model that was used to capture the image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string CameraModel { get; set; }
```

Property Value
- **Type:** String

### See Also

Reference
- WICMetadataHandler Class
- FreeImageAPI.Metadata Namespace

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WICMetadataHandler.Comment Property

Comment Gets or sets a value that represents a comment that is associated with the image file.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string Comment { get; set; }
```

**Property Value**  
Type: `String`

### See Also

**Reference**  
WICMetadataHandler Class  
FreeImageAPI.Metadata Namespace

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WICMetadataHandler Copyright Property

Gets or sets a value that indicates copyright information that is associated with the image file.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
public string Copyright { get; set; }
```

**Property Value**

Type: **String**

## See Also

Reference

- WICMetadataHandler Class
- FreeImageAPI.Metadata Namespace

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WICMetadataHandler.DateTaken Property

Gets or sets a value that indicates the date that the image was taken.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public Nullable<DateTime> DateTaken { get; set; }
```

### Property Value

Type: NullableDateTime

### See Also

Reference
- WICMetadataHandler Class
- FreeImageAPI.Metadata Namespace

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WICMetadataHandler Keywords Property

Gets or sets a collection of keywords that describe the bitmap image.

**Namespace:** FreeImageAPI.Metadata

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ReadOnlyCollection<string> Keywords { get; }
```

**Property Value**

Type: `ReadOnlyCollection<string>`

### See Also

**Reference**

WICMetadataHandler Class

FreeImageAPI.Metadata Namespace
WICMetadataHandlerRating Property

Gets or sets a value that identifies the image rating.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public int Rating { get; set; }
```

### Property Value

Type: `Int32`  
The rating value between 0 and 5.

### See Also

Reference  
WICMetadataHandler Class  
FreeImageAPI.Metadata Namespace

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WICMetadataHandler Subject Property

Gets or sets a value that indicates the subject matter of the bitmap image.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string Subject { get; set; }
```

### Property Value

Type: **String**

### See Also

Reference  
WICMetadataHandler Class  
FreeImageAPI.Metadata Namespace

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Help improve this Documentation: [Join the Project](#)
WICMetadataHandler Title Property

Gets or sets a value that identifies the title of an image file.

**Namespace**: FreeImageAPI.Metadata  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string Title { get; set; }
```

Property Value  
Type: String

**See Also**

Reference  
WICMetadataHandler Class  
FreeImageAPI.Metadata Namespace

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FreeImage.NET Homepage  
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WICMetadataHandler
Methods

The `WICMetadataHandler` type exposes the following members.

## Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ContainsQuery</code></td>
<td>Determines whether a given query string exists within a <code>BitmapMetadata</code> object.</td>
</tr>
<tr>
<td><code>Equals</code></td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>Finalize</code></td>
<td>Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>GetHashCode</code></td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td><code>GetQuery</code></td>
<td>Provides access to a metadata query reader that can extract metadata from a bitmap image file.</td>
</tr>
<tr>
<td><code>GetType</code></td>
<td>Gets the <code>Type</code> of the current</td>
</tr>
</tbody>
</table>
MemberwiseClone | Creates a shallow copy of the current Object. (Inherited from Object.)

RemoveQuery | Removes a metadata query from an instance of BitmapMetadata.

Save | Saves the metadata to the underlying FreeImageBitmap. Modified metadata is not saved until this method is called.

SetQuery | Provides access to a metadata query writer that can write metadata to a bitmap image file.

ToString | Returns a string that represents the current object. (Inherited from Object.)
WICMetadataHandlerContainsQuery Method

Determines whether a given query string exists within a BitmapMetadata object.

Namespace: FreeImageAPI.Metadata
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#  Copy

```csharp
public bool ContainsQuery(
    string query
)
```

Parameters

query
Type: System.String
Identifies the string that is being queried in the current BitmapMetadata object.

Return Value
Type: Boolean
true if the query string is found within the metadata store; otherwise, false.

Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td>query is null.</td>
</tr>
</tbody>
</table>
## Examples

```csharp
using (FreeImageBitmap fib = new FreeImageBitmap(path))
{
    WICMetadataHandler metadata = fib.GetWICMetadataHandler();
    metadata.DateTaken = DateTime.Now;
    metadata.Comment = "Hallo";
    object alt = metadata.GetQuery("System.GPS.Latitude");
    metadata.Save();
}
```

## See Also

**Reference**
- WICMetadataHandler Class
- FreeImageAPI.Metadata Namespace

**Other Resources**
- Metadata Query Language Overview
- Native Image Format Metadata Queries
- Photo Metadata Policies

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WICMetadataHandler GetQuery Method

Provides access to a metadata query reader that can extract metadata from a bitmap image file.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public Object GetQuery(
    string query
)
```

### Parameters

**query**
- Type: **System.String**
  - Identifies the string that is being queried in the current BitmapMetadata object.

### Return Value
- **Type:** **Object**
  - The metadata at the specified query location.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentException</td>
<td>query is null.</td>
</tr>
</tbody>
</table>
Examples

```csharp
using (FreeImageBitmap fib = new FreeImageBitmap(path)) {
    WICMetadataHandler metadata = fib.GetWICMetadata();
    metadata.DateTaken = DateTime.Now;
    metadata.Comment = "Hallo";
    object alt = metadata.GetQuery("System.GPS.Latitude");
    metadata.Save();
}
```

See Also

Reference
- WICMetadataHandler Class
- FreeImageAPI.Metadata Namespace

Other Resources
- Metadata Query Language Overview
- Native Image Format Metadata Queries
- Photo Metadata Policies

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WICMetadataHandlerRemoveQuery Method

Removes a metadata query from an instance of BitmapMetadata.

**Namespace:** FreeImageAPI.Metadata
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void RemoveQuery(
    string query
)
```

### Parameters

- `query`  
  Type: `System.String`  
  The metadata query to remove.

### Exceptions

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentNullException</td>
<td><code>query</code> is null.</td>
</tr>
<tr>
<td>InvalidOperationException</td>
<td>Occurs when image metadata is read-only.</td>
</tr>
</tbody>
</table>

### Examples
```csharp
using (FreeImageBitmap fib = new FreeImageBitmap(path))
{
    WICMetadataHandler metadata = fib.GetWICMetadataHandler();
    metadata.DateTaken = DateTime.Now;
    metadata.Comment = "Hallo";
    object alt = metadata.GetQuery("System.GPS.Latitude");
    metadata.Save();
}
```

See Also

- Reference
  - WICMetadataHandler Class
  - FreeImageAPI.Metadata Namespace
- Other Resources
  - Metadata Query Language Overview
  - Native Image Format Metadata Queries
  - Photo Metadata Policies

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WICMetadataHandler Save Method

Saves the metadata to the underlying FreeImageBitmap. Modified metadata is not saved until this method is called.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public void Save()
```

**See Also**

Reference  
WICMetadataHandler Class  
FreeImageAPI.Metadata Namespace

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WICMetadataHandler SetQuery Method

Provides access to a metadata query writer that can write metadata to a bitmap image file.

**Namespace:** FreeImageAPI.Metadata  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public void SetQuery(
    string query,
    Object value
)
```

### Parameters

- **query**  
  Type: System.String  
  Identifies the location of the metadata to be written.

- **value**  
  Type: System.Object  
  The value of the metadata to be written.

### Examples

```csharp
using (FreeImageBitmap fib = new FreeImageBitmap())
{
    WICMetadataHandler metadata = fib.GetWICMetadata();
    metadata.DateTaken = DateTime.Now;
}
```
metadata.Comment = "Hallo";
object alt = metadata.GetQuery("System.GPS.Latitude");
metadata.Save();

See Also

Reference
WICMetadataHandler Class
FreeImageAPI.Metaddata Namespace

Other Resources
Metadata Query Language Overview
Native Image Format Metadata Queries
Photo Metadata Policies

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FreeImageAPI.Plugins Namespace

Classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FreelImagePlugin</td>
<td>Class representing a FreelImage format.</td>
</tr>
<tr>
<td>LocalPlugin</td>
<td>Class representing own FreelImage-Plugins.</td>
</tr>
<tr>
<td>PluginRepository</td>
<td>Class representing all registered FreelImagePlugin in FreelImage.</td>
</tr>
</tbody>
</table>

Structures

<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugin</td>
<td>The structure contains function pointers that make up a FreelImage plugin.</td>
</tr>
</tbody>
</table>

Delegates

<table>
<thead>
<tr>
<th>Delegate</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CloseProc</td>
<td>Delegate to a function that closes a previously opened file.</td>
</tr>
<tr>
<td>Proc</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DescriptionProc</td>
<td>Delegate to a function that returns a string which contains a more detailed description.</td>
</tr>
<tr>
<td>ExtensionListProc</td>
<td>Delegate to a function that returns a comma separated list of file extensions the plugin can read or write.</td>
</tr>
<tr>
<td>FormatProc</td>
<td>Delegate to a function that returns a string which describes the plugins format.</td>
</tr>
<tr>
<td>InitProc</td>
<td>Callback function used by FreelImage to register plugins.</td>
</tr>
<tr>
<td>LoadProc</td>
<td>Delegate to a function that loads and decodes a bitmap into memory.</td>
</tr>
<tr>
<td>MimeProc</td>
<td>Delegate to a function that returns a string which contains the plugin's mime type.</td>
</tr>
<tr>
<td>OpenProc</td>
<td>Delegate to a function that opens a file.</td>
</tr>
<tr>
<td>PageCapabilityProc</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>PageCountProc</td>
<td>Delegate to a function that returns the number of pages of a multipage bitmap if the plugin is capable of</td>
</tr>
</tbody>
</table>
handling multipage bitmaps.

<table>
<thead>
<tr>
<th>Delegate</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ReprExprProc</strong></td>
<td>Delegate to a function that returns a regular expression that can be used to identify whether a file can be handled by the plugin.</td>
</tr>
<tr>
<td><strong>SaveProc</strong></td>
<td>Delegate to a function that saves a bitmap.</td>
</tr>
<tr>
<td><strong>SupportsExportBPPProc</strong></td>
<td>Delegate to a function that returns whether the plugin can handle the specified color depth.</td>
</tr>
<tr>
<td><strong>SupportsExportTypeProc</strong></td>
<td>Delegate to a function that returns whether the plugin can handle the specified image type.</td>
</tr>
<tr>
<td><strong>SupportsICCProfilesProc</strong></td>
<td>Delegate to a function that returns whether the plugin can handle ICC-Profiles.</td>
</tr>
<tr>
<td><strong>ValidateProc</strong></td>
<td>Delegate to a function that determines whether the source defined by and is a valid image.</td>
</tr>
</tbody>
</table>

**Enumerations**
<table>
<thead>
<tr>
<th>Enumeration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LocalPluginMethodFlags</td>
<td>MethodFlags defines values to fill a bitfield telling which functions have been implemented by a plugin.</td>
</tr>
</tbody>
</table>

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CloseProc Delegate

Delegate to a function that closes a previously opened file.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public delegate void CloseProc(
    ref FreeImageAPI.IO io,
    fi_handle handle,
    IntPtr data
)
```

**Parameters**

- **io**  
  Type: FreeImageAPI.IO

- **handle**  
  Type: FreeImageAPI.IO

- **data**  
  Type: System.IntPtr

**See Also**

Reference  
FreeImageAPI.Plugins Namespace

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DescriptionProc Delegate

Delegate to a function that returns a string which contains a more detailed description.

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public delegate string DescriptionProc()
```

Return Value
Type: String

See Also

Reference
FreeImageAPI.Plugins Namespace

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ExtensionListProc Delegate

Delegate to a function that returns a comma separated list of file extensions the plugin can read or write.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate string ExtensionListProc()
```

**Return Value**  
Type: **String**

### See Also

**Reference**  
FreeImageAPI.Plugins Namespace
FormatProc Delegate

Delegate to a function that returns a string which describes the plugins format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate string FormatProc()
```

**Return Value**  
Type: **String**

### See Also

**Reference**  
FreeImageAPI.Plugins Namespace

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FreeImagePlugin Class

Class representing a FreeImage format.

Inheritance Hierarchy

System
Object
FreeImageAPI.Plugins
FreeImagePlugin

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public sealed class FreeImagePlugin
```

The FreeImagePlugin type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Gets a descriptive string that describes the bitmap formats this plugin can read and/or write.</td>
</tr>
<tr>
<td>Enabled</td>
<td>Gets or sets whether this plugin is enabled.</td>
</tr>
<tr>
<td>ExtenssionList</td>
<td>Gets a comma-delimited file extension list describing the bitmap formats this plugin can read and/or write.</td>
</tr>
</tbody>
</table>
FIFormat

Gets the format of this instance.

Format

Gets a string describing the format.

RegExpr

Returns a regular expression string that can be used by a regular expression engine to identify the bitmap. FreImageQt makes use of this function.

SupportsICCProfiles

Gets whether this plugin can load or save an ICC profile.

SupportsReading

Gets whether this plugin can load bitmaps.

SupportsWriting

Gets whether this plugin can save bitmaps.

**Methods**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <strong>Type</strong> of the current instance. (Inherited from <strong>Object</strong>.)</td>
</tr>
<tr>
<td>SupportsExportBPP</td>
<td>Checks whether this plugin can save bitmaps in the desired bit depth.</td>
</tr>
<tr>
<td>SupportsExportType</td>
<td>Checks whether this plugin can save a bitmap in the desired data type.</td>
</tr>
<tr>
<td>ToString</td>
<td>Gets a descriptive string that describes the bitmap formats this plugin can read and/or write. (Overrides <strong>Object.ToString</strong>.)</td>
</tr>
<tr>
<td>ValidExtension(String)</td>
<td>Checks whether an extension is valid for this format.</td>
</tr>
<tr>
<td>ValidExtension(String, StringComparison)</td>
<td>Checks whether an extension is valid for this format.</td>
</tr>
<tr>
<td>ValidFilename(String)</td>
<td>Checks whether a filename is valid for this format.</td>
</tr>
<tr>
<td>ValidFilename(String, StringComparison)</td>
<td>Checks whether a filename is valid for this format.</td>
</tr>
</tbody>
</table>
Reference
FreelImageAPI.Plugins Namespace

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The **FreeImagePlugin** type exposes the following members.

### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Gets a descriptive string that describes the bitmap formats this plugin can read and/or write.</td>
</tr>
<tr>
<td>Enabled</td>
<td>Gets or sets whether this plugin is enabled.</td>
</tr>
<tr>
<td>ExtentsionList</td>
<td>Gets a comma-delimited file extension list describing the bitmap formats this plugin can read and/or write.</td>
</tr>
<tr>
<td>FIFormat</td>
<td>Gets the format of this instance.</td>
</tr>
<tr>
<td>Format</td>
<td>Gets a string describing the format.</td>
</tr>
<tr>
<td>RegExpr</td>
<td>Returns a regular expression string that can be used by a regular expression engine to identify the bitmap. FreemageQt makes use of this function.</td>
</tr>
<tr>
<td>SupportsICCProfiles</td>
<td>Gets whether this plugin</td>
</tr>
</tbody>
</table>
can load or save an ICC profile.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SupportsReading</td>
<td>Gets whether this plugin can load bitmaps.</td>
</tr>
<tr>
<td>SupportsWriting</td>
<td>Gets whether this plugin can save bitmaps.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreelImagePlugin Class
- FreelImageAPI.Plugins Namespace

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FreeImagePluginDescription Property

Gets a descriptive string that describes the bitmap formats this plugin can read and/or write.

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public string Description { get; }
```

Property Value
Type: String

See Also

Reference
FreeImagePlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginEnabled Property

Gets or sets whether this plugin is enabled.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public bool Enabled { get; set; }
```

**Property Value**

Type: Boolean

### See Also

Reference

- FreeImagePlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImagePluginExtenssionList Property

Gets a comma-delimited file extension list describing the bitmap formats this plugin can read and/or write.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public string ExtensionList { get; }
```

### Property Value

Type: `String`

### See Also

Reference
- FreeImagePlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginFIFormat Property

Gets the format of this instance.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FREE_IMAGE_FORMAT FIFormat { get; }
```

### Property Value

**Type:** FREE_IMAGE_FORMAT

### See Also

- Reference
  - FreeImagePlugin Class
  - FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImagePluginFormat Property

Gets a string describing the format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public string Format { get; }
```

**Property Value**

Type: *String*

**See Also**

Reference  
FreeImagePlugin Class  
FreeImageAPI.Plugins Namespace
FreeImagePluginRegExpr Property

Returns a regular expression string that can be used by a regular expression engine to identify the bitmap. FreeImageQt makes use of this function.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public string RegExpr { get; }
```

### Property Value

Type: String

### See Also

**Reference**  
FreeImagePlugin Class  
FreeImageAPI.Plugins Namespace
FreeImagePlugin.SupportsICCProfiles Property

Gets whether this plugin can load or save an ICC profile.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool SupportsICCProfiles { get; }
```

**Property Value**  
Type: Boolean

### See Also

Reference  
- FreeImagePlugin Class  
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImagePluginSupportsReading Property

Gets whether this plugin can load bitmaps.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool SupportsReading { get; }
```

**Property Value**

Type: Boolean

### See Also

Reference
- FreeImagePlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginSupportsWriting Property

Gets whether this plugin can save bitmaps.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public bool SupportsWriting { get; }
```

**Property Value**

Type: Boolean

### See Also

Reference

- FreeImagePlugin Class  
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImagePlugin Methods

The FreeImagePlugin type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Determines whether the specified Object is equal to the current Object. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from Object.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the Type of the current instance. (Inherited from Object.)</td>
</tr>
<tr>
<td>SupportsExportBPP</td>
<td>Checks whether this plugin can save bitmaps in the desired bit depth.</td>
</tr>
<tr>
<td>SupportsExportType</td>
<td>Checks whether this plugin can save a bitmap in the desired data type.</td>
</tr>
<tr>
<td>ToString</td>
<td>Gets a descriptive string that describes the bitmap formats this plugin can read and/or write. (Overrides Object.ToString.)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>ValidExtension(String)</td>
<td>Checks whether an extension is valid for this format.</td>
</tr>
<tr>
<td>ValidExtension(String, StringComparison)</td>
<td>Checks whether an extension is valid for this format.</td>
</tr>
<tr>
<td>ValidFilename(String)</td>
<td>Checks whether a filename is valid for this format.</td>
</tr>
<tr>
<td>ValidFilename(String, StringComparison)</td>
<td>Checks whether a filename is valid for this format.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
- FreelImagePlugin Class
- FreelImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginSupportsExportBPP Method

Checks whether this plugin can save bitmaps in the desired bit depth.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool SupportsExportBPP(int bpp)
```

### Parameters

- **bpp**  
  Type: System.Int32  
  The desired bit depth.

### Return Value

Type: Boolean  
True if this plugin can save bitmaps in the desired bit depth, else false.

### See Also

- Reference  
  FreeImagePlugin Class  
  FreeImageAPI.Plugins Namespace
FreeImagePluginSupportsExportType Method

Checks whether this plugin can save a bitmap in the desired data type.

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public bool SupportsExportType(
    FREE_IMAGE_TYPE type
)
```

Parameters

`type`
Type: FreeImageAPIFREET_IMAGE_TYPE
The desired image type.

Return Value
Type: Boolean
True if this plugin can save bitmaps as the desired type, else false.

See Also

Reference
FreeImagePlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginToString Method

Gets a descriptive string that describes the bitmap formats this plugin can read and/or write.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public override string ToString()
```

**Return Value**

Type: **String**  
A descriptive string that describes the bitmap formats.

**See Also**

Reference  
FreeImagePlugin Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
FreeImagePluginValidExtension Method

Overload List

<table>
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<th>Name</th>
<th>Description</th>
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</table>

See Also

Reference
FreeImagePlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginValidExtension Method (String)

Checks whether an extension is valid for this format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool ValidExtension(  
    string extension
)
```

### Parameters

- **extension**
  - Type: `System.String`
  - The desired extension.

### Return Value

- **Type:** `Boolean`
- True if the extension is valid for this format, false otherwise.

### See Also

- [FreeImagePlugin Class](#)
- [ValidExtension Overload](#)
- [FreeImageAPI.Plugins Namespace](#)
Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginValidExtension

Method (String, StringComparison)

Checks whether an extension is valid for this format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4  
(3.17.0)

### Syntax

```csharp
public bool ValidExtension(
    string extension,
    StringComparison comparisonType
)
```

### Parameters

- **extension**  
  Type: System.String  
  The desired extension.

- **comparisonType**  
  Type: System.StringComparison  
  The string comparison type.

### Return Value

- Type: Boolean  
  True if the extension is valid for this format, false otherwise.

### See Also
Reference
FreelmagePlugin Class
ValidExtension Overload
FreelmageAPI.Plugins Namespace

Contact/Feedback: Freelmage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePluginValidFilename Method

Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ValidFilename(String)</td>
<td>Checks whether a filename is valid for this format.</td>
</tr>
<tr>
<td>ValidFilename(String, StringComparison)</td>
<td>Checks whether a filename is valid for this format.</td>
</tr>
</tbody>
</table>

See Also

Reference
- FreeImagePlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
FreeImagePlugin ValidFilename Method (String)

Checks whether a filename is valid for this format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool ValidFilename(
    string filename
)
```

**Parameters**

*filename*

  Type: **SystemString**  
  The desired filename.

**Return Value**

Type: **Boolean**  
True if the filename is valid for this format, false otherwise.

### See Also

- Reference  
  FreeImagePlugin Class  
  ValidFilename Overload  
  FreeImageAPI.Plugins Namespace
FreeImagePluginValidFilename
Method (String, StringComparison)

Checks whether a filename is valid for this format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public bool ValidFilename(
    string filename,
    StringComparison comparisonType
)
```

### Parameters

- **filename**
  - Type: System.String
  - The desired filename.

- **comparisonType**
  - Type: System.StringComparison
  - The string comparison type.

### Return Value
- Type: Boolean  
  - True if the filename is valid for this format, false otherwise.

## See Also
Reference
FreelImagePlugin Class
ValidFilename Overload
FreelImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
InitProc Delegate

Callback function used by FreeImage to register plugins.

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public delegate void InitProc(
    ref Plugin plugin,
    int format_id
)
```

Parameters

- `plugin`: Type: FreeImageAPI.PluginsPlugin
- `format_id`: Type: System.Int32

See Also

Reference
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LoadProc Delegate

Delegate to a function that loads and decodes a bitmap into memory.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

### C#  

```csharp
public delegate FIBITMAP LoadProc(
    ref FreeImageIO io,
    fi_handle handle,
    int page,
    int flags,
    IntPtr data
)
```

### Parameters

- **io**  
  Type: FreeImageAPI.IOFreeImageIO  
- **handle**  
  Type: FreeImageAPI.IOfi_handle  
- **page**  
  Type: SystemInt32  
- **flags**  
  Type: SystemInt32  
- **data**  
  Type: SystemIntPtr  

### Return Value

Type: FIBITMAP
See Also

Reference
FreelimageAPI.Plugins Namespace

Contact/Feedback: Freelimage.NET Homepage
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LocalPlugin Class

Class representing own FreeImage-Plugins.

- **Inheritance Hierarchy**
  ```system
  System
  Object
  FreeImageAPI.PluginsLocalPlugin
  ```

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

- **Syntax**
  ```c#
  public abstract class LocalPlugin
  ```

The `LocalPlugin` type exposes the following members.

- **Constructors**
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LocalPlugin</td>
<td>The constructor automatically registers the plugin in FreeImage. To do this it prepares a FreeImage defined structure with function pointers to the implemented functions or null if not implemented. Before registing the functions they are pinned in memory so the garbage collector can't move them around in memory after we passed there addresses to FreeImage.</td>
</tr>
</tbody>
</table>
### Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Gets or sets if the plugin is enabled.</td>
</tr>
<tr>
<td>Format</td>
<td>Gets the <code>FREE_IMAGE_FORMAT</code> FreeImage assigned to this plugin.</td>
</tr>
<tr>
<td>Registered</td>
<td>Gets if the plugin was registered successfully.</td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CloseProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>DescriptionProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Equals</td>
<td>Determines whether the specified <code>Object</code> is equal to the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>ExtensionListProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Finalize</td>
<td>Allows an object to try to free resources and perform other cleanup.</td>
</tr>
</tbody>
</table>
operations before it is reclaimed by garbage collection. (Inherited from `Object`.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FormatProc</td>
<td>Implementation of <code>FormatProc</code></td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Serves as a hash function for a particular type. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>GetImplementedMethods</td>
<td>Function that returns a bitfield containing the implemented methods.</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>LoadProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>MemberwiseClone</td>
<td>Creates a shallow copy of the current <code>Object</code>. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>MimeProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>OpenProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Function</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PageCapabilityProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>PageCountProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Read</td>
<td>Reads from an unmanaged stream.</td>
</tr>
<tr>
<td>ReadByte</td>
<td>Reads a single byte from an unmanaged stream.</td>
</tr>
<tr>
<td>RegExprProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>SaveProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Seek</td>
<td>Seeks in an unmanaged stream.</td>
</tr>
<tr>
<td>SupportsExportBPPProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>SupportsExportTypeProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>SupportsICCProfilesProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Tell</td>
<td>Retrieves the position of an unmanaged stream.</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns a string that represents the current object. (Inherited from Object.)</td>
</tr>
</tbody>
</table>
ValidateProc Function that can be implemented.

Write Writes to an unmanaged stream.

WriteByte Writes a single byte to an unmanaged stream.

---

**Fields**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>format</td>
<td>The format id assigned to the plugin.</td>
</tr>
<tr>
<td>implementedMethods</td>
<td>A copy of the functions used to register.</td>
</tr>
<tr>
<td>registered</td>
<td>When true the plugin was registered successfully; else false.</td>
</tr>
</tbody>
</table>

---

**Remarks**

FreeImages itself is plugin based. Each supported format is integrated by a separate plugin, that handles loading, saving, descriptions, identifying etc. And of course the user can create own plugins and use them in FreeImage. To do that the above mentioned predefined methodes need to be implemented. The class below handles the creation of such a plugin. The class itself is abstract as well as some core functions that need to be implemented. The class can be used to enable or disable the plugin.
in FreeImage after registration or retrieve the formatid, assigned by FreeImage. The class handles the callback functions, garbage collector and pointer operation to make the implementation as user friendly as possible.

How to: There are two functions that need to be implemented: GetImplementedMethods and FormatProc. GetImplementedMethods is used by the constructor of the abstract class. FreeImage wants a list of the implemented functions. Each function is represented by a function pointer (a .NET Delegate). In case a function is not implemented FreeImage receives an empty delegate. To tell the constructor which functions have been implemented the information is represented by a disjunction of LocalPluginMethodFlags.

For example: return MethodFlags.LoadProc | MethodFlags.SaveProc;

The above statement means that LoadProc and SaveProc have been implemented by the user. Keep in mind, that each function has a standard implementation that has static return values that may cause errors if listed in GetImplementedMethods without a real implementation.

FormatProc is used by some checks of FreeImage and must be implemented. LoadProc(FreeImageIO, fi_handle, Int32, Int32, IntPtr) for example can be implemented if the plugin supports reading, but it doesn't have to, the plugin could only be used to save an already loaded bitmap in a special format.

See Also

Reference
FreelImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPlugin Constructor

The constructor automatically registers the plugin in FreeImage. To do this it prepares a FreeImage defined structure with function pointers to the implemented functions or null if not implemented. Before registering the functions they are pinned in memory so the garbage collector can't move them around in memory after we passed there addresses to FreeImage.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public LocalPlugin()
```

### See Also

Reference
- LocalPlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPlugin Properties

The LocalPlugin type exposes the following members.

## Properties

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Gets or sets if the plugin is enabled.</td>
</tr>
<tr>
<td>Format</td>
<td>Gets the <code>FREE_IMAGE_FORMAT</code> FreeImage assigned to this plugin.</td>
</tr>
<tr>
<td>Registered</td>
<td>Gets if the plugin was registered successfully.</td>
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</tbody>
</table>

See Also

Reference

LocalPlugin Class
FreelImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginEnabled Property

Gets or sets if the plugin is enabled.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public bool Enabled { get; set; }
```

**Property Value**  
Type: **Boolean**

### See Also

**Reference**  
- LocalPlugin Class  
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
LocalPluginFormat Property

Gets the FREE_IMAGE_FORMAT FreeImage assigned to this plugin.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FREE_IMAGE_FORMAT Format { get; }
```

### Property Value

Type: FREE_IMAGE_FORMAT

### See Also

Reference  
LocalPlugin Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
LocalPluginRegistered Property

Gets if the plugin was registered successfully.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```
public bool Registered { get; }
```

Property Value

Type: Boolean

## See Also

Reference

- LocalPlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
The `LocalPlugin` type exposes the following members.

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</tr>
</tbody>
</table>
from an unmanaged stream.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RegExprProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>SaveProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Seek</td>
<td>Seeks in an unmanaged stream.</td>
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<tr>
<td>SupportsExportBPPProc</td>
<td>Function that can be implemented.</td>
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<td>SupportsExportTypeProc</td>
<td>Function that can be implemented.</td>
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<tr>
<td>SupportsICCProfilesProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Tell</td>
<td>Retrieves the position of an unmanaged stream.</td>
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<tr>
<td>ToString</td>
<td>Returns a string that represents the current object. (Inherited from Object.)</td>
</tr>
<tr>
<td>ValidateProc</td>
<td>Function that can be implemented.</td>
</tr>
<tr>
<td>Write</td>
<td>Writes to an unmanaged stream.</td>
</tr>
<tr>
<td>WriteByte</td>
<td>Writes a single byte to an unmanaged stream.</td>
</tr>
</tbody>
</table>
See Also

Reference
LocalPlugin Class
FreelImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginCloseProc
Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected virtual void CloseProc(
    ref FreeImageIO io,
    fi_handle handle,
    IntPtr data
)
```

**Parameters**

- **io**
  - Type: FreeImageAPI.IOFreeImageIO

- **handle**
  - Type: FreeImageAPI.IOfi_handle
  - [Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.CloseProc(FreeImageAPI.IO.FreeImageIO@]

- **data**
  - Type: SystemIntPtr
See Also

Reference
- LocalPlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginDescriptionProc Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
protected virtual string DescriptionProc()
```

### Return Value

Type: **String**


### See Also

Reference
- LocalPlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreImage.NET Homepage  
Help improve this Documentation: Join the Project
LocalPluginExtensionListProc Method

Function that can be implemented.

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
protected virtual string ExtensionListProc()
```

Return Value
Type: String


See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginFormatProc Method

Implementation of FormatProc

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected abstract string FormatProc()
```

**Return Value**

Type: **String**

A string containing the plugins format.

### See Also

**Reference**
- LocalPlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginGetImplementedMethods Method

Function that returns a bitfield containing the implemented methods.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

![Syntax](https://example.com/csharp-syntax.png)

**Return Value**  
Type: LocalPluginMethodFlags  
Bitfield of the implemented methods.

**See Also**

Reference  
LocalPlugin Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
LocalPluginLoadProc Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
protected virtual FIBITMAP LoadProc(
    ref FreeImageIO io,
    fi_handle handle,
    int page,
    int flags,
    IntPtr data
)
```

### Parameters

**io**
Type: FreeImageAPI.IOFreeImageIO

**handle**
Type: FreeImageAPI.IOfi_handle
[Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.LoadProc(FreeImageAPI.IO.FreeImageIO@]

**page**
Type: SystemInt32
[Missing <param name="page"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.LoadProc(FreeImageAPI.IO.FreeImageIO@]

**flags**
Type: `SystemInt32`  

`data`  
Type: `SystemIntPtr`  

Return Value  
Type: `FIBITMAP`  

See Also  
Reference  
LocalPlugin Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
LocalPluginMimeProc

Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
protected virtual string MimeProc()
```

### Return Value

**Type:** String  

## See Also

**Reference**  
LocalPlugin Class  
FreeImageAPI.Plugins Namespace
LocalPluginOpenProc

Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
protected virtual IntPtr OpenProc(
    ref FreeImageIO io,
    fi_handle handle,
    bool read
)
```

### Parameters

**io**

Type: FreeImageAPI.IOFreeImageIO

[Missing <param name="io"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.OpenProc(FreeImageAPI.IO.Frei..."

**handle**

Type: FreeImageAPI.IOfi_handle

[Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.OpenProc(FreeImageAPI.IO.Frei..."

**read**

Type: SystemBoolean

[Missing <param name="read"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.OpenProc(FreeImageAPI.IO.Frei..."
Return Value
Type: IntPtr

[Missing <returns> documentation for
"M:FreeImageAPI.Plugins.LocalPlugin.OpenProc(FreeImageAPI.IO.FreeImageIO@,Freel]

See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginPageCapabilityProc Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected virtual int PageCapabilityProc(
    ref FreeImageIO io,
    fi_handle handle,
    IntPtr data
)
```

### Parameters

**io**
- Type: `FreeImageAPI.IOFreeImageIO`  

**handle**
- Type: `FreeImageAPI.IOFi_handle`  

**data**
- Type: `System(IntPtr)`  
[Missing <param name="data"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.PageCapabilityProc(FreeImageAPI.IO.FreeImageNETIntPtr)"

```
Return Value
Type: Int32

See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginPageCountProc
Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
C#

protected virtual int PageCountProc(
    ref FreeImageIO io,
    fi_handle handle,
    IntPtr data
)
```

### Parameters

**io**
Type: FreeImageAPI.IOFreeImageIO

**handle**
Type: FreeImageAPI.IOfi_handle
[Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.PageCountProc(Freelmaç

**data**
Type: SystemIntPtr
[Missing <param name="data"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.PageCountProc(Freelmaç
Return Value
Type: Int32

See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginRead Method

Reads from an unmanaged stream.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
protected int Read(
    FreeImageIO io,
    fi_handle handle,
    uint size,
    uint count,
    ref byte[] buffer
)
```

### Parameters

**io**  
Type: FreeImageAPI.IOFreeImageIO

**handle**  
Type: FreeImageAPI.IOfi_handle

**size**  
Type: System.UInt32

**count**
Type: System.UInt32

[Missing <param name="count"/> documentation for

buffer

Type: System.Byte

[Missing <param name="buffer"/> documentation for

Return Value

Type: Int32

[Missing <returns> documentation for

See Also

Reference

LocalPlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPlugin ReadByte Method

Reads a single byte from an unmanaged stream.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
protected int ReadByte(
    FreeImageIO io,
    fi_handle handle
)
```

### Parameters

**io**  
Type: FreeImageAPI.IOFreeImageIO  
[Missing <param name="io"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.ReadByte(FreeImageAPI.IO.FreeImageIO,F"

**handle**  
Type: FreeImageAPI.IOfi_handle  
[Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.ReadByte(FreeImageAPI.IO.FreeImageIO,F"

### Return Value

Type: Int32  
[Missing <returns> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.ReadByte(FreeImageAPI.IO.FreeImageIO,F"

### See Also
Reference

LocalPlugin Class
FreelImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginRegExprProc

Method

Function that can be implemented.

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

protected virtual string RegExprProc()

Return Value

Type: String

See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace
LocalPluginSaveProc Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
protected virtual bool SaveProc(
    ref FreeImageIO io,
    FIBITMAP dib,
    fi_handle handle,
    int page,
    int flags,
    IntPtr data
)
```

### Parameters

**io**
- Type: FreeImageAPI.IOFreeImageIO
  [Missing <param name="io"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.SaveProc(FreeImageAPI.IO.FreeImageIO@]

**dib**
- Type: FreeImageAPI.FIFIBITMAP
  [Missing <param name="dib"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.SaveProc(FreeImageAPI.IO.FreeImageIO@]

**handle**
- Type: FreeImageAPI.IOfi_handle
  [Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.SaveProc(FreeImageAPI.IO.FreeImageIO@]
page
Type: SystemInt32
[Missing <param name="page"/> documentation for

flags
Type: SystemInt32
[Missing <param name="flags"/> documentation for

data
Type: SystemIntPtr
[Missing <param name="data"/> documentation for

Return Value
Type: Boolean
[Missing <returns> documentation for

See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPlugin Seek Method

Seeks in an unmanaged stream.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected int Seek(
    FreeImageIO io,
    fi_handle handle,
    int offset,
    SeekOrigin origin
)
```

### Parameters

- **io**
  - Type: FreeImageAPI.IOFreeImageIO  
    [Missing <param name="io"/> documentation for  
    "M:FreeImageAPI.Plugins.LocalPlugin.Seek(FreeImageAPI.IO.FreeImageIO,FreeImageNET.dll)"
  
- **handle**
  - Type: FreeImageAPI.IOfi_handle  
    [Missing <param name="handle"/> documentation for  
    "M:FreeImageAPI.Plugins.LocalPlugin.Seek(FreeImageAPI.IO.FreeImageIO,FreeImageNET.dll)"
  
- **offset**
  - Type: System.Int32  
    [Missing <param name="offset"/> documentation for  
    "M:FreeImageAPI.Plugins.LocalPlugin.Seek(FreeImageAPI.IO.FreeImageIO,FreeImageNET.dll)"
  
- **origin**
  - Type: System.IOSeekOrigin
Return Value
Type: Int32

See Also
Reference
- LocalPlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginSupportsExportBPPPF

Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins
**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
protected virtual bool SupportsExportBPPProc(
    int bpp
)
```

Parameters

*bpp*
Type: System.Int32


Return Value
Type: Boolean


See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace
LocalPluginSupportsExportTypeProc Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
protected virtual bool SupportsExportTypeProc(FREE_IMAGE_TYPE type)
```

### Parameters

**type**

Type: FreeImageAPI.FREE_IMAGE_TYPE

[Missing <param name="type"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.SupportsExportTypeProc(FreeImageAPI.FREE_IMAGE_TYPE)"

### Return Value

Type: Boolean

[Missing <returns> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.SupportsExportTypeProc(FreeImageAPI.FREE_IMAGE_TYPE)"

## See Also

Reference

LocalPlugin Class

FreeImageAPI.Plugins Namespace
LocalPluginSupportsICCProfilesProc Method

Function that can be implemented.

**Namespace:** FreImageAPI.Plugins

**Assembly:** FreImageNET (in FreImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
protected virtual bool SupportsICCProfilesProc()
```

**Return Value**

Type: Boolean


**See Also**

Reference
- LocalPlugin Class
- FreImageAPI.Plugins Namespace

Contact/Feedback: FreImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginTell Method

Retrieves the position of an unmanaged stream.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
protected int Tell(
    FreeImageIO io,
    fi_handle handle
)
```

### Parameters

- **io**
  - Type: `FreeImageAPI.IOFreeImageIO`  
  [Missing <param name="io"/> documentation for
  "M:FreeImageAPI.Plugins.LocalPlugin.Tell(FreeImageAPI.IO.FreeImageIO,FreeImageAPI.IO.fi_handle)"

- **handle**
  - Type: `FreeImageAPI.IOfi_handle`  
  [Missing <param name="handle"/> documentation for
  "M:FreeImageAPI.Plugins.LocalPlugin.Tell(FreeImageAPI.IO.FreeImageIO,FreeImageAPI.IO.fi_handle)"

### Return Value

- **Type:** `Int32`  
  [Missing <returns> documentation for
  "M:FreeImageAPI.Plugins.LocalPlugin.Tell(FreeImageAPI.IO.FreeImageIO,FreeImageAP

### See Also
LocalPluginValidateProc Method

Function that can be implemented.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
protected virtual bool ValidateProc(
    ref FreeImageIO io,
    fi_handle handle
)
```

**Parameters**

- **io**
  - Type: FreeImageAPI.IOFreeImageIO
  - [Missing <param name="io"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.ValidateProc(FreeImageAPI.IO.FreeImageIO@,FreeImageAPI.IO.fi_handle)"

- **handle**
  - Type: FreeImageAPI.IOfi_handle
  - [Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.ValidateProc(FreeImageAPI.IO.FreeImageIO@,FreeImageAPI.IO.fi_handle)"

**Return Value**

- **Type:** Boolean
See Also

Reference
LocalPlugin Class
FreelImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPluginWrite Method

Writes to an unmanaged stream.

**Namespace:** FreeImageAPI.Plugins
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
protected int Write(
    FreeImageIO io,
    fi_handle handle,
    uint size,
    uint count,
    ref byte[] buffer
)
```

### Parameters

- **io**
  - Type: FreeImageAPI.IO
  - [Missing <param name="io"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.Write(FreeImageAPI.IO.FreeImageIO,FreeImageIO,FreeImageNET.dll,Version=3.17.0.4,3.17.0)"

- **handle**
  - Type: FreeImageAPI.IO
  - [Missing <param name="handle"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.Write(FreeImageAPI.IO.FreeImageIO,FreeImageIO,FreeImageNET.dll,Version=3.17.0.4,3.17.0)"

- **size**
  - Type: System.UInt32
  - [Missing <param name="size"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.Write(FreeImageAPI.IO.FreeImageIO,FreeImageIO,FreeImageNET.dll,Version=3.17.0.4,3.17.0)"

- **count**
  - [Missing <param name="count"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.Write(FreeImageAPI.IO.FreeImageIO,FreeImageIO,FreeImageNET.dll,Version=3.17.0.4,3.17.0)"

- **buffer**
  - [Missing <param name="buffer"/> documentation for "M:FreeImageAPI.Plugins.LocalPlugin.Write(FreeImageAPI.IO.FreeImageIO,FreeImageIO,FreeImageNET.dll,Version=3.17.0.4,3.17.0)"


Type: System.UInt32

buffer
Type: System.Byte

Return Value
Type: Int32

See Also
Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace

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LocalPlugin

WriteByte Method

Writers a single byte to an unmanaged stream.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```csharp
protected int WriteByte(
    FreeImageIO io,
    fi_handle handle,
    byte value
)
```

### Parameters

**io**
- **Type:** FreeImageAPI.IOFreeImageIO
  
**handle**
- **Type:** FreeImageAPI.IO\_fi\_handle
  
**value**
- **Type:** System\_Byte
  
### Return Value
- **Type:** Int32
See Also

Reference
LocalPlugin Class
FreeImageAPI.Plugins Namespace

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Help improve this Documentation: Join the Project
The `LocalPlugin` type exposes the following members.

## Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>format</code></td>
<td>The format id assigned to the plugin.</td>
</tr>
<tr>
<td><code>implementedMethods</code></td>
<td>A copy of the functions used to register.</td>
</tr>
<tr>
<td><code>registered</code></td>
<td>When true the plugin was registered successfully else false.</td>
</tr>
</tbody>
</table>

## See Also

Reference
- `LocalPlugin Class`
- `FreelImageAPI.Plugins Namespace`

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
LocalPlugin format Field

The format id assiged to the plugin.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

▲ Syntax

```csharp
protected FREE_IMAGE_FORMAT format
```

Field Value
Type: **FREE_IMAGE_FORMAT**

▲ See Also

Reference
LocalPlugin Class  
FreeImageAPI.Plugins Namespace
LocalPluginImplementedMethods Field

A copy of the functions used to register.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
protected readonly LocalPluginMethodFlags implementedMethods
```

### Field Value

Type: `LocalPluginMethodFlags`

## See Also

**Reference**

- LocalPlugin Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://freeimage.net)  
Help improve this Documentation: [Join the Project](https://github.com/freeimage-net/freeimage-net)
LocalPluginregistered Field

When true the plugin was registered successfully else false.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
protected readonly bool registered
```

**Field Value**  
**Type:** Boolean

### See Also

**Reference**  
LocalPlugin Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
LocalPluginMethodFlags

Enumeration

MethodFlags defines values to fill a bitfield telling which functions have been implemented by a plugin.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
[FlagsAttribute]
protected enum MethodFlags
```

### Members

<table>
<thead>
<tr>
<th>Member name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
<td>No methods implemented.</td>
</tr>
<tr>
<td>DescriptionProc</td>
<td>1</td>
<td>DescriptionProc has been implemented.</td>
</tr>
<tr>
<td>ExtensionListProc</td>
<td>2</td>
<td>ExtensionListProc has been implemented.</td>
</tr>
<tr>
<td>RegExprProc</td>
<td>4</td>
<td>RegExprProc has been implemented.</td>
</tr>
<tr>
<td>OpenProc</td>
<td>8</td>
<td>OpenProc has been implemented.</td>
</tr>
<tr>
<td>Procedure</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>CloseProc</td>
<td>16</td>
<td>CloseProc has been implemented.</td>
</tr>
<tr>
<td>PageCountProc</td>
<td>32</td>
<td>PageCountProc has been implemented.</td>
</tr>
<tr>
<td>PageCapabilityProc</td>
<td>64</td>
<td>PageCapabilityProc has been implemented.</td>
</tr>
<tr>
<td>LoadProc</td>
<td>128</td>
<td>LoadProc has been implemented.</td>
</tr>
<tr>
<td>SaveProc</td>
<td>256</td>
<td>SaveProc has been implemented.</td>
</tr>
<tr>
<td>ValidateProc</td>
<td>512</td>
<td>ValidateProc has been implemented.</td>
</tr>
<tr>
<td>MimeProc</td>
<td>1024</td>
<td>MimeProc has been implemented.</td>
</tr>
<tr>
<td>SupportsExportBPPProc</td>
<td>2048</td>
<td>SupportsExportBPPProc has been implemented.</td>
</tr>
<tr>
<td>SupportsExportTypeProc</td>
<td>4096</td>
<td>SupportsExportTypeProc has been implemented.</td>
</tr>
<tr>
<td>SupportsICCProfilesProc</td>
<td>8192</td>
<td>SupportsICCProfilesProc has been implemented.</td>
</tr>
</tbody>
</table>

**See Also**

Reference
FreelImageAPI.Plugins Namespace

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Help improve this Documentation: Join the Project
MimeProc Delegate

Delegate to a function that returns a string which contains the plugin's mime type.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate string MimeProc()
```

#### Return Value

Type: **String**

### See Also

Reference  
FreeImageAPI.Plugins Namespace
OpenProc Delegate

Delegate to a function that opens a file.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public delegate IntPtr OpenProc(
    ref FreeImageIO io,
    fi_handle handle,
    bool read
)
```

### Parameters

- **io**
  - Type: FreeImageAPI.IOFreeImageIO
- **handle**
  - Type: FreeImageAPI.IOfi_handle
- **read**
  - Type: System.Boolean

### Return Value

Type: IntPtr

### See Also

Reference  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PageCapabilityProc Delegate

UNKNOWN

Namespace: FreeImageAPI.Plugins  
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#

```csharp
public delegate int PageCapabilityProc(
    ref FreeImageIO io,
    fi_handle handle,
    IntPtr data
)
```

Parameters

- `io`  
  Type: FreeImageAPI.IOFreeImageIO  
- `handle`  
  Type: FreeImageAPI.IOfi_handle  
- `data`  
  Type: SystemIntPtr

Return Value

Type: Int32

See Also

Reference  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PageCountProc Delegate

Delegate to a function that returns the number of pages of a multipage bitmap if the plugin is capable of handling multipage bitmaps.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate int PageCountProc(  
    ref FreeImageIO io,  
    fi_handle handle,  
    IntPtr data
)
```

### Parameters

- **io**  
  Type: FreeImageAPI.IOFreeImageIO
- **handle**  
  Type: FreeImageAPI.IOfi_handle
- **data**  
  Type: SystemIntPtr

### Return Value

Type: Int32

### See Also

Reference  
FreeImageAPI.Plugins Namespace
Plugin Structure

The structure contains function pointers that make up a FreeImage plugin.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
[SerializableAttribute]
public struct Plugin
```

The `Plugin` type exposes the following members.

### Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equals</td>
<td>Indicates whether this instance and a specified object are equal. (Inherited from <code>ValueType</code>.)</td>
</tr>
<tr>
<td>GetHashCode</td>
<td>Returns the hash code for this instance. (Inherited from <code>ValueType</code>.)</td>
</tr>
<tr>
<td>GetType</td>
<td>Gets the <code>Type</code> of the current instance. (Inherited from <code>Object</code>.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance.</td>
</tr>
</tbody>
</table>
(Inherited from **ValueType**.)

### Top

#### Fields

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>closeProc</td>
<td>Delegate to a function that closes a previously opened file.</td>
</tr>
<tr>
<td>descriptionProc</td>
<td>Delegate to a function that returns a string which contains a more detailed description.</td>
</tr>
<tr>
<td>extensionListProc</td>
<td>Delegate to a function that returns a comma separated list of file extensions the plugin can read or write.</td>
</tr>
<tr>
<td>formatProc</td>
<td>Delegate to a function that returns a string which describes the plugins format.</td>
</tr>
<tr>
<td>loadProc</td>
<td>Delegate to a function that loads and decodes a bitmap into memory.</td>
</tr>
<tr>
<td>mimeProc</td>
<td>Delegate to a function that returns a string which contains the plugin's mime type.</td>
</tr>
<tr>
<td>openProc</td>
<td>Delegate to a function that opens a file.</td>
</tr>
<tr>
<td>Function Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>pageCapabilityProc</td>
<td>Delegate to a function that returns the number of pages of a multipage bitmap if the plugin is capable of handling multipage bitmaps.</td>
</tr>
<tr>
<td>pageCountProc</td>
<td>Delegate to a function that returns the number of pages of a multipage bitmap if the plugin is capable of handling multipage bitmaps.</td>
</tr>
<tr>
<td>regExprProc</td>
<td>Delegate to a function that returns a regular expression that can be used to identify whether a file can be handled by the plugin.</td>
</tr>
<tr>
<td>saveProc</td>
<td>Delegate to a function that saves a bitmap.</td>
</tr>
<tr>
<td>supportsExportBPPProc</td>
<td>Delegate to a function that returns whether the plugin can handle the specified color depth.</td>
</tr>
<tr>
<td>supportsExportTypeProc</td>
<td>Delegate to a function that returns whether the plugin can handle the specified image type.</td>
</tr>
<tr>
<td>supportsICCProfilesProc</td>
<td>Delegate to a function that returns whether the plugin can handle ICC-Profiles.</td>
</tr>
<tr>
<td>validateProc</td>
<td>Delegate to a function that determines whether the source is a valid image.</td>
</tr>
</tbody>
</table>
Plugin Methods

The Plugin type exposes the following members.

## Methods

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<td>(Inherited from ValueType.)</td>
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<tr>
<td>GetType</td>
<td>Gets the Type of the current instance.</td>
</tr>
<tr>
<td></td>
<td>(Inherited from Object.)</td>
</tr>
<tr>
<td>ToString</td>
<td>Returns the fully qualified type name of this instance.</td>
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<td></td>
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Top

### See Also

Reference

- Plugin Structure
- FreeImageAPI.Plugins Namespace

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Help improve this Documentation: Join the Project
The **Plugin** type exposes the following members.

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<tr>
<td>formatProc</td>
<td>Delegate to a function that returns a string which describes the plugins format.</td>
</tr>
<tr>
<td>loadProc</td>
<td>Delegate to a function that loads and decodes a bitmap into memory.</td>
</tr>
<tr>
<td>mimeProc</td>
<td>Delegate to a function that returns a string which contains the plugin’s mime type.</td>
</tr>
<tr>
<td>Proc Type</td>
<td>Delegate to a function description</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>openProc</td>
<td>Delegate to a function that opens a file.</td>
</tr>
<tr>
<td>pageCapabilityProc</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>pageCountProc</td>
<td>Delegate to a function that returns the number of pages of a multipage bitmap if the plugin is capable of handling multipage bitmaps.</td>
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<td>Delegate to a function that returns whether the plugin can handle ICC-Profiles.</td>
</tr>
<tr>
<td>validateProc</td>
<td>Delegate to a function</td>
</tr>
</tbody>
</table>
that determines whether the source is a valid image.
Plugin closeProc Field

Delegate to a function that closes a previosly opened file.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public CloseProc closeProc
```

### Field Value

**Type:** CloseProc

### See Also

Reference
- Plugin Structure
- FreeImageAPI.Plugins Namespace

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PlugindescriptionProc Field

Delegate to a function that returns a string which contains a more detailed description.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public DescriptionProc descriptionProc
```

**Field Value**  
Type: DescriptionProc

### See Also

Reference  
Plugin Structure  
FreeImageAPI.Plugins Namespace

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Plugin extensionListProc Field

Delegate to a function that returns a comma separated list of file extensions the plugin can read or write.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ExtensionListProc extensionListProc
```

### Field Value

Type: `ExtensionListProc`

### See Also

Reference  
Plugin Structure  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
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PluginFormatProc Field

Delegate to a function that returns a string which describes the plugins format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public FormatProc formatProc
```

### Field Value

Type: FormatProc

### See Also

Reference
- Plugin Structure
- FreeImageAPI.Plugins Namespace

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#### Plugin.loadProc Field

Delegate to a function that loads and decodes a bitmap into memory.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

#### Syntax

```
public LoadProc loadProc
```

#### Field Value

**Type:** LoadProc

#### See Also

- Reference
  - Plugin Structure
  - FreeImageAPI.Plugins Namespace

**Contact/Feedback:** FreeImage.NET Homepage  
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PluginmimeProc Field

Delegate to a function that returns a string which contains the plugin's mime type.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public MimeProc mimeProc
```

**Field Value**

Type: MimeProc

### See Also

Reference

- Plugin Structure
- FreeImageAPI.Plugins Namespace

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PluginopenProc Field

Delegate to a function that opens a file.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

C#  

```csharp
public OpenProc openProc
```

**Field Value**

**Type:** OpenProc

**See Also**

Reference  
Plugin Structure  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
Plugin

pageCapabilityProc

Field

UNKNOWN

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public PageCapabilityProc pageCapabilityProc
```

Field Value

Type: PageCapabilityProc

See Also

Reference
Plugin Structure
FreeImageAPI.Plugins Namespace
Plugin pageCountProc Field

Delegate to a function that returns the number of pages of a multipage bitmap if the plugin is capable of handling multipage bitmaps.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public PageCountProc pageCountProc
```

**Field Value**

Type: `PageCountProc`

**See Also**

Reference
- Plugin Structure
- FreeImageAPI.Plugins Namespace

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PluginregExprProc Field

Delegate to a function that returns a regular expression that can be used to identify whether a file can be handled by the plugin.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public RegExprProc regExprProc
```

Field Value  
Type: RegExprProc

### See Also

Reference  
**Plugin Structure**  
**FreeImageAPI.Plugins Namespace**

Contact/Feedback: FreeImage.NET Homepage  
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Plugins_saveProc Field

Delegate to a function that saves a bitmap.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public SaveProc saveProc
```

### Field Value

Type: **SaveProc**

### See Also

Reference
- Plugin Structure
- FreeImageAPI.Plugins Namespace

Contact/Feedback: [FreeImage.NET Homepage](#)
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PluginsupportsExportBPPProc Field

Delegate to a function that returns whether the plugin can handle the specified color depth.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public SupportsExportBPPProc supportsExportBPPProc
```

**Field Value**
Type: SupportsExportBPPProc

**See Also**

Reference  
Plugin Structure  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginssupportsExportTypeProc Field

Delegate to a function that returns whether the plugin can handle the specified image type.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public SupportsExportTypeProc supportsExportTypeProc
```

**Field Value**  
**Type:** SupportsExportTypeProc

**See Also**

Reference
- Plugin Structure  
- FreeImageAPI.Plugins Namespace

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PluginsupportsICCProfilesProc Field

Delegate to a function that returns whether the plugin can handle ICC-Profiles.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public SupportsICCProfilesProc supportsICCProfile;
```

Field Value  
Type: SupportsICCProfilesProc

**See Also**

Reference  
Plugin Structure  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
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Plugin\_validateProc Field

Delegate to a function that determines whether the source is a valid image.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public ValidateProc validateProc
```

**Field Value**  
Type: ValidateProc

### See Also

Reference  
Plugin Structure  
FreeImageAPI.Plugins Namespace

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PluginRepository Class

Class representing all registered FreeImagePlugin in FreeImage.

Inheritance Hierarchy

```
  System
    Object
    FreeImageAPI.Plugins
      PluginRepository
```

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```
public static class PluginRepository
```

The PluginRepository type exposes the following members.

Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMP</td>
<td>Windows or OS/2 Bitmap File (*.BMP)</td>
</tr>
<tr>
<td>BuiltInPlugins</td>
<td>Gets a list of built-in plugins.</td>
</tr>
<tr>
<td>CUT</td>
<td>Dr. Halo (*.CUT)</td>
</tr>
<tr>
<td>DDS</td>
<td>DirectDraw Surface (*.DDS)</td>
</tr>
<tr>
<td>EXR</td>
<td>OpenEXR format (*.EXR)</td>
</tr>
<tr>
<td>FAXG3</td>
<td>Raw Fax format CCITT G3</td>
</tr>
<tr>
<td>Plugin</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>FIFCount</td>
<td>Gets the number of registered plugins.</td>
</tr>
<tr>
<td>GIF</td>
<td>Graphics Interchange Format (*.GIF)</td>
</tr>
<tr>
<td>HDR</td>
<td>High Dynamic Range (*.HDR)</td>
</tr>
<tr>
<td>ICO</td>
<td>Independent JPEG Group (*.JPG, *.JIF, *.JPEG, *.JPE)</td>
</tr>
<tr>
<td>IFF</td>
<td>Amiga IFF (*.IFF, *.LBM)</td>
</tr>
<tr>
<td>J2K</td>
<td>JPEG-2000 format (*.J2K, *.J2C)</td>
</tr>
<tr>
<td>JNG</td>
<td>JPEG Network Graphics (*.JNG)</td>
</tr>
<tr>
<td>JP2</td>
<td>JPEG-2000 format (*.JP2)</td>
</tr>
<tr>
<td>JPEG</td>
<td>Independent JPEG Group (*.JPG, *.JIF, *.JPEG, *.JPE)</td>
</tr>
<tr>
<td>KOALA</td>
<td>Commodore 64 Koala format (*.KOA)</td>
</tr>
<tr>
<td>LBM</td>
<td>Amiga IFF (*.IFF, *.LBM)</td>
</tr>
<tr>
<td>LocalPlugins</td>
<td>Gets a list of local plugins.</td>
</tr>
<tr>
<td>MNG</td>
<td>Multiple Network Graphics (*.MNG)</td>
</tr>
<tr>
<td>PBM</td>
<td>Portable Bitmap (ASCII) (*.PBM)</td>
</tr>
<tr>
<td>PBMRAW</td>
<td>Portable Bitmap (BINARY)</td>
</tr>
<tr>
<td>Plugin</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>PCD</td>
<td>Kodak PhotoCD (*.PCD)</td>
</tr>
<tr>
<td>PCX</td>
<td>Zsoft Paintbrush PCX bitmap format (*.PCX)</td>
</tr>
<tr>
<td>PFM</td>
<td>Portable FloatMap (*.PFM)</td>
</tr>
<tr>
<td>PGM</td>
<td>Portable Graymap (ASCII) (*.PGM)</td>
</tr>
<tr>
<td>PGMRAW</td>
<td>Portable Graymap (BINARY) (*.PGM)</td>
</tr>
<tr>
<td>PICT</td>
<td>Macintosh PICT (*.PICT)</td>
</tr>
<tr>
<td>PluginList</td>
<td>Gets a readonly collection of all plugins.</td>
</tr>
<tr>
<td>PNG</td>
<td>Portable Network Graphics (*.PNG)</td>
</tr>
<tr>
<td>PPM</td>
<td>Portable Pixelmap (ASCII) (*.PPM)</td>
</tr>
<tr>
<td>PPMRAW</td>
<td>Portable Pixelmap (BINARY) (*.PPM)</td>
</tr>
<tr>
<td>PSD</td>
<td>Adobe Photoshop (*.PSD)</td>
</tr>
<tr>
<td>RAS</td>
<td>Sun Rasterfile (*.RAS)</td>
</tr>
<tr>
<td>RAW</td>
<td>RAW camera image (<em>.</em>)</td>
</tr>
<tr>
<td>ReadablePlugins</td>
<td>Gets a list of plugins that are able to read.</td>
</tr>
<tr>
<td>ReadOnlyPlugins</td>
<td>Gets a list of plugins that are</td>
</tr>
</tbody>
</table>
only able to read but not to write.

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGI</td>
<td>Silicon Graphics SGI image format (*.SGI)</td>
</tr>
<tr>
<td>StupidPlugins</td>
<td>Gets a list of plugins that are not able to read or write.</td>
</tr>
<tr>
<td>TARGA</td>
<td>truevision Targa files (*.TGA, *.TARGA)</td>
</tr>
<tr>
<td>TIFF</td>
<td>Tagged Image File Format (*.TIF, *.TIFF)</td>
</tr>
<tr>
<td>WBMP</td>
<td>Wireless Bitmap (*.WBMP)</td>
</tr>
<tr>
<td>WriteablePlugins</td>
<td>Gets a list of plugins that are able to write.</td>
</tr>
<tr>
<td>WriteOnlyPlugins</td>
<td>Gets a list of plugins that are only able to write but not to read.</td>
</tr>
<tr>
<td>XBM</td>
<td>X11 Bitmap Format (*.XBM)</td>
</tr>
<tr>
<td>XPM</td>
<td>X11 Pixmap Format (*.XPM)</td>
</tr>
</tbody>
</table>

**Methods**

<table>
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<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugin(Int32)</td>
<td>Returns an instance of FreelImagePlugin, representing the format at the given</td>
</tr>
<tr>
<td><strong>Plugin(String)</strong></td>
<td>Returns an instance of <code>FreeImagePlugin</code>. The expression is searched in: <code>Format</code>, <code>RegExpr</code>, <code>ValidExtension</code> and <code>ValidFilename</code>.</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Plugin(FREE_IMAGE_FORMAT)</strong></td>
<td>Returns an instance of <code>FreeImagePlugin</code>, representing the given format.</td>
</tr>
<tr>
<td><strong>PluginFromFilename</strong></td>
<td>Returns an instance of <code>FreeImagePlugin</code> for the given filename.</td>
</tr>
<tr>
<td><strong>PluginFromFormat</strong></td>
<td>Returns an instance of <code>FreeImagePlugin</code> for the given format.</td>
</tr>
<tr>
<td><strong>PluginFromMime</strong></td>
<td>Returns an instance of <code>FreeImagePlugin</code> for the given mime.</td>
</tr>
</tbody>
</table>
The `PluginRepository` type exposes the following members.

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<td>Dr. Halo (*.CUT)</td>
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<td>DirectDraw Surface (*.DDS)</td>
</tr>
<tr>
<td>EXR</td>
<td>OpenEXR format (*.EXR)</td>
</tr>
<tr>
<td>FAXG3</td>
<td>Raw Fax format CCITT G3 (*.G3)</td>
</tr>
<tr>
<td>FIFCount</td>
<td>Gets the number of registered plugins.</td>
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<td>Graphics Interchange Format (*.GIF)</td>
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<td>High Dynamic Range (*.HDR)</td>
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<tr>
<td>ICO</td>
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<tr>
<td>IFF</td>
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<td>TIFF</td>
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<td><img src="s" alt="s" /></td>
<td>WBMP</td>
</tr>
</tbody>
</table>
**ReadablePlugins**

Gets a list of plugins that are able to write.

**WriteOnlyPlugins**

Gets a list of plugins that are only able to write but not to read.

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</tr>
</tbody>
</table>

---

**See Also**

Reference

PluginRepository Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepository.BMP Property

Windows or OS/2 Bitmap File (*.BMP)

_namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FreeImagePlugin BMP { get; }
```

Property Value
Type: FreeImagePlugin

See Also

Reference
PluginRepository Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepository.BuiltInPlugins

Property

Gets a list of built-in plugins.

**Namespace**: FreeImageAPI.Plugins  
**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static List<FreeImagePlugin> BuiltInPlugins
```

**Property Value**

Type: `List<FreeImagePlugin>`

**See Also**

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
**PluginRepository.CUT**

Dr. Halo (*.CUT)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin CUT { get; }
```

**Property Value**

Type: FreeImagePlugin

### See Also

- Reference
  - PluginRepository Class
  - FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryDDS Property

DirectDraw Surface (*.DDS)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

C#  

```csharp
public static FreeImagePlugin DDS { get; }
```

### Property Value

Type: FreeImagePlugin

### See Also

- Reference  
  - PluginRepository Class  
  - FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryEXR Property

OpenEXR format (*.EXR)

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```c#
public static FreeImagePlugin EXR { get; }
```

Property Value
Type: FreeImagePlugin

See Also

Reference
PluginRepository Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepository.FAXG3

Property

Raw Fax format CCITT G3 (*.G3)

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImage.NET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

⚠️ Syntax

```csharp
public static FreeImagePlugin FAXG3 { get; }
```

Property Value

Type: FreeImagePlugin

⚠️ See Also

Reference

- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryFIFCount Property

Gets the number of registered plugins.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static int FIFCount { get; }
```

**Property Value**  
Type: Int32

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository.GIF Property

Graphics Interchange Format (*.GIF)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin GIF { get; }
```

**Property Value**  
Type: FreeImagePlugin

### See Also

- Reference  
  - PluginRepository Class  
  - FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryHDR Property

High Dynamic Range (*.HDR)

**Namespace:** FreeImageAPI.Plugins
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin HDR { get; }
```

**Property Value**
Type: FreeImagePlugin

### See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryICO

Property

Independent JPEG Group (.*JPG, .*JIF, .*JPEG, .*JPE)

**Namespace:** FreeImageAPI.Plugins
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public static FreeImagePlugin ICO { get; }
```

**Property Value**

**Type:** FreeImagePlugin

## See Also

**Reference**

PluginRepository Class
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryIFF Property

Amiga IFF (*.IFF, *.LBM)

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FreeImagePlugin IFF { get; }
```

Property Value
Type: FreeImagePlugin

See Also

Reference
PluginRepository Class
FreeImageAPI.Plugins Namespace
PluginRepositoryJ2K Property

JPEG-2000 format (*.J2K, *.J2C)

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static FreeImagePlugin J2K { get; }
```

### Property Value

Type: FreeImagePlugin

### See Also

Reference

- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage

Help improve this Documentation: Join the Project
PluginRepositoryJNG Property

JPEG Network Graphics (*.JNG)

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static FreeImagePlugin JNG { get; }
```

### Property Value

Type: `FreeImagePlugin`

### See Also

- Reference
  - PluginRepository Class
  - FreeImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryJP2 Property

JPEG-2000 format (*.JP2)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static FreeImagePlugin JP2 { get; }
```

Property Value  
Type: FreeImagePlugin

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
**PluginRepositoryJPEG Property**

Independent JPEG Group (*.JPG, *.JIF, *.JPEG, *.JPE)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin JPEG { get; }
```

Property Value  
Type: FreeImagePlugin

### See Also

- Reference  
  - PluginRepository Class  
  - FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryKOALA Property

Commodore 64 Koala format (*.KOA)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FreeImagePlugin KOALA { get; }
```

### Property Value
Type: FreeImagePlugin

### See Also

Reference

PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryLBM Property

Amiga IFF (*.IFF, *.LBM)

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FreeImagePlugin LBM { get; }
```

### Property Value

Type: FreeImagePlugin

### See Also

Reference

- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepository.LocalPlugins Property

Gets a list of local plugins.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static ReadOnlyCollection<FreeImagePlugin>
```

### Property Value

Type: `ReadOnlyCollection<FreeImagePlugin>`

### See Also

- Reference
  - PluginRepository Class
  - FreeImageAPI.Plugins Namespace

---

**Contact/Feedback:** FreeImage.NET Homepage

Help improve this Documentation: Join the Project
PluginRepositoryMNG Property

Multiple Network Graphics (*.MNG)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin MNG { get; }
```

### Property Value

Type: FreeImagePlugin

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository.PBM Property

Portable Bitmap (ASCII) (*.PBM)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin PBM { get; }
```

**Property Value**

Type: FreeImagePlugin

### See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository PBMRAW Property

Portable Bitmap (BINARY) (*.PBM)

**Namespace**: FreeImageAPI.Plugins

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FreeImagePlugin PBMRAW { get; }
```

Property Value

Type: FreeImagePlugin

### See Also

Reference

PluginRepository Class

FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage

Help improve this Documentation: Join the Project
PluginRepository

PCD Property

Kodak PhotoCD (*.PCD)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```c#
public static FreeImagePlugin PCD { get; }
```

**Property Value**

Type: FreeImagePlugin

**See Also**

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryPCX Property

Zsoft Paintbrush PCX bitmap format (*.PCX)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FreeImagePlugin PCX { get; }
```

Property Value  
Type: FreeImagePlugin

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryPFM

Property

Portable FloatMap (*.PFM)

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin PFM { get; }
```

### Property Value

Type: **FreeImagePlugin**

### See Also

Reference

- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage

Help improve this Documentation: Join the Project
PluginRepository.PGM

Property

Portable Graymap (ASCII) (*.PGM)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin PGM { get; }
```

#### Property Value

Type: `FreeImagePlugin`

### See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository PGMRAW Property

Portable Graymap (BINARY) (*.PGM)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin PGMRAW { get; }
```

**Property Value**  
Type: `FreeImagePlugin`

### See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryPICT Property

Macintosh PICT (*.PICT)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FreeImagePlugin PICT { get; }
```

### Property Value

Type: FreeImagePlugin

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository.PluginList Property

Gets a readonly collection of all plugins.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static ReadOnlyCollection<FreeImagePlugin> PluginList
```

**Property Value**

Type: **ReadOnlyCollection<FreeImagePlugin>**

**See Also**

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryPNG Property

Portable Network Graphics (*.PNG)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImagePlugin PNG { get; }
```

**Property Value**

Type: `FreeImagePlugin`

**See Also**

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryPPM Property

Portable Pixelmap (ASCII) (*.PPM)

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

C#  Copy

```csharp
public static FreeImagePlugin PPM { get; }
```

Property Value
Type: FreeImagePlugin

See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryPPMRAW Property

Portable Pixelmap (BINARY) (*.PPM)

**Namespace**: FreeImageAPI.Plugins

**Assembly**: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin PPMRAW { get; }
```

### Property Value

Type: `FreeImagePlugin`

### See Also

Reference

- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: [FreeImage.NET Homepage](https://www.freeimage.net)

Help improve this Documentation: [Join the Project](https://github.com/freeimage/freenet)
PluginRepositoryPSD Property

Adobe Photoshop (*.PSD)

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImagePlugin PSD { get; }
```

**Property Value**

Type: FreeImagePlugin

**See Also**

Reference

- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage

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PluginRepositoryRAS Property

Sun Rasterfile (*.RAS)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin RAS { get; }
```

Property Value  
Type: FreeImagePlugin

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreelImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryRAW Property

RAW camera image (*.*)

**Namespace:** FreeImageAPI.Plugins
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin RAW { get; }
```

**Property Value**

Type: FreeImagePlugin

### See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryReadablePlugin Property

Gets a list of plugins that are able to read.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static List<FreeImagePlugin> ReadablePlugins
```

### Property Value

Type: `List<FreeImagePlugin>`

### See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage
Help improve this Documentation: Join the Project
PluginRepositoryReadOnlyPlugins Property

_gets a list of plugins that are only able to read but not to write.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static List<FreeImagePlugin> ReadOnlyPlugins
```

**Property Value**  
_Type:_ List<FreeImagePlugin>

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository.SGI Property

Silicon Graphics SGI image format (*.SGI)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin SGI { get; }
```

Property Value  
Type: FreeImagePlugin

### See Also

Reference  
- PluginRepository Class  
- FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository.StupidPlugins Property

Gets a list of plugins that are not able to read or write.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static List<FreeImagePlugin> StupidPlugins
```

**Property Value**

Type: List<FreeImagePlugin>

**See Also**

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepository.TARGA Property

truevision Targa files (*.TGA, *.TARGA)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin TARGA {
    get; }
```

### Property Value

Type: FreeImagePlugin

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

Contact/Feedback: FreeImage.NET Homepage  
Help improve this Documentation: Join the Project
PluginRepositoryTIFF Property

Tagged Image File Format (*.TIF, *.TIFF)

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public static FreeImagePlugin TIFF { get; }
```

Property Value
Type: FreeImagePlugin

See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

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PluginRepository.WBMP Property

Wireless Bitmap (*.WBMP)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin WBMP { get; }
```

### Property Value

Type: FreeImagePlugin

### See Also

- Reference
  - PluginRepository Class
  - FreeImageAPI.Plugins Namespace

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Gets a list of plugins that are able to write.

**Namespace:** FreeImageAPI.Plugins

**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static List<FreeImagePlugin> WriteablePlugins
```

**Property Value**

Type: `List<FreeImagePlugin>`

### See Also

Reference

- [PluginRepository Class](#)
- [FreeImageAPI.Plugins Namespace](#)

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PluginRepositoryWriteOnlyPlugins Property

Gets a list of plugins that are only able to write but not to read.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#  
public static List<FreeImagePlugin> WriteOnlyPlugins
```

### Property Value

Type: List<FreeImagePlugin>

### See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

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PluginRepository XBM Property

X11 Bitmap Format (*.XBM)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public static FreeImagePlugin XBM { get; }
```

Property Value  
Type: FreeImagePlugin

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace
PluginRepositoryXPM Property

X11 Pixmap Format (*.XPM)

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin XPM { get; }
```

Property Value  
Type: FreeImagePlugin

### See Also

Reference  
- PluginRepository Class  
- FreeImageAPI.Plugins Namespace

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PluginRepository Methods

The PluginRepository type exposes the following members.

Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugin(Int32)</td>
<td>Returns an instance of FreeImagePlugin, representing the format at the given index.</td>
</tr>
<tr>
<td>Plugin(String)</td>
<td>Returns an instance of FreeImagePlugin. expression is searched in: Format, RegExpr, ValidExtension and ValidFilename.</td>
</tr>
<tr>
<td>Plugin(FREE_IMAGE_FORMAT)</td>
<td>Returns an instance of FreeImagePlugin, representing the given format.</td>
</tr>
<tr>
<td>PluginFromFilename</td>
<td>Returns an instance of FreeImagePlugin.</td>
</tr>
</tbody>
</table>
for the given filename.

<table>
<thead>
<tr>
<th>PluginFromFormat</th>
<th>Returns an instance of FreeImagePlugin for the given format.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PluginFromMime</td>
<td>Returns an instance of FreeImagePlugin for the given mime.</td>
</tr>
</tbody>
</table>

See Also

Reference
- PluginRepository Class
- FreeImageAPI.Plugins Namespace

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## PluginRepository.Plugin Method

### Overload List

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Plugin(Int32)</td>
<td>Returns an instance of <code>FreeImagePlugin</code>, representing the format at the given index.</td>
</tr>
<tr>
<td>Plugin(String)</td>
<td>Returns an instance of <code>FreeImagePlugin</code>. <code>expression</code> is searched in: <code>Format</code>, <code>RegExpr</code>, <code>ValidExtension</code> and <code>ValidFilename</code>.</td>
</tr>
<tr>
<td>Plugin(FREE_IMAGE_FORMAT)</td>
<td>Returns an instance of <code>FreeImagePlugin</code>, representing the given format.</td>
</tr>
</tbody>
</table>

*See Also*
Reference

PluginRepository Class
FreelImageAPI.Plugins Namespace

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PluginRepository.Plugin Method (Int32)

Returns an instance of `FreeImagePlugin`, representing the format at the given index.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImagePlugin Plugin(int index)
```

**Parameters**

`index`  
Type: `System.Int32`  
The index of the representing format.

**Return Value**  
Type: `FreeImagePlugin`  
An instance of `FreeImagePlugin`.

**See Also**

Reference
- PluginRepository Class
- Plugin Overload
- FreeImageAPI.Plugins Namespace
PluginRepository.Plugin Method (String)

Returns an instance of `FreeImagePlugin`. `expression` is searched in: `Format`, `RegExpr`, `ValidExtension` and `ValidFilename`.

**Namespace:** `FreeImageAPI.Plugins`

**Assembly:** `FreeImageNET` (in `FreeImageNET.dll`) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImagePlugin Plugin(
    string expression
)
```

**Parameters**

`expression`

- Type: `System.String`
- The expression to search for.

**Return Value**

- Type: `FreeImagePlugin`
- An instance of `FreeImagePlugin`.

**See Also**

- Reference
- `PluginRepository Class`
- `Plugin Overload`
- `FreeImageAPI.Plugins Namespace`
PluginRepositoryPlugin

Method

(FREE_IMAGE_FORMAT)

Returns an instance of FreeImagePlugin, representing the given format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```c#
public static FreeImagePlugin Plugin(
    FREE_IMAGE_FORMAT fif
)
```

### Parameters

*fif*

Type: FreeImageAPIFREE_IMAGE_FORMAT  
The representing format.

### Return Value

Type: FreeImagePlugin  
An instance of FreeImagePlugin.

### See Also

Reference

PluginRepository Class  
Plugin Overload
FreelmageAPI.Plugins Namespace

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PluginRepository.PluginFromFilename Method

Returns an instance of FreeImagePlugin for the given filename.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImagePlugin PluginFromFilename(string filename)
```

**Parameters**

*filename*

Type: `System.String`  
The valid filename for the plugin.

**Return Value**

Type: `FreeImagePlugin`  
An instance of `FreeImagePlugin`.

**See Also**

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

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PluginRepository.PluginFromFormat Method

Returns an instance of FreeImagePlugin for the given format.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public static FreeImagePlugin PluginFromFormat(
    string format
)
```

### Parameters

`format`  
Type: System.String  
The format of the Plugin.

### Return Value

Type: FreeImagePlugin  
An instance of FreeImagePlugin.

### See Also

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

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PluginRepository.PluginFromMime Method

Returns an instance of FreeImagePlugin for the given mime.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

**Syntax**

```csharp
public static FreeImagePlugin PluginFromMime(
    string mime
)
```

**Parameters**

- **mime**  
  Type: System.String  
  The valid mime for the plugin.

**Return Value**

Type: FreeImagePlugin  
An instance of FreeImagePlugin.

**See Also**

Reference  
PluginRepository Class  
FreeImageAPI.Plugins Namespace

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RegExprProc Delegate

Delegate to a function that returns a regular expression that can be used to identify whether a file can be handled by the plugin.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

## Syntax

```c#
public delegate string RegExprProc()
```

Return Value
Type: String

## See Also

Reference
FreeImageAPI.Plugins Namespace

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SaveProc Delegate

Delegate to a function that saves a bitmap.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate bool SaveProc(
    ref FreeImageIO io,
    FIBITMAP dib,
    fi_handle handle,
    int page,
    int flags,
    IntPtr data
)
```

### Parameters

- **io**
  - Type: FreeImageAPI.IOFreeImageIO
- **dib**
  - Type: FreeImageAPI.FIBITMAP
- **handle**
  - Type: FreeImageAPI.IOfi_handle
- **page**
  - Type: System.Int32
- **flags**
  - Type: System.Int32
- **data**
  - Type: System.IntPtr
Return Value
Type: Boolean

See Also

Reference
FreelImageAPI.Plugins Namespace

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SupportsExportBPPProc Delegate

Delegate to a function that returns whether the plugin can handle the specified color depth.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate bool SupportsExportBPPProc(int bpp)
```

**Parameters**

- `bpp`  
  - Type: `System.Int32`

**Return Value**

- Type: `Boolean`

### See Also

- Reference  
  - FreeImageAPI.Plugins Namespace

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SupportsExportTypeProc Delegate

Delegate to a function that returns whether the plugin can handle the specified image type.

Namespace: FreeImageAPI.Plugins
Assembly: FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

Syntax

```csharp
public delegate bool SupportsExportTypeProc(
    FREE_IMAGE_TYPE type
)
```

Parameters

`type`
Type: FreeImageAPI.FREE_IMAGE_TYPE

Return Value
Type: Boolean

See Also

Reference
FreeImageAPI.Plugins Namespace

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**SupportsICCProfilesProc Delegate**

Delegate to a function that returns whether the plugin can handle ICC-Profiles.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```
public delegate bool SupportsICCProfilesProc()
```

Return Value  
Type: Boolean

### See Also

Reference  
FreeImageAPI.Plugins Namespace

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ValidateProc Delegate

Delegate to a function that determines whether the source defined by and is a valid image.

**Namespace:** FreeImageAPI.Plugins  
**Assembly:** FreeImageNET (in FreeImageNET.dll) Version: 3.17.0.4 (3.17.0)

### Syntax

```csharp
public delegate bool ValidateProc(
    ref FreeImageIO io,
    fi_handle handle
)
```

### Parameters

- **io**  
  Type: FreeImageAPI.IOFreeImageIO

- **handle**  
  Type: FreeImageAPI.IOfi_handle

### Return Value

Type: Boolean

### See Also

- Reference  
  FreeImageAPI.Plugins Namespace

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