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● C#

● Visual Basic

● Visual C++

A Sandcastle Documented Class Library

Vajhoej.Record Namespace

Library for reading and writing binary native structs.

Purpose

It is a library to read and write native structs from and to byte arrays by .NET programs in a way that is natural for .NET.

It's main purpose is to be used by the NISAM library.

Java port

The library is a port of a similar Java library, so an occasional Java'ism may be found.

Getting started

To use the library you need to:

- create POCO classes that contains all the fields in the native structs
- put annotations on the class and the fields that tell the library how the data are mapped to the native structs
- write the code that uses the library and the new POCO classes

Note:

- the POCO classes should have a no args constructor
- the library does not care whether you use private fields and public properties or public fields (the first is .NET best practice)
- all fields except static fields must have attributes defining reading/writing

Examples:

POCO class

```
[Struct]
public class Data
{
    [StructField(N=0, Type=FieldType.INT4)]
    private int iv;
    [StructField(N=1, Type=FieldType.FP8)]
    private double xv;
    [StructField(N=2, Type=FieldType.FIXSTR, Length=8, Encoding="IS")]
    private String sv;
    public int Iv
    {
        get { return iv; }
        set { iv = value; }
    }
    public double Xv
    {
        get { return xv; }
        set { xv = value; }
    }
    public string Sv
```

```

    {
        get { return sv; }
        set { sv = value; }
    }
}

```

The class got a [Struct] attribute. Each field in the class got a [StructField] attribute with an element N that determines the order of the fields and an element type that describes the datatype in the native struct plus some optional elements that are needed for some field types.

Code fragments

```

// read
StructReader sr = new StructReader(somebytearray);
Data obj = sr.Read<Data>(typeof(Data));
// write
Data obj = new Data();
...
StructWriter sw = new StructWriter();
sw.Write(obj);
byte[] ba = sw.GetBytes();

```

Arrays

To specify a field as an array put an @Array annotation on the field and make the .NET type an array.

Sub structs

To specify a field as a sub struct just specify Type=FieldType.STRUCT in the [StructField] attribute.

Polymorphism

The Record library supports polymorphism in records.

You must use the [Selector] attribute on the last field in the super class.

```

[Struct]
public class SuperData

```

```

{
    [StructField(N=0,Type=FieldType.INT4)]
    private int id;
    [StructField(N=1,Type=FieldType.INT4)]
    [Selector]
    [SubType(Value=1,Type=typeof(DataX))]
    [SubType(Value=2,Type=typeof(DataY))]
    private int typ;
    public int Id
    {
        get { return id; }
        set { id = value; }
    }
    public int Typ
    {
        get { return typ; }
        set { typ = value; }
    }
}

```

Usage is as simple as:

```
Data obj = sr.Read<Data>(typeof(Data));
```

This will actually read DataX or DataY instances depending on the value of the typ field.

Note that the numbering of the struct fields continue in the sub class - it does not reset to zero.

System requirements

- .NET 2.0 or newer

License

All the C# code is licensed under the [Apache License, Version 2.0.](#)

Author, bug reports etc.

This library is written by Arne Vajhoej (arne@vajhoej.dk).

Bug reports, bug fixes and comments in general are welcome.

Since this is a hobby project, then I can not give any guarantees about timeline for new releases.

Version history:

1.0

Initial release (February 2011).

1.1

More advanced length providers and some new struct types (May 2013).

- Types

All Types Classes Enumerations Delegates

Name	Descr
Alignment	Enum Alignment specifies alignment with Annotation for arrays.
ArrayFieldAttribute	Class TimeUtil converts between bytes w/ BigDecimal objects.
BCDUtil	Converts a selector of any type to a usable Get number of elements in array. Note: can arrays.
ConvertSelector	Enum Endian specifies endianess within r Class FieldInfo contains information about conversions.
ElementsProvider	Enum FieldType specifies native struct ty Semantics:
Endian	
FieldInfo	

enum value	description	attribute
INT1		
INT2		
INT4		
INT8		
UINT1		
UINT2		
UINT4		

FP4		
FP8		
INTX		length <byte used>
FIXSTR	Fixed length string	length <leng string encod <encod used> (defau encod is ISC 8859-
FIXSTRNULLTERM	Fixed length string nul terminated	length <leng string encod <encod used> (defau encod is ISC 8859-
VARSTR	Variable length string with 2 byte length prefix	encod <encod used> (defau encod is ISC 8859- max. length

			32767
	VARFIXSTR	Variable length string with 2 byte length prefix and padded to max length	length<leng string encod<encod used>(default encod is ISC 8859-max. length 32767)
	REMSTR	Remaining data string	encod<encod used>(default encod is ISC 8859-max. length 32767)
	BOOLEAN	Boolean (0=false, other=true)	length<byte used>
	BIT	Bits	length<bits used>(max. is 32)
	JAVATIME	Binary time in Java format (milliseconds since 1-Jan-	

FieldType



	1970)	
UNIXTIME	Binary time in Unix format (seconds since 1-Jan- 1970)	
VMSTIME	Binary time in VMS format (100 nanoseconds since 17- Nov-1858)	
PACKEDBCD	Packed BCD (1 byte = 2 decimal digit nibbles)	length <byte used> decin <num of im decin (defa decin is 0)
ZONEBCD	Zoned BCD (1 byte = 1 zone nibble + 1 decimal digit nibble)	length <byte used> decin <num of im decin zone= <zone value (defa decin s0, de zone : EBCI

VAXFP4	VAX F floating point
VAXFP8	VAX G floating point
STRUCT	Sub struct

[LengthProvider](#)

Get length of field. Note: can only be used with FIXSTRNULTERM, PACKEDBCD and .NET objects.

[MaxLengthProvider](#)

Get max length of struct. Note: can only be used with FIXSTR, FIXSTRNULTERM, PACKEDBCD and .NET objects.

[Util...:::ObjectHandlerProcess<\(Of <T>\)>](#)

Process object.

[Util2...:::ObjectHandlerProcess<\(Of <T>\)>](#)

Process object.

[RecordException](#)

Class RecordException encapsulates exceptions.

[SelectorAttribute](#)

Annotation for selection of sub types.

[StructAttribute](#)

Annotation for structs.

[StructFieldAttribute](#)

Annotation for fields.

[StructInfo](#)

Class StructInfo contains information about reading and/or writing.

[StructInfoCache](#)

Class StructInfoCache caches StructInfo objects.

[StructReader](#)

Class StructReader reads a .NET object from a struct.

[StructWriter](#)

Class StructWriter writes a .NET object to a struct.

[SubClassAndPad](#)

Class SubClassAndPad contains information about a field.

[SubTypeAttribute](#)

Annotation for sub types.

[TimeUtil](#)

Class TimeUtil converts between integers and .NET objects.

[Util...:::TransformerConvert<\(Of <T1, T2>\)>](#)

Convert object.

[Util2...:::TransformerConvert<\(Of <T1, T2>\)>](#)

Convert object.

[Util](#)

Utility class to process lists and to work with .NET objects.

 [Util2](#)

Utility class to process lists and to work with
work even with variable length structs.

Class VAXFloatUtil converts between VA

 [VAXFloatUtil](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Alignment Enumeration

Enum Alignment specifies alignment within native struct.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public enum Alignment  
Public Enumeration Alignment  
public enum class Alignment
```

-Members

Member	Description
PACKED	No padding.
NATURAL	Padding to natural alignment.
ALIGN1	Padding to multipla of 1 alignment (same as PACKED).
ALIGN2	Padding to multipla of 2 alignment.
ALIGN4	Padding to multipla of 4 alignment.
ALIGN8	Padding to multipla of 8 alignment.

See Also

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

ArrayFieldAttribute Class

Annotation for arrays.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
[AttributeUsageAttribute(AttributeTargets.Field)]
public class ArrayFieldAttribute : Attribute

<AttributeUsageAttribute(AttributeTargets.Field)> _
Public Class ArrayFieldAttribute _
    Inherits Attribute

[AttributeUsageAttribute(AttributeTargets::Field)]
public ref class ArrayFieldAttribute : public Attribute
```

-Members

All Members Constructors Properties Methods Explicit Interface Implementations

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 ArrayFieldAttribute()	Default constructor.
 Elements	Number of elements in array.
 Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
 Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type

	information for an interface. (Inherited from Attribute .)
 Attribute:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)
 Attribute:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()()	Returns a string that represents the current object. (Inherited from Object .)
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)

■ Inheritance Hierarchy

[System..::..Object](#)

[System..::..Attribute](#)

Vajhoej.Record..::..ArrayFieldAttribute

See Also

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

ArrayFieldAttribute Constructor

Default constructor.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public ArrayFieldAttribute()
```

```
Public Sub New
```

```
public:  
ArrayFieldAttribute()
```

See Also

[ArrayFieldAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

ArrayFieldAttribute Methods

The [ArrayFieldAttribute](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
=  Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
=  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
=  GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
=  Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
=  GetType()	Gets the type of the current instance. (Inherited from Object .)
=  Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type information for an interface. (Inherited from Attribute .)
=  Attribute..:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)

 Attribute..:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[ArrayFieldAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

ArrayFieldAttribute Properties

The [ArrayFieldAttribute](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Elements	Number of elements in array.
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)

See Also

[ArrayFieldAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
ArrayFieldAttribute..::Elements Property

Number of elements in array.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Elements { get; set; }

Public Property Elements As Integer
    Get
    Set

public:
property int Elements {
    int get ();
    void set (int value);
}
```

See Also

[ArrayFieldAttribute Class](#)

[Vajhoej.Record Namespace](#)

□ | ▶

- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

BCDUtil Class

Class TimeUtil converts between bytes with Binary Coded Decimals ant
BigDecimal objects.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class BCDUtil  
Public Class BCDUtil  
public ref class BCDUtil
```

Members

All Members Constructors Fields Methods

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
  BCDUtil()	Initializes a new instance of the BCDUtil class.
  ASCII	ASCII zone nibble.
  DecodePackedBCD(array<Byte>[], Int32)	Convert from packed BCD to decimal.
  DecodeZonedBCD(array<Byte>[], Byte, Int32)	Convert from zoned BCD to decimal.
  EBCDIC	EBCDIC zone nibble.
  EncodePackedBCD(Decimal, Int32)	Convert from decimal to packed BCD.
  EncodeZonedBCD(Decimal, Byte, Int32, Int32)	Convert from BigDecimal to zoned BCD.
  Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
  GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
	Gets the type of the current

- ≡  [GetType\(\)](#)
instance.
(Inherited from [Object](#).)
- ≡  [MemberwiseClone\(\)](#)
Creates a shallow copy of the
current [Object](#).
(Inherited from [Object](#).)
- ≡  [ToString\(\)](#)
Returns a string that represents the
current object.
(Inherited from [Object](#).)
- ≡  **[ZERO](#)**
Zero zone nibble.

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::BCDUtil

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil Constructor

Initializes a new instance of the [BCDUtil](#) class

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public BCDUtil()
```

```
Public Sub New
```

```
public:  
BCDUtil()
```

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
BCDUtil Fields

The [BCDUtil](#) type exposes the following fields.

-Fields

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
<input checked="" type="checkbox"/> s ASCII	ASCII zone nibble.
<input checked="" type="checkbox"/> s EBCDIC	EBCDIC zone nibble.
<input checked="" type="checkbox"/> s ZERO	Zero zone nibble.

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil..::ASCII Field

ASCII zone nibble.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public const byte ASCII
```

```
Public Const ASCII As Byte
```

```
public:  
literal unsigned char ASCII
```

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil..::EBCDIC Field

EBCDIC zone nibble.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public const byte EBCDIC  
Public Const EBCDIC As Byte  
public:  
literal unsigned char EBCDIC
```

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil..::ZERO Field

Zero zone nibble.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public const byte ZERO
```

```
Public Const ZERO As Byte
```

```
public:  
literal unsigned char ZERO
```

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil Methods

The [BCDUtil](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 DecodePackedBCD(array<Byte>[], Int32)	Convert from packed BCD to decimal.
 DecodeZonedBCD(array<Byte>[], Byte, Int32)	Convert from zoned BCD to decimal.
 EncodePackedBCD(Decimal, Int32)	Convert from decimal to packed BCD.
 EncodeZonedBCD(Decimal, Byte, Int32, Int32)	Convert from BigDecimal to zoned BCD.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object.

(Inherited from [Object](#).)

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil..::DecodePackedBCD Method

Convert from packed BCD to decimal.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static decimal DecodePackedBCD(
    byte[] b,
    int decimals
)

Public Shared Function DecodePackedBCD ( _
    b As Byte(), _
    decimals As Integer _
) As Decimal

public:
static Decimal DecodePackedBCD(
    array<unsigned char>^ b,
    int decimals
)
```

Parameters

b

array<Byte>[][][]

Bytes with packed BCD.

decimals

Int32

Implied decimals.

Return Value

Decimal.

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil..::DecodeZonedBCD Method

Convert from zoned BCD to decimal.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public static decimal DecodeZonedBCD(
    byte[] b,
    byte zone,
    int decimals
)

Public Shared Function DecodeZonedBCD ( _
    b As Byte(), _
    zone As Byte, _
    decimals As Integer _
) As Decimal

public:
static Decimal DecodeZonedBCD(
    array<unsigned char>^ b,
    unsigned char zone,
    int decimals
)
```

Parameters

b

array<Byte>[]()[][]
Bytes with zoned BCD.

zone

Byte
Zone nibble value.

decimals

Int32
Implied decimals.

Return Value

Decimal.

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil..::EncodePackedBCD Method

Convert from decimal to packed BCD.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static byte[] EncodePackedBCD(
    decimal v,
    int decimals,
    int length
)

Public Shared Function EncodePackedBCD ( _
    v As Decimal, _
    decimals As Integer, _
    length As Integer _
) As Byte()

public:
static array<unsigned char>^ EncodePackedBCD(
    Decimal v,
    int decimals,
    int length
)
```

Parameters

v

Decimal

Decimal.

decimals

Int32

Implied decimals.

length

Int32

Length.

Return Value

Byte array with packed BCD.

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

BCDUtil..::EncodeZonedBCD Method

Convert from BigDecimal to zoned BCD.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static byte[] EncodeZonedBCD(
    decimal v,
    byte zone,
    int decimals,
    int length
)

Public Shared Function EncodeZonedBCD ( _
    v As Decimal, _
    zone As Byte, _
    decimals As Integer, _
    length As Integer _ 
) As Byte()

public:
static array<unsigned char>^ EncodeZonedBCD(
    Decimal v,
    unsigned char zone,
    int decimals,
    int length
)
```

Parameters

v

[Decimal](#)

Decimal.

zone

[Byte](#)

Zone nibble value.

decimals

[Int32](#)

Implied decimals.

length
[Int32](#)
Length.

Return Value

Byte array with zoned BCD.

See Also

[BCDUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

ConvertSelector Delegate

Converts a selector of any type to a usable integer selector.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public delegate Nullable<int> ConvertSelector(  
    Object o  
)  
  
Public Delegate Function ConvertSelector ( _  
    o As Object _  
) As Nullable\(Of Integer\)  
  
public delegate Nullable<int> ConvertSelector(  
    Object^ o  
)
```

Parameters

o

[Object](#)

Object (not completely initialized for read).

Return Value

Real selector (null indicates that it is to be ignored).

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

ElementsProvider Delegate

Get number of elements in array. Note: can only be used with struct fields that are arrays.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public delegate int ElementsProvider(
    Object o,
    int n
)

Public Delegate Function ElementsProvider ( _
    o As Object, _
    n As Integer _
) As Integer

public delegate int ElementsProvider(
    Object^ o,
    int n
)
```

Parameters

o

[Object](#)

Object (not completely initialized for read).

n

[Int32](#)

Field number.

Return Value

Elements (values < 0 indicates that value is to be ignored).

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Endian Enumeration

Enum Endian specifies endianess within native struct.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public enum Endian  
Public Enumeration Endian  
public enum class Endian
```

-Members

Member	Description
LITTLE	Little endian.
BIG	Big endian (alias network order).

See Also

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

FieldInfo Class

Class FieldInfo contains information about a native struct field needed for conversions.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class PropertyInfo
```

```
Public Class PropertyInfo
```

```
public ref class PropertyInfo
```

Members

All Members Constructors  Properties  Methods 

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
FieldInfo(FieldType, Int32, Int32, String, Byte, Int32, Type, FieldInfo, IDictionary<(Of <<'(Int32, SubClassAndPad>)gg), Boolean, Int32)	Create instance of FieldInfo with all necessary properties.
 ClassType	.NET class type.
 Decimals	Decimals of BCD.
 Elements	Number of elements.
 Encoding	Encoding of string.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Field	Corresponding reflection object.
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 Length	Length of fixed length string.

 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 PrefixLength	Prefix length.
 SelectPad	Sub class padding to fixed length.
 Selects	Sub class selections.
 StructType	Struct type.
 ToString()	Returns a string that represents the current object. (Inherited from Object .)
 Zone	Zone of zoned BCD.

-Inheritance Hierarchy

[System..::..Object](#)

Vajhoej.Record..::..FieldInfo

See Also

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo Constructor

Create instance of FieldInfo with all necessary properties.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public FieldInfo(
    FieldType structType,
    int length,
    int decimals,
    string encoding,
    byte zone,
    int prefixLength,
    Type classType,
    FieldInfo field,
    IDictionary<int, SubClassAndPad> selects,
    bool selectPad,
    int elements
)

Public Sub New ( _
    structType As FieldType, _
    length As Integer, _
    decimals As Integer, _
    encoding As String, _
    zone As Byte, _
    prefixLength As Integer, _
    classType As Type, _
    field As FieldInfo, _
    selects As IDictionary(Of Integer, SubClassAndPad), _
    selectPad As Boolean, _
    elements As Integer _
)

public:
FieldInfo(
    FieldType structType,
    int length,
    int decimals,
    String^ encoding,
    unsigned char zone,
    int prefixLength,
    Type^ classType,
    FieldInfo^ field,
```

```
    IDictionary<int, SubClassAndPad>>^ selects,  
    bool selectPad,  
    int elements  
\)
```

Parameters

structType

[FieldType](#)

native struct type.

length

[Int32](#)

length of fixed length string.

decimals

[Int32](#)

Number of decimals.

encoding

[String](#)

Encoding of string.

zone

[Byte](#)

Zone of zoned BCD.

prefixLength

[Int32](#)

Prefix length of variable length string

classType

[Type](#)

.NET class type.

field

[FieldInfo](#)

Corresponding reflection object.

selects

[IDictionary](#)<(Of <('Int32, [SubClassAndPad](#))>)>

Sub class selections.

selectPad

[Boolean](#)

Pad sub classes to fixed length.

elements

[Int32](#)

Number of elements.

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo Methods

The [FieldInfo](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo Properties

The [FieldInfo](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 ClassType	.NET class type.
 Decimals	Decimals of BCD.
 Elements	Number of elements.
 Encoding	Encoding of string.
 Field	Corresponding reflection object.
 Length	Length of fixed length string.
 PrefixLength	Prefix length.
 SelectPad	Sub class padding to fixed length.
 Selects	Sub class selections.
 StructType	Struct type.
 Zone	Zone of zoned BCD.

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::ClassType Property

.NET class type.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public Type ClassType { get; }  
Public ReadOnly Property ClassType As Type  
    Get
```

```
public:  
property Type^ ClassType {  
    Type^ get ();  
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::Decimals Property

Decimals of BCD.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Decimals { get; }

Public ReadOnly Property Decimals As Integer
    Get

public:
property int Decimals {
    int get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::Elements Property

Number of elements.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Elements { get; }

Public ReadOnly Property Elements As Integer
    Get

public:
property int Elements {
    int get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::Encoding Property

Encoding of string.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public string Encoding { get; }

Public ReadOnly Property Encoding As String
    Get

public:
property String^ Encoding {
    String^ get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::Field Property

Corresponding reflection object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public FieldInfo Field { get; }

Public ReadOnly Property Field As FieldInfo
    Get

public:
property FieldInfo^ Field {
    FieldInfo^ get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::Length Property

Length of fixed length string.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Length { get; }

Public ReadOnly Property Length As Integer
    Get

public:
property int Length {
    int get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::PrefixLength Property

Prefix length.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int PrefixLength { get; }

Public ReadOnly Property PrefixLength As Integer
    Get

public:
property int PrefixLength {
    int get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::SelectPad Property

Sub class padding to fixed length.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public bool SelectPad { get; }

Public ReadOnly Property SelectPad As Boolean
    Get

public:
property bool SelectPad {
    bool get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::Selects Property

Sub class selections.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public IDictionary<int, SubClassAndPad> Selects { get; }

Public ReadOnly Property Selects As IDictionary(Of Integer, SubClass
    Get

public:
property IDictionary<int, SubClassAndPad^>^ Selects {
    IDictionary<int, SubClassAndPad^>^ get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::StructType Property

Struct type.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public FieldType StructType { get; }

Public ReadOnly Property StructType As FieldType
    Get

public:
property FieldType StructType {
    FieldType get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ↗
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

FieldInfo...::Zone Property

Zone of zoned BCD.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public byte Zone { get; }

Public ReadOnly Property Zone As Byte
    Get

public:
property unsigned char Zone {
    unsigned char get ();
}
```

See Also

[FieldInfo Class](#)

[Vajhoej.Record Namespace](#)



C#

Visual Basic

Visual C++

| See Also

A Sandcastle Documented Class Library

FieldType Enumeration

Enum FieldType specifies native struct types.

Semantics:

enum value	description	attributes	native implementation	.NET implementation
INT1			8 bit signed integer	sbyte
INT2			16 bit signed integer	short
INT4			32 bit signed integer	int
INT8			64 bit signed integer	long
UINT1			8 bit unsigned integer	byte
UINT2			16 bit unsigned integer	ushort
UINT4			32 bit unsigned integer	uint
FP4			32 bit IEEE floating point	float
FP8			64 bit IEEE floating point	double
INTX		length=<bytes used>	bytes	ulong
		length=		

FIXSTR	Fixed length string	<length of string> encoding= <encoding used> (default encoding is ISO-8859-1)	sequence of bytes	string
FIXSTRNULTERM	Fixed length string nul terminated	length= <length of string> encoding= <encoding used> (default encoding is ISO-8859-1)	sequence of bytes with nul bytes added for write and stripped for read	string
VARSTR	Variable length string with 2 byte length prefix	encoding= <encoding used> (default encoding is ISO-8859-1, max. length is 32767)	2 byte length + sequence of bytes	string
VARFIXSTR	Variable length string with 2 byte length prefix and padded to max	length= <length of string> encoding= <encoding used> (default encoding is ISO-	2 byte length + sequence of bytes	string

	length	8859-1, max. length is 32767)		
REMSTR	Remaing data string	encoding= <encoding used> (default encoding is ISO- 8859-1, max. length is 32767)	sequence of bytes	string
BOOLEAN	Boolean (0=false, other=true)	length= <bytes used>	bytes	bool
BIT	Bits	length= <bits used> (max. bits is 32)	bytes	int
JAVATIME	Binary time in Java format (milliseconds since 1-Jan- 1970)		64 bit integer	System.DateTim
UNIXTIME	Binary time in Unix format (seconds since 1-Jan- 1970)		32 bit integer	System.DateTim
VMSTIME	Binary time in VMS format (100		64 bit integer	System.DateTim

	nanoseconds since 17-Nov-1858)			
PACKEDBCD	Packed BCD (1 byte = 2 decimal digit nibbles)	length= <bytes used> decimals= <number of implied decimals> (default decimals is 0)	sequence of bytes	decimal
ZONEDBCD	Zoned BCD (1 byte = 1 zone nibble + 1 decimal digit nibble)	length= <bytes used> decimals= <number of implied decimals> zone= <zone value> (default decimals is 0, default zone is EBCDIC)	sequence of bytes	decimal
VAXFP4	VAX F floating point		32 bit VAX floating point	float
VAXFP8	VAX G floating point		64 bit VAX floating point	double
STRUCT	Sub struct			

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public enum FieldType  
Public Enumeration FieldType  
public enum class FieldType
```

-Members

Member	Description
INT1	8 bit signed integer.
INT2	16 bit signed integer.
INT4	32 bit signed integer.
INT8	64 bit signed integer.
UINT1	8 bit unsigned integer.
UINT2	16 bit unsigned integer.
UINT4	32 bit unsigned integer.
FP4	32 bit IEEE floating point.
FP8	64 bit IEEE floating point.
INTX	8-56 bit integer (intended for 24, 40, 48 and 56 bits).
FIXSTR	Fixed length string.
FIXSTRNULTERM	Fixed length string nul terminated.
VARSTR	Variable length string with 2 byte length prefix.
VARFIXSTR	Variable length string with 2 byte length prefix and padded to max length.
REMSTR	Remaining data string.
BOOLEAN	Boolean.
BIT	Bits.
JAVATIME	Binary time in Java format.
UNIXTIME	Binary time in Unix format.
VMSTIME	Binary time in VMS format.
PACKEDBCD	Packed BCD.
ZONEDBCD	Zoned BCD.
VAXFP4	VAX F floating point.
VAXFP8	VAX G floating point.
STRUCT	Sub struct.

See Also

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

LengthProvider Delegate

Get length of field. Note: can only be used with struct fields of field types FIXSTR, FIXSTRNULTERM, PACKEDBCD and ZONEDPBCD.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public delegate int LengthProvider(  
    Object o,  
    int n  
)  
  
Public Delegate Function LengthProvider ( _  
    o As Object, _  
    n As Integer _  
) As Integer  
  
public delegate int LengthProvider(  
    Object^ o,  
    int n  
)
```

Parameters

o

[Object](#)

Object (not completely initialized for read).

n

[Int32](#)

Field number.

Return Value

Length (values < 0 indicates that value is to be ignored).

See Also

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

MaxLengthProvider Delegate

Get max length of struct. Note: can only be used with struct fields of field types FIXSTR, FIXSTRNULTERM, PACKEDBCD and ZONEDBCD.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public delegate int MaxLengthProvider()  
Public Delegate Function MaxLengthProvider As Integer  
public delegate int MaxLengthProvider()
```

Return Value

Max length (values < 0 indicates that value is to be ignored).

See Also

[Vajhoej.Record Namespace](#)

 | 

 C#

 Visual Basic

 Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

RecordException Class

Class RecordException encapsulates exceptions related to record processing.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public class RecordException : Exception
Public Class RecordException _
    Inherits Exception
public ref class RecordException : public Exception
```

-Members

All Members Constructors  Properties  Methods 

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 RecordException()	Create instance of RecordException.
 RecordException(Exception)	Create instance of RecordException.
 RecordException(String)	Create instance of RecordException.
 RecordException(String, Exception)	Create instance of RecordException.
 Data	Gets a collection of key/value pairs that provide additional user-defined information about the exception. (Inherited from Exception .)
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetBaseException()	When overridden in a derived class, returns the Exception that is the root cause of one or more subsequent exceptions. (Inherited from Exception .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetObjectData(SerializationInfo, StreamingContext)	When overridden in a derived class, sets the SerializationInfo with information about the exception.

	(Inherited from Exception .)
 GetType()	Gets the runtime type of the current instance. (Inherited from Exception .)
 HelpLink	Gets or sets a link to the help file associated with this exception. (Inherited from Exception .)
 HResult	Gets or sets HRESULT, a coded numerical value that is assigned to a specific exception. (Inherited from Exception .)
 InnerException	Gets the Exception instance that caused the current exception. (Inherited from Exception .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 Message	Gets a message that describes the current exception. (Inherited from Exception .)
 Source	Gets or sets the name of the application or the object that causes the error. (Inherited from Exception .)
 StackTrace	Gets a string representation of the frames on the call stack at the time the current exception was thrown. (Inherited from Exception .)
 TargetSite	Gets the method that throws the current exception. (Inherited from Exception .)
 ToString()	Creates and returns a string representation of the current exception. (Inherited from Exception .)

-Inheritance Hierarchy

[System..::..Object](#)

[System..::..Exception](#)

Vajhoej.Record..::..RecordException

See Also

[Vajhoej.Record Namespace](#)

-  | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
RecordException Constructor

-Overload List

Name	Description
<u>RecordException()</u>	Create instance of RecordException.
<u>RecordException(Exception)</u>	Create instance of RecordException.
<u>RecordException(String)</u>	Create instance of RecordException.
<u>RecordException(String, Exception)</u>	Create instance of RecordException.

See Also

[RecordException Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

RecordException Constructor

Create instance of RecordException.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public RecordException()
```

```
Public Sub New
```

```
public:  
RecordException()
```

See Also

[RecordException Class](#)

[RecordException Overload](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
RecordException Constructor (Exception)

Create instance of RecordException.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public RecordException(  
    Exception cause  
)  
  
Public Sub New ( _  
    cause As Exception _  
)  
  
public:  
RecordException(  
    Exception^ cause  
)
```

Parameters

cause

Exception

Underlying exception.

See Also

[RecordException Class](#)

[RecordException Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

RecordException Constructor (String)

Create instance of RecordException.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public RecordException(  
    string message  
)  
  
Public Sub New ( _  
    message As String _  
)  
  
public:  
RecordException(  
    String^ message  
)
```

Parameters

message

[String](#)

Message describing exception.

See Also

[RecordException Class](#)

[RecordException Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
RecordException Constructor (String, Exception)
Create instance of RecordException.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public RecordException(  
    string message,  
    Exception cause  
)  
  
Public Sub New ( _  
    message As String, _  
    cause As Exception _  
)  
  
public:  
RecordException(  
    String^ message,  
    Exception^ cause  
)
```

Parameters

message

[String](#)

Message describing exception.

cause

[Exception](#)

Underlying exception.

See Also

[RecordException Class](#)

[RecordException Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

RecordException Methods

The [RecordException](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
= ♡ Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
= ♡ Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
= ♡ GetBaseException()	When overridden in a derived class, returns the Exception that is the root cause of one or more subsequent exceptions. (Inherited from Exception .)
= ♡ GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
= ♡ GetObjectData(SerializationInfo, StreamingContext)	When overridden in a derived class, sets the SerializationInfo with information about the exception. (Inherited from Exception .)
= ♡ GetType()	Gets the runtime type of the current instance. (Inherited from Exception .)
= ♡ MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
= ♡ ToString()	Creates and returns a string representation of the current exception. (Inherited from Exception .)

See Also

[RecordException Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

RecordException Properties

The [RecordException](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Data	Gets a collection of key/value pairs that provide additional user-defined information about the exception. (Inherited from Exception .)
 HelpLink	Gets or sets a link to the help file associated with this exception. (Inherited from Exception .)
 HResult	Gets or sets HRESULT, a coded numerical value that is assigned to a specific exception. (Inherited from Exception .)
 InnerException	Gets the Exception instance that caused the current exception. (Inherited from Exception .)
 Message	Gets a message that describes the current exception. (Inherited from Exception .)
 Source	Gets or sets the name of the application or the object that causes the error. (Inherited from Exception .)
 StackTrace	Gets a string representation of the frames on the call stack at the time the current exception was thrown. (Inherited from Exception .)
 TargetSite	Gets the method that throws the current exception. (Inherited from Exception .)

See Also

[RecordException Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

SelectorAttribute Class

Annotation for selection of sub types.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
[AttributeUsageAttribute(AttributeTargets.Field)]
public class SelectorAttribute : Attribute

<AttributeUsageAttribute(AttributeTargets.Field)> _
Public Class SelectorAttribute _
    Inherits Attribute

[AttributeUsageAttribute(AttributeTargets::Field)]
public ref class SelectorAttribute : public Attribute
```

-Members

All Members Constructors Properties Methods Explicit Interface Implementations

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 SelectorAttribute()	Default constructor.
 Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
 Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type information for an interface.

	(Inherited from Attribute .)
 Attribute...:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)
 Attribute...:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()QQQ	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()QQQ	Creates a shallow copy of the current Object . (Inherited from Object .)
 Pad	Pad all sub types to same length.
 Subtypes	Available sub types.
 ToString()QQQ	Returns a string that represents the current object. (Inherited from Object .)
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)

-Inheritance Hierarchy

System..::..Object

System..::..Attribute

Vajhoej.Record..::..SelectorAttribute

See Also

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SelectorAttribute Constructor

Default constructor.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public SelectorAttribute()
```

```
Public Sub New
```

```
public:  
SelectorAttribute()
```

See Also

[SelectorAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SelectorAttribute Methods

The [SelectorAttribute](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
=  Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
=  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
=  GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
=  Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
=  GetType()	Gets the type of the current instance. (Inherited from Object .)
=  Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type information for an interface. (Inherited from Attribute .)
=  Attribute..:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)

 Attribute..:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[SelectorAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SelectorAttribute Properties

The [SelectorAttribute](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Pad	Pad all sub types to same length.
 Subtypes	Available sub types.
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)

See Also

[SelectorAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SelectorAttribute..::Pad Property

Pad all sub types to same length.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public bool Pad { get; set; }

Public Property Pad As Boolean
    Get
    Set

public:
property bool Pad {
    bool get ();
    void set (bool value);
}
```

See Also

[SelectorAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SelectorAttribute..::Subtypes Property

Available sub types.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public Object[] Subtypes { get; set; }

Public Property Subtypes As Object()
    Get
    Set

public:
property array<Object>^ Subtypes {
    array<Object>^ get ();
    void set (array<Object>^ value);
}
```

See Also

[SelectorAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

StructAttribute Class

Annotation for structs.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
[AttributeUsageAttribute(AttributeTargets.Class)]
public class StructAttribute : Attribute

<AttributeUsageAttribute(AttributeTargets.Class)> _
Public Class StructAttribute _
    Inherits Attribute

[AttributeUsageAttribute(AttributeTargets::Class)]
public ref class StructAttribute : public Attribute
```

-Members

All Members Constructors Properties Methods Explicit Interface Implementations

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 StructAttribute()	Default constructor.
 Alignment	Alignment. Default is packed.
 Endianess	Byte order. Default is little endian.
 Endpad	End padding. Default is false.
 Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
 Attribute...::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)

 Attribute...:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type information for an interface. (Inherited from Attribute .)
 Attribute...:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)
 Attribute...:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()()	Returns a string that represents the current object. (Inherited from Object .)
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)

- Inheritance Hierarchy

System..::..Object

System..::..Attribute

Vajhoej.Record..::..StructAttribute

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructAttribute Constructor

Default constructor.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public StructAttribute()
```

```
Public Sub New
```

```
public:  
StructAttribute()
```

See Also

[StructAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructAttribute Methods

The [StructAttribute](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
=  Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
=  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
=  GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
=  Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
=  GetType()	Gets the type of the current instance. (Inherited from Object .)
=  Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type information for an interface. (Inherited from Attribute .)
=  Attribute..:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)

 Attribute..:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[StructAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructAttribute Properties

The [StructAttribute](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Alignment	Alignment. Default is packed.
 Endianess	Byte order. Default is little endian.
 Endpad	End padding. Default is false.
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)

See Also

[StructAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructAttribute..::Alignment Property

Alignment. Default is packed.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public Alignment Alignment { get; set; }
```

```
Public Property Alignment As Alignment
    Get
    Set
```

```
public:
property Alignment Alignment {
    Alignment get ();
    void set (Alignment value);
}
```

See Also

[StructAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructAttribute..::Endianess Property

Byte order. Default is little endian.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public Endian Endianess { get; set; }
```

```
Public Property Endianess As Endian
    Get
    Set
```

```
public:
property Endian Endianess {
    Endian get ();
    void set (Endian value);
}
```

See Also

[StructAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructAttribute..::Endpad Property

End padding. Default is false.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public bool Endpad { get; set; }

Public Property Endpad As Boolean
    Get
    Set

public:
property bool Endpad {
    bool get ();
    void set (bool value);
}
```

See Also

[StructAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

StructFieldAttribute Class

Annotation for fields.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
[AttributeUsageAttribute(AttributeTargets.Field)]
public class StructFieldAttribute : Attribute

<AttributeUsageAttribute(AttributeTargets.Field)> _
Public Class StructFieldAttribute _
    Inherits Attribute

[AttributeUsageAttribute(AttributeTargets::Field)]
public ref class StructFieldAttribute : public Attribute
```

-Members

All Members Constructors Properties Methods Explicit Interface Implementations

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 StructFieldAttribute()	Default constructor.
 Decimals	Field decimals (for BCD's).
 Encoding	Field encoding (for strings).
 Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
 Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
	Retrieves the type information for an object, which can be

 Attribute...:::GetTypeInfo(UInt32, UInt32, IntPtr)	Used to get the type information for an interface. (Inherited from Attribute .)
 Attribute...:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)
 Attribute...:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Length	Field length (for fixed length strings and BCD's).
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()()	Creates a shallow copy of the current Object . (Inherited from Object .)
 N	Field number.
 PrefixLength	Prefix length (for variable length strings).
 ToString()()	Returns a string that represents the current object. (Inherited from Object .)
 Type	Field type. When implemented in a derived class, gets a unique



[TypeId](#)

identifier for this [Attribute](#).
(Inherited from [Attribute](#).)



[Zone](#)

Field zone value (for zoned
BCD's).

-Inheritance Hierarchy

System..::..Object

System..::..Attribute

Vajhoej.Record..::..StructFieldAttribute

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructFieldAttribute Constructor

Default constructor.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public StructFieldAttribute()
```

```
Public Sub New
```

```
public:  
StructFieldAttribute()
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructFieldAttribute Methods

The [StructFieldAttribute](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
=  Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
=  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
=  GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
=  Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
=  GetType()	Gets the type of the current instance. (Inherited from Object .)
=  Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type information for an interface. (Inherited from Attribute .)
=  Attribute..:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)

 Attribute..:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructFieldAttribute Properties

The [StructFieldAttribute](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Decimals	Field decimals (for BCD's).
 Encoding	Field encoding (for strings).
 Length	Field length (for fixed length strings and BCD's).
 N	Field number.
 PrefixLength	Prefix length (for variable length strings).
 Type	Field type. When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)
 TypeId	
 Zone	Field zone value (for zoned BCD's).

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructFieldAttribute...::Decimals Property
Field decimals (for BCD's).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Decimals { get; set; }

Public Property Decimals As Integer
    Get
    Set

public:
property int Decimals {
    int get ();
    void set (int value);
}
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructFieldAttribute..::Encoding Property
Field encoding (for strings).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public string Encoding { get; set; }

Public Property Encoding As String
    Get
    Set

public:
property String^ Encoding {
    String^ get ();
    void set (String^ value);
}
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

[StructFieldAttribute..::Length Property](#)

Field length (for fixed length strings and BCD's).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Length { get; set; }

Public Property Length As Integer
    Get
    Set

public:
property int Length {
    int get ();
    void set (int value);
}
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructFieldAttribute...::N Property

Field number.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int N { get; set; }

Public Property N As Integer
    Get
    Set

public:
property int N {
    int get ();
    void set (int value);
}
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructFieldAttribute...::PrefixLength Property
Prefix length (for variable length strings).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public int PrefixLength { get; set; }

Public Property PrefixLength As Integer
    Get
    Set

public:
property int PrefixLength {
    int get ();
    void set (int value);
}
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructFieldAttribute...::Type Property

Field type.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public FieldType Type { get; set; }
```

```
Public Property Type As FieldType
    Get
    Set
```

```
public:
property FieldType Type {
    FieldType get ();
    void set (FieldType value);
}
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- | ↗
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructFieldAttribute..::Zone Property

Field zone value (for zoned BCD's).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public byte Zone { get; set; }
```

```
Public Property Zone As Byte
    Get
    Set
```

```
public:
property unsigned char Zone {
    unsigned char get ();
    void set (unsigned char value);
}
```

See Also

[StructFieldAttribute Class](#)
[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

StructInfo Class

Class StructInfo contains information about a native struct needed for reading and/or writing.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class StructInfo
```

```
Public Class StructInfo
```

```
public ref class StructInfo
```

Members

All Members Constructors  Properties  Methods 

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
StructInfo(Endian, Alignment, Boolean, IList<(Of <<'(FieldInfo)>>), Type)	Create instance of StructInfo.
 Alignment	Alignment.
 Analyze(Type)	Analyze class.
 Endianess	Endianess.
 Endpad	Pad at end.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Fields	Fields.
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 FixedLength	Fixed length struct.
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 Length	Length.
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
	Returns a string that represents the current



[ToString\(\)](#)

object.

(Inherited from [Object](#).)

-Inheritance Hierarchy

[System..::..Object](#)

Vajhoej.Record..::..StructInfo

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo Constructor

Create instance of StructInfo.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public StructInfo(
    Endian endianess,
    Alignment alignment,
    bool endpad,
    IList<FieldInfo> fields,
    Type cls
)

Public Sub New ( _
    endianess As Endian, _
    alignment As Alignment, _
    endpad As Boolean, _
    fields As IList(Of FieldInfo), _
    cls As Type
)

public:
StructInfo(
    Endian endianess,
    Alignment alignment,
    bool endpad,
    IList<FieldInfo>^ fields,
    Type^ cls
)
```

Parameters

endianess

[Endian](#)

Byte order for all fields.

alignment

[Alignment](#)

Alignment for all fields.

endpad

[Boolean](#)

Pad at end.

fields

[IList<\(Of <\('FieldInfo\)>\)>](#)

Array of FieldInfo describing all fields.

clz

[Type](#)

Class implementing struct.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If error calculation length information.

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructInfo Methods

The [StructInfo](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
=  Analyze(Type)	Analyze class.
=  Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
=  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
=  GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
=  GetType()	Gets the type of the current instance. (Inherited from Object .)
=  MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
=  ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo...::Analyze Method

Analyze class.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static StructInfo Analyze(  
    Type clz  
)  
  
Public Shared Function Analyze ( _  
    clz As Type _  
) As StructInfo  
  
public:  
static StructInfo^ Analyze(  
    Type^ clz  
)
```

Parameters

[clz](#)

[Type](#)

Class to analyze.

Return Value

[StructInfo](#) for class.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If error calculation length information.

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo Properties

The [StructInfo](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Alignment	Alignment.
 Endianess	Endianess.
 Endpad	Pad at end.
 Fields	Fields.
 FixedLength	Fixed length struct.
 Length	Length.

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo...::Alignment Property

Alignment.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public Alignment Alignment { get; }

Public ReadOnly Property Alignment As Alignment
    Get

public:
property Alignment Alignment {
    Alignment get ();
}
```

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo...::Endianess Property

Endianess.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public Endian Endianess { get; }

Public ReadOnly Property Endianess As Endian
    Get

public:
property Endian Endianess {
    Endian get ();
}
```

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo...::Endpad Property

Pad at end.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public bool Endpad { get; }

Public ReadOnly Property Endpad As Boolean
    Get

public:
property bool Endpad {
    bool get ();
}
```

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo...::Fields Property

Fields.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public IList<FieldInfo> Fields { get; }

Public ReadOnly Property Fields As IList\(Of FieldInfo\)
    Get

public:
property IList<FieldInfo^>^ Fields {
    IList<FieldInfo^>^ get ();
}
```

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo...::FixedLength Property

Fixed length struct.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

[-] Syntax

C# Visual Basic Visual C++

```
public bool FixedLength { get; }

Public ReadOnly Property FixedLength As Boolean
    Get

public:
property bool FixedLength {
    bool get ();
}
```

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfo...::Length Property

Length.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Length { get; }

Public ReadOnly Property Length As Integer
    Get

public:
property int Length {
    int get ();
}
```

See Also

[StructInfo Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache Class

Class StructInfoCache caches StructInfo objects in a singleton cache.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class StructInfoCache  
Public Class StructInfoCache  
public ref class StructInfoCache
```

-Members

All Members Properties  Methods 

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
  Analyze(Type)	Convenience method to get StructInfo from cache and analyze class if not in cache.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 Get(Type)	Get StructInfo from cache.
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 HitRate	Cache hit rate.
  Instance	Singleton instance.
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 Put(Type, StructInfo)	Put StructInfo into cache.
 Reset()	Reset cache.
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::StructInfoCache

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache Methods

The [StructInfoCache](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Analyze(Type)	Convenience method to get StructInfo from cache and analyze class if not in cache.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 Get(Type)	Get StructInfo from cache.
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 Put(Type, StructInfo)	Put StructInfo into cache.
 Reset()	Reset cache.
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache..::Analyze Method

Convenience method to get StructInfo from cache and analyze class if not in cache.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

[-] Syntax

C# Visual Basic Visual C++

```
public static StructInfo Analyze(  
    Type t  
)  
  
Public Shared Function Analyze ( _  
    t As Type _  
) As StructInfo  
  
public:  
static StructInfo^ Analyze(  
    Type^ t  
)
```

Parameters

t

[Type](#)

Class.

Return Value

[StructInfo](#) for class.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If error analyzing cache.

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache..::Get Method

Get StructInfo from cache.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public StructInfo Get(  
    Type cls  
)
```

```
Public Function Get ( _  
    cls As Type _  
) As StructInfo
```

```
public:  
StructInfo^ Get(  
    Type^ cls  
)
```

Parameters

cls

[Type](#)

Class we want StructInfo for.

Return Value

StructInfo.

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache..::Put Method

Put StructInfo into cache.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public void Put(
    Type cls,
    StructInfo si
)

Public Sub Put ( _
    cls As Type, _
    si As StructInfo _
)

public:
void Put(
    Type^ cls,
    StructInfo^ si
)
```

Parameters

cls

Type

Class we have StructInfo for.

si

StructInfo

StructInfo.

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache..::Reset Method

Reset cache.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public void Reset()
```

```
Public Sub Reset
```

```
public:  
void Reset()
```

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache Properties

The [StructInfoCache](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 HitRate	Cache hit rate.
 Instance	Singleton instance.

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache..::HitRate Property

Cache hit rate.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public double HitRate { get; }

Public ReadOnly Property HitRate As Double
    Get

public:
property double HitRate {
    double get ();
}
```

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructInfoCache..::Instance Property

Singleton instance.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static StructInfoCache Instance { get; }

Public Shared ReadOnly Property Instance As StructInfoCache
    Get

public:
static property StructInfoCache^ Instance {
    StructInfoCache^ get ();
}
```

See Also

[StructInfoCache Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

StructReader Class

Class StructReader reads a .NET object from a byte array containing a native struct.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class StructReader  
Public Class StructReader  
public ref class StructReader
```

Members

All Members Constructors  Properties  Methods 

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 StructReader(array<Byte>[] Q[])	Create instance of StructReader.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 More	More records available.
 Read<(Of <<'(T)>>)(Type)	Read.
 Read<(Of <<'(T)>>)(Type, LengthProvider)	Read.
Read<(Of <<'(T)>>)(Type, LengthProvider, MaxLengthProvider)	Read.
Read<(Of <<'(T)>>)(Type,	

= ♦ LengthProvider , MaxLengthProvider , ElementsProvider) Read<(Of <<'(T)>>)(Type, LengthProvider ,	Read.
= ♦ MaxLengthProvider , ElementsProvider , ConvertSelector)	Read.
= ♦ ToString() ()()	Returns a string that represents the current object. (Inherited from Object .)

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::StructReader

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader Constructor

Create instance of StructReader.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public StructReader(  
    byte[] ba  
)  
  
Public Sub New ( _  
    ba As Byte() _  
)  
  
public:  
StructReader(  
    array<unsigned char>^ ba  
)
```

Parameters

ba

array<[Byte](#)>[][][]
Byte array to read from.

See Also

[StructReader Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructReader Methods

The [StructReader](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
= ♡ Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
= ♡ Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
= ♡ GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
= ♡ GetType()	Gets the type of the current instance. (Inherited from Object .)
= ♡ MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
= ♡ Read<(Of <<'(T)>>)(Type)	Read.
= ♡ Read<(Of <<'(T)>>)(Type, LengthProvider)	Read.
= ♡ Read<(Of <<'(T)>>)(Type, LengthProvider, MaxLengthProvider)	Read.
= ♡ Read<(Of <<'(T)>>)(Type, LengthProvider, MaxLengthProvider, ElementsProvider)	Read.
= ♡ Read<(Of <<'(T)>>)(Type, LengthProvider,	

≡♥ [MaxLengthProvider](#),
[ElementsProvider](#),
[ConvertSelector](#))

Read.

≡♥ [ToString\(\)](#)

Returns a string that represents the current object.
(Inherited from [Object](#).)

See Also

[StructReader Class](#)

[Vajhoej.Record Namespace](#)

 | 

-  C#
-  Visual Basic
-  Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader...::Read Method

Overload List

Name	Description
<u>Read<(Of <<'(T)>>)(Type)</u>	Read.
<u>Read<(Of <<'(T)>>)(Type, LengthProvider)</u>	Read.
<u>Read<(Of <<'(T)>>)(Type, LengthProvider, MaxLengthProvider)</u>	Read.
<u>Read<(Of <<'(T)>>)(Type, LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Read.
<u>Read<(Of <<'(T)>>)(Type, LengthProvider, MaxLengthProvider, ElementsProvider, ConvertSelector)</u>	Read.

See Also

[StructReader Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructReader...::Read<(Of <('T)>) Method (Type)
Read.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public T Read<T>(  
    Type t  
)  
where T : class, new()  
  
Public Function Read(Of T As {Class, New}) ( _  
    t As Type _  
) As T  
  
public:  
generic<typename T>  
where T : ref class, gcnew()  
T Read(  
    Type^ t  
)
```

Parameters

t

Type

Type of what to read.

Type Parameters

T

Type of what to read.

Return Value

Object read.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructReader Class](#)

[Read Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader...::Read<(Of <(<'T>)>) Method (Type, LengthProvider)

Read.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public T Read<T>(
    Type t,
    LengthProvider lenpvd
)
where T : class, new()

Public Function Read(Of T As {Class, New}) ( _
    t As Type, _
    lenpvd As LengthProvider _
) As T

public:
generic<typename T>
where T : ref class, gcnew()
T Read(
    Type^ t,
    LengthProvider^ lenpvd
)
```

Parameters

t

Type

Type of what to read.

lenpvd

LengthProvider

Supplies length for fields where it is not given.

Type Parameters

T

Type of what to read.

Return Value

Object read.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructReader Class](#)

[Read Overload](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader...::Read<(Of <('T)>)> Method (Type, LengthProvider, MaxLengthProvider)

Read.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public T Read<T>(
    Type t,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd
)
where T : class, new()

Public Function Read(Of T As {Class, New}) ( _
    t As Type, _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider _ 
) As T

public:
generic<typename T>
where T : ref class, gcnew()
T Read(
    Type^ t,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd
)
```

Parameters

t

Type

Type of what to read.

lenpvd

LengthProvider

Supplies length for fields where it is not given.

maxlenpvd

MaxLengthProvider

Supplies max length for fields where it is not given.

Type Parameters

T

Type of what to read.

Return Value

Object read.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructReader Class](#)

[Read Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader...::Read<(Of <('T)>) Method (Type, LengthProvider, MaxLengthProvider, ElementsProvider)

Read.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public T Read<T>(
    Type t,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)
where T : class, new()

Public Function Read(Of T As {Class, New}) ( _
    t As Type, _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
) As T

public:
generic<typename T>
where T : ref class, gcnew()
T Read(
    Type^ t,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t

Type

Type of what to read.

lenpvd

LengthProvider

Supplies length for fields where it is not given.

maxlenpvd

[MaxLengthProvider](#)

Supplies max length for fields where it is not given.

elmpvd

[ElementsProvider](#)

Supplies elements for fields where it is not given.

Type Parameters

T

Type of what to read.

Return Value

Object read.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructReader Class](#)

[Read Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader...::Read<(Of <('T)>)> Method (Type, LengthProvider, MaxLengthProvider, ElementsProvider, ConvertSelector)

Read.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public T Read<T>(
    Type t,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd,
    ConvertSelector infpvd
)
where T : class, new()

Public Function Read(Of T As {Class, New}) ( _
    t As Type, _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider, _
    infpvd As ConvertSelector _
) As T

public:
generic<typename T>
where T : ref class, gcnew()
T Read(
    Type^ t,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd,
    ConvertSelector^ infpvd
)
```

Parameters

t

Type

Type of what to read.

lenpvd

LengthProvider

Supplies length for fields where it is not given.

maxlenpvd

[MaxLengthProvider](#)

Supplies max length for fields where it is not given.

elmpvd

[ElementsProvider](#)

Supplies elements for fields where it is not given.

infpvd

[ConvertSelector](#)

Supplies selector converter for fields where it is needed.

Type Parameters

T

Type of what to read.

Return Value

Object read.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructReader Class](#)

[Read Overload](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader Properties

The [StructReader](#) type exposes the following properties.

Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
---------------	--------------------

 [More](#) More records available.

See Also

[StructReader Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructReader...::More Property

More records available.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public bool More { get; }

Public ReadOnly Property More As Boolean
    Get

public:
property bool More {
    bool get ();
}
```

See Also

[StructReader Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

StructWriter Class

Class StructWriter writes a .NET object to a byte array as a native struct.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class StructWriter  
Public Class StructWriter  
public ref class StructWriter
```

-Members

All Members Constructors Properties Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
StructWriter()	Construct instance of StructWriter with default buffer size.
StructWriter(Int32)	Construct instance of StructWriter.
Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
Extend(Int32)	Extend capacity.
Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
GetBytes()	Get bytes.
GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
GetType()	Gets the type of the current instance. (Inherited from Object .)
Length	The length.
MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
ToString()	Returns a string that represents the current object. (Inherited from Object .)
Write(Object)	Write.

- = ♪ [Write\(Object, LengthProvider\)](#) Write.
- = ♪ [Write\(Object, LengthProvider, MaxLengthProvider\)](#) Write.
- = ♪ [Write\(Object, LengthProvider, MaxLengthProvider, ElementsProvider\)](#) Write.
- = ♪ [Write\(Object, LengthProvider, MaxLengthProvider, ElementsProvider, ConvertSelector\)](#) Write.

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::StructWriter

See Also

[Vajhoej.Record Namespace](#)

 | 

-  C#
-  Visual Basic
-  Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter Constructor

[-]Overload List

Name	Description
StructWriter()	Construct instance of StructWriter with default buffer size.
StructWriter(Int32)	Construct instance of StructWriter.

See Also

[StructWriter Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter Constructor

Construct instance of StructWriter with default buffer size.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public StructWriter()
```

```
Public Sub New
```

```
public:  
StructWriter()
```

See Also

[StructWriter Class](#)

[StructWriter Overload](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter Constructor (Int32)

Construct instance of StructWriter.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public StructWriter(  
    int bufsiz  
)  
  
Public Sub New ( _  
    bufsiz As Integer _  
)  
  
public:  
StructWriter(  
    int bufsiz  
)
```

Parameters

bufsiz

[Int32](#)

Size of byte array to write to.

See Also

[StructWriter Class](#)

[StructWriter Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructWriter Methods

The [StructWriter](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
≡♥ Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
≡♥ Extend(Int32)	Extend capacity.
≡♥ Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
≡♥ GetBytes()	Get bytes.
≡♥ GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
≡♥ GetType()	Gets the type of the current instance. (Inherited from Object .)
≡♥ MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
≡♥ ToString()	Returns a string that represents the current object. (Inherited from Object .)
≡♥ Write(Object)	Write.
≡♥ Write(Object, LengthProvider)	Write.
≡♥ Write(Object, LengthProvider, MaxLengthProvider)	Write.
≡♥ Write(Object, LengthProvider, MaxLengthProvider, ElementsProvider)	Write.
≡♥ Write(Object, LengthProvider,	

≡ [MaxLengthProvider](#),
[ElementsProvider](#),
[ConvertSelector](#))

Write.

See Also

[StructWriter Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::Extend Method

Extend capacity.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public void Extend(  
    int newbufsiz  
)  
  
Public Sub Extend ( _  
    newbufsiz As Integer _  
)  
  
public:  
void Extend(  
    int newbufsiz  
)
```

Parameters

newbufsiz

[Int32](#)

New size of byte array to write to.

See Also

[StructWriter Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::GetBytes Method

Get bytes.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public byte[] GetBytes()  
Public Function GetBytes As Byte()  
public:  
array<unsigned char>^ GetBytes()
```

Return Value

The resulting byte array.

See Also

[StructWriter Class](#)

[Vajhoej.Record Namespace](#)

 | 

-  C#
-  Visual Basic
-  Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::Write Method

Overload List

Name	Description
<u>Write(Object)</u>	Write.
<u>Write(Object, LengthProvider)</u>	Write.
<u>Write(Object, LengthProvider, MaxLengthProvider)</u>	Write.
<u>Write(Object, LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Write.
<u>Write(Object, LengthProvider, MaxLengthProvider, ElementsProvider, ConvertSelector)</u>	Write.

See Also

[StructWriter Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::Write Method (Object)

Write.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public void Write(  
    Object o  
)  
  
Public Sub Write ( _  
    o As Object _  
)  
  
public:  
void Write(  
    Object^ o  
)
```

Parameters

o

Object

Object to write.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructWriter Class](#)

[Write Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
StructWriter...::Write Method (Object, LengthProvider)
Write.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public void Write(  
    Object o,  
    LengthProvider lenpvd  
)  
  
Public Sub Write ( _  
    o As Object, _  
    lenpvd As LengthProvider _  
)  
  
public:  
void Write(  
    Object^ o,  
    LengthProvider^ lenpvd  
)
```

Parameters

o

Object

Object to write.

lenpvd

LengthProvider

Supplies length for fields where it is not given -

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructWriter Class](#)

[Write Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::Write Method (Object, LengthProvider, MaxLengthProvider)

Write.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public void Write(
    Object o,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd
)

Public Sub Write ( _
    o As Object, _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider _
)

public:
void Write(
    Object^ o,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd
)
```

Parameters

o

[Object](#)

Object to write.

lenpvd

[LengthProvider](#)

Supplies length for fields where it is not given -

maxlenpvd

[MaxLengthProvider](#)

Supplies max length for fields where it is not given.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructWriter Class](#)

[Write Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::Write Method (Object, LengthProvider, MaxLengthProvider, ElementsProvider)

Write.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public void Write(
    Object o,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)

Public Sub Write ( _
    o As Object, _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
)

public:
void Write(
    Object^ o,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

o

[Object](#)

Object to write.

lenpvd

[LengthProvider](#)

Supplies length for fields where it is not given -

maxlenpvd

[MaxLengthProvider](#)

Supplies max length for fields where it is not given.

elmpvd

[ElementsProvider](#)

Supplies elements for fields where it is not given.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructWriter Class](#)

[Write Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::Write Method (Object, LengthProvider, MaxLengthProvider, ElementsProvider, ConvertSelector)

Write.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public void Write(
    Object o,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd,
    ConvertSelector infpvd
)

Public Sub Write ( _
    o As Object, _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider, _
    infpvd As ConvertSelector _
)

public:
void Write(
    Object^ o,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd,
    ConvertSelector^ infpvd
)
```

Parameters

o

[Object](#)

Object to write.

lenpvd

[LengthProvider](#)

Supplies length for fields where it is not given -

maxlenpvd

[MaxLengthProvider](#)

Supplies max length for fields where it is not given.

elmpvd

[ElementsProvider](#)

Supplies elements for fields where it is not given.

infpvd

[ConvertSelector](#)

Supplies selector converter for fields where it is needed.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If impossible to convert between types in class and struct.

See Also

[StructWriter Class](#)

[Write Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter Properties

The [StructWriter](#) type exposes the following properties.

Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member Description

 [Length](#) The length.

See Also

[StructWriter Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

StructWriter...::Length Property

The length.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Length { get; }

Public ReadOnly Property Length As Integer
    Get

public:
property int Length {
    int get ();
}
```

See Also

[StructWriter Class](#)

[Vajhoej.Record Namespace](#)

[|](#)

[C#](#)

[Visual Basic](#)

[Visual C++](#)

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

SubClassAndPad Class

Class SubClassAndPad contains information about class and padding for select field.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class SubClassAndPad  
Public Class SubClassAndPad  
public ref class SubClassAndPad
```

-Members

All Members Constructors Properties Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
SubClassAndPad(Type, Int32)	Create instance of ClassAndPad with all necessary properties.
Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
GetType()	Gets the type of the current instance. (Inherited from Object .)
MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
Pad	Padding.
SubClass	Class.
ToString()	Returns a string that represents the current object. (Inherited from Object .)

-Inheritance Hierarchy

System..::..Object

Vajhoej.Record..::..SubClassAndPad

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubClassAndPad Constructor

Create instance of ClassAndPad with all necessary properties.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public SubClassAndPad(
    Type subClass,
    int pad
)

Public Sub New ( _
    subClass As Type, _
    pad As Integer _
)

public:
SubClassAndPad(
    Type^ subClass,
    int pad
)
```

Parameters

subClass

Type

Class.

pad

Int32

Padding.

See Also

[SubClassAndPad Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubClassAndPad Methods

The [SubClassAndPad](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[SubClassAndPad Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubClassAndPad Properties

The [SubClassAndPad](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member Description

 [Pad](#) Padding.

 [SubClass](#) Class.

See Also

[SubClassAndPad Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubClassAndPad...::Pad Property

Padding.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Pad { get; }

Public ReadOnly Property Pad As Integer
    Get

public:
property int Pad {
    int get ();
}
```

See Also

[SubClassAndPad Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubClassAndPad...::SubClass Property

Class.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public Type SubClass { get; }

Public ReadOnly Property SubClass As Type
    Get

public:
property Type^ SubClass {
    Type^ get ();
}
```

See Also

[SubClassAndPad Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

SubTypeAttribute Class

Annotation for sub types.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
[AttributeUsageAttribute(AttributeTargets.Field, AllowMultiple = true)  
public class SubTypeAttribute : Attribute
```

```
<AttributeUsageAttribute(AttributeTargets.Field, AllowMultiple := True)  
Public Class SubTypeAttribute  
    Inherits Attribute
```

```
[AttributeUsageAttribute(AttributeTargets::Field, AllowMultiple = true)  
public ref class SubTypeAttribute : public Attribute
```

-Members

All Members Constructors Properties Methods Explicit Interface Implementations

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 SubTypeAttribute()()	Initializes a new instance of the SubTypeAttribute class
 Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
 Finalize()()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()()	Returns the hash code for this instance. (Inherited from Attribute .)
 Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
 GetType()()	Gets the type of the current instance. (Inherited from Object .)
 Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type

	information for an interface. (Inherited from Attribute .)
 Attribute:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)
 Attribute:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)
 Type	Sub type class.
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)
 Value	Value of selector.

- Inheritance Hierarchy

System..:::Object

System..:::Attribute

Vajhoej.Record..:::SubTypeAttribute

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubTypeAttribute Constructor

Initializes a new instance of the [SubTypeAttribute](#) class

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public SubTypeAttribute()
```

```
Public Sub New
```

```
public:  
SubTypeAttribute()
```

See Also

[SubTypeAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubTypeAttribute Methods

The [SubTypeAttribute](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
=  Equals(Object)	Returns a value that indicates whether this instance is equal to a specified object. (Inherited from Attribute .)
=  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
=  GetHashCode()	Returns the hash code for this instance. (Inherited from Attribute .)
=  Attribute..:::GetIDsOfNames(Guid%, IntPtr, UInt32, UInt32, IntPtr)	Maps a set of names to a corresponding set of dispatch identifiers. (Inherited from Attribute .)
=  GetType()	Gets the type of the current instance. (Inherited from Object .)
=  Attribute..:::GetTypeInfo(UInt32, UInt32, IntPtr)	Retrieves the type information for an object, which can be used to get the type information for an interface. (Inherited from Attribute .)
=  Attribute..:::GetTypeInfoCount(UInt32%)	Retrieves the number of type information interfaces that an object provides (either 0 or 1). (Inherited from Attribute .)

 Attribute..:::Invoke(UInt32, Guid%, UInt32, Int16, IntPtr, IntPtr, IntPtr, IntPtr)	Provides access to properties and methods exposed by an object. (Inherited from Attribute .)
 IsDefaultAttribute()	When overridden in a derived class, indicates whether the value of this instance is the default value for the derived class. (Inherited from Attribute .)
 Match(Object)	When overridden in a derived class, returns a value that indicates whether this instance equals a specified object. (Inherited from Attribute .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[SubTypeAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubTypeAttribute Properties

The [SubTypeAttribute](#) type exposes the following properties.

-Properties

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Type	Sub type class.
 TypeId	When implemented in a derived class, gets a unique identifier for this Attribute . (Inherited from Attribute .)
 Value	Value of selector.

See Also

[SubTypeAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubTypeAttribute...::Type Property

Sub type class.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public Type Type { get; set; }
```

```
Public Property Type As Type
    Get
    Set
```

```
public:
property Type^ Type {
    Type^ get ();
    void set (Type^ value);
}
```

See Also

[SubTypeAttribute Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

SubTypeAttribute...::Value Property

Value of selector.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public int Value { get; set; }

Public Property Value As Integer
    Get
    Set

public:
property int Value {
    int get ();
    void set (int value);
}
```

See Also

[SubTypeAttribute Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

TimeUtil Class

Class TimeUtil converts between integers in various time formats and DateTime objects.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class TimeUtil
```

```
Public Class TimeUtil
```

```
public ref class TimeUtil
```

Members

All Members Constructors Methods

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 TimeUtil()	Initializes a new instance of the TimeUtil class.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
  FromJavaTime(Int64)	Convert from long with Java time (milliseconds since 1-Jan-1970) to Date object.
  FromUnixTime(Int32)	Convert from int with Unix time (seconds since 1-Jan-1970) to Date object.
  FromVMSTime(Int64)	Convert from long with VMS time (100 nanoseconds since 17-Nov-1858) to Date object.
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
  ToJavaTime(DateTime)	Convert from DateTime object to long with Java time (milliseconds since 1-Jan-1970).
 ToString()	Returns a string that represents the current object. (Inherited from Object .)
  ToUnixTime(DateTime)	Convert from Date object to int with Unix time

(seconds since 1-Jan-1970).

= [ToVMSTime\(DateTime\)](#) Convert from Date object to long with VMS time
(100 nanoseconds since 17-Nov-1858).

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::TimeUtil

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil Constructor

Initializes a new instance of the [TimeUtil](#) class

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public TimeUtil()
```

```
Public Sub New
```

```
public:  
TimeUtil()
```

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil Methods

The [TimeUtil](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
≡  Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
≡  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
≡  FromJavaTime(Int64)	Convert from long with Java time (milliseconds since 1-Jan-1970) to Date object.
≡  FromUnixTime(Int32)	Convert from int with Unix time (seconds since 1-Jan-1970) to Date object.
≡  FromVMSTime(Int64)	Convert from long with VMS time (100 nanoseconds since 17-Nov-1858) to Date object.
≡  GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
≡  GetType()	Gets the type of the current instance. (Inherited from Object .)
≡  MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
≡  ToJavaTime(DateTime)	Convert from DateTime object to long with Java time (milliseconds since 1-Jan-1970).
≡  ToString()	Returns a string that represents the current object. (Inherited from Object .)
≡  ToUnixTime(DateTime)	Convert from Date object to int with Unix time (seconds since 1-Jan-1970).
≡  ToVMSTime(DateTime)	Convert from Date object to long with VMS time (100 nanoseconds since 17-Nov-1858).

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil..::FromJavaTime Method

Convert from long with Java time (milliseconds since 1-Jan-1970) to Date object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public static DateTime FromJavaTime(  
    long v  
)  
  
Public Shared Function FromJavaTime ( _  
    v As Long _  
) As DateTime  
  
public:  
static DateTime FromJavaTime(  
    long long v  
)
```

Parameters

v

[Int64](#)

Java time.

Return Value

DateTime object

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil...::FromUnixTime Method

Convert from int with Unix time (seconds since 1-Jan-1970) to Date object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static DateTime FromUnixTime(  
    int v  
)  
  
Public Shared Function FromUnixTime ( _  
    v As Integer _  
) As DateTime  
  
public:  
static DateTime FromUnixTime(  
    int v  
)
```

Parameters

v

[Int32](#)

Unix time.

Return Value

DateTime object.

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil...::FromVMSTime Method

Convert from long with VMS time (100 nanoseconds since 17-Nov-1858) to Date object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

[-]Syntax

C# Visual Basic Visual C++

```
public static DateTime FromVMSTime(  
    long v  
)  
  
Public Shared Function FromVMSTime ( _  
    v As Long _  
) As DateTime  
  
public:  
static DateTime FromVMSTime(  
    long long v  
)
```

Parameters

v

[Int64](#)

VMS time.

Return Value

DateTime object.

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil...::ToJavaTime Method

Convert from DateTime object to long with Java time (milliseconds since 1-Jan-1970).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public static long ToJavaTime(  
    DateTime dt  
)  
  
Public Shared Function ToJavaTime ( _  
    dt As DateTime _  
) As Long
```

```
public:  
static long long ToJavaTime(  
    DateTime dt  
)
```

Parameters

dt

DateTime

DateTime object.

Return Value

Java time.

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil...::ToUnixTime Method

Convert from Date object to int with Unix time (seconds since 1-Jan-1970).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static int ToUnixTime(  
    DateTime dt  
)  
  
Public Shared Function ToUnixTime ( _  
    dt As DateTime _  
) As Integer
```

```
public:  
static int ToUnixTime(  
    DateTime dt  
)
```

Parameters

dt

DateTime

DateTime object

Return Value

Unix time.

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

TimeUtil...::ToVMSTime Method

Convert from Date object to long with VMS time (100 nanoseconds since 17-Nov-1858).

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public static long ToVMSTime(  
    DateTime dt  
)  
  
Public Shared Function ToVMSTime ( _  
    dt As DateTime _  
) As Long  
  
public:  
static long long ToVMSTime(  
    DateTime dt  
)
```

Parameters

dt

DateTime

DateTime object.

Return Value

VMS time.

See Also

[TimeUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

Util Class

Utility class to process lists and to work with files instead of byte arrays.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class Util  
Public Class Util  
public ref class Util
```

Members

All Members Constructors Methods

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 Util()	Initializes a new instance of the Util class
  CopyAll<(Of <<'(T1, T2)>>)	Convert array of struct in bytes into array of struct in bytes.
  Util...::TransformerConvert<(Of <<'(T1, T2)>>)	Convert array of struct in stream into array of struct in stream.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)

 ReadAll<(Of <<'(T>)>>)(Type, array<Byte>[], ()[][],)	Read array of struct in byte array into List of objects.
 ReadAll<(Of <<'(T>)>>)(Type, Stream, IList<(Of <<'(T>)>>))	Read array of struct in stream into List of objects. Note: does not work with structs containing VARSTR fields and STRUCT fields.
 ReadAll<(Of <<'(T>)>>)(Type, Stream, Util...:::ObjectHandlerProcess<(Of <<'(T>)>>))	Read array of struct in stream and processes them by handler. Note: does not work with structs containing VARSTR fields and STRUCT fields.
 ToString()	Returns a string that represents the current object. (Inherited from Object .)
 WriteAll<(Of <<'(T>)>>)(Type, IList<(Of <<'(T>)>>))	Write List of objects into array of struct in byte array. Note: does not work with structs containing VARSTR fields and STRUCT fields.
 WriteAll<(Of <<'(T>)>>)(Type, IList<(Of <<'(T>)>>), Stream)	Write List of objects into array of struct in stream. Note: does not work with structs containing VARSTR fields and STRUCT fields.

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::Util

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util Constructor

Initializes a new instance of the [Util](#) class

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public Util()
```

```
Public Sub New
```

```
public:  
Util()
```

See Also

[Util Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
Util Methods

The [Util](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 CopyAll<(Of <<'(T1, T2>)>>)(Type, array<Byte>[][], Type, Util,:::, TransformerConvert<(Of <<'(T1, T2>)>>))	Convert array of struct in bytes into array of struct in bytes.
 CopyAll<(Of <<'(T1, T2>)>>)(Type, Stream, Type, Stream, Util,:::, TransformerConvert<(Of <<'(T1, T2>)>>))	Convert array of struct in stream into array of struct in stream.
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 ReadAll<(Of <<'(T>)>>)(Type, array<Byte>[], List<T>) (Util,:::, TransformerConvert<(Of <<'(T>)>>)(Type, array<Byte>[], List<T>))	Read array of struct in byte array into List of objects.
 ReadAll<(Of <<'(T>)>>)(Type, Stream, Type, Stream, Util,:::, TransformerConvert<(Of <<'(T>)>>)(Type, Stream, List<T>))	Read array of struct in stream into List of objects. Note: does not work with

Stream, IList<(Of <<'(T)>>)()	stucts containing VARSTR fields and STRUCT fields.
 ReadAll<(Of <<'(T)>>)(Type, Stream,  Util...:::ObjectHandlerProcess<(Of <<'(T)>>)	Read array of struct in stream and processes them by handler. Note: does not work with stucts containing VARSTR fields and STRUCT fields.
 ToString()	Returns a string that represents the current object. (Inherited from Object .)
 WriteAll<(Of <<'(T)>>)(Type, IList<(Of <<'(T)>>)())	Write List of objects into array of struct in byte array. Note: does not work with stucts containing VARSTR fields and STRUCT fields.
 WriteAll<(Of <<'(T)>>)(Type, IList<(Of <<'(T)>>), Stream)	Write List of objects into array of struct in stream. Note: does not work with stucts containing VARSTR fields and STRUCT fields.

See Also

[Util Class](#)

[Vajhoej.Record Namespace](#)

 | 

-  C#
-  Visual Basic
-  Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::CopyAll Method

Overload List

Name	Description
<code>CopyAll<(Of <<'(T1, T2>)>>)(Type, array<Byte>[], Type, Util...:::TransformerConvert<(Of <<'(T1, T2>)>>)</code>	Convert array of struct in bytes into array of struct in bytes.
<code>CopyAll<(Of <<'(T1, T2>)>>)(Type, Stream, Type, Stream, Util...:::TransformerConvert<(Of <<'(T1, T2>)>>)</code>	Convert array of struct in stream into array of struct in stream.

See Also

[Util Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::CopyAll<(Of <('T1, T2)>) Method (Type, array<Byte>[][][], Type,
Util....::TransformerConvert<(Of <('T1, T2)>)>)

Convert array of struct in bytes into array of struct in bytes.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static byte[] CopyAll<T1, T2>(
    Type t1,
    byte[] b,
    Type t2,
    Util....TransformerConvert<T1, T2> cvt
)
where T1 : class, new()

Public Shared Function CopyAll(Of T1 As {Class, New}, T2) ( _
    t1 As Type, _
    b As Byte(), _
    t2 As Type, _
    cvt As Util....TransformerConvert(Of T1, T2) _
) As Byte()

public:
generic<typename T1, typename T2>
where T1 : ref class, gcnew()
static array<unsigned char>^ CopyAll(
    Type^ t1,
    array<unsigned char>^ b,
    Type^ t2,
    Util....TransformerConvert<T1, T2>^ cvt
)
```

Parameters

t1

Type

From type.

b

array<Byte>[][][]

From byte array.

t2

Type

To type.

cvt

Util...::...TransformerConvert<(Of <('T1, T2)>)>

Converter of objects.

Type Parameters

T1

From type.

T2

To type.

Return Value

To byte array.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If problem with record definition.

See Also

[Util Class](#)

[CopyAll Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::CopyAll<(Of <(<'T1, T2>)>) Method (Type, Stream, Type, Stream,
Util....::TransformerConvert<(Of <(<'T1, T2>)>)>)

Convert array of struct in stream into array of struct in stream.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static void CopyAll<T1, T2>(
    Type t1,
    Stream instm,
    Type t2,
    Stream outstm,
    Util...::TransformerConvert<T1, T2> cvt
)
where T1 : class, new()

Public Shared Sub CopyAll(Of T1 As {Class, New}, T2) ( _
    t1 As Type, _
    instm As Stream, _
    t2 As Type, _
    outstm As Stream, _
    cvt As Util...::TransformerConvert(Of T1, T2) _
)

public:
generic<typename T1, typename T2>
where T1 : ref class, gcnew()
static void CopyAll(
    Type^ t1,
    Stream^ instm,
    Type^ t2,
    Stream^ outstm,
    Util...::TransformerConvert<T1, T2>^ cvt
)
```

Parameters

t1

Type

From type.

instm

Stream

From stream.

t2

[Type](#)

To type.

outstm

[Stream](#)

To stream.

cvt

[Util...:::TransformerConvert<\(Of <\('T1, T2\)>\)>](#)

Converter of objects.

Type Parameters

T1

From type.

T2

To type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util Class](#)

[CopyAll Overload](#)

[Vajhoej.Record Namespace](#)

 | 

-  C#
-  Visual Basic
-  Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::ReadAll Method

Overload List

Name	Description
<u>ReadAll<(Of <<'(T)>>)(Type, array<Byte>[]()[])</u>	Read array of struct in byte array into List of objects.
<u>ReadAll<(Of <<'(T)>>)(Type, Stream, IList<(Of <<'(T)>>))</u>	Read array of struct in stream into List of objects. Note: does not work with structs containing VARSTR fields and STRUCT fields.
<u>ReadAll<(Of <<'(T)>>)(Type, Stream, Util::ObjectHandlerProcess<(Of <<'(T)>>))</u>	Read array of struct in stream and processes them by handler. Note: does not work with structs containing VARSTR fields and STRUCT fields.

See Also

[Util Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::ReadAll<(Of <(<'T>)>) Method (Type, array<Byte>[]()[][])

Read array of struct in byte array into List of objects.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static IList<T> ReadAll<T>(
    Type t,
    byte[] b
)
where T : class, new()

Public Shared Function ReadAll(Of T As {Class, New}) ( _
    t As Type, _
    b As Byte() _ 
) As IList(Of T)

public:
generic<typename T>
where T : ref class, gcnew()
static IList<T>^ ReadAll(
    Type^ t,
    array<unsigned char>^ b
)
```

Parameters

t

Type

Type.

b

array<Byte>[][][]

Byte array.

Type Parameters

T

Type.

Return Value

List of objects.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If problem with record definition.

See Also

[Util Class](#)

[ReadAll Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::ReadAll<(Of <(<'T>)>) Method (Type, Stream, IList<(Of <(<'T>)>)>)

Read array of struct in stream into List of objects. Note: does not work with
structs containing VARSTR fields and STRUCT fields.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static void ReadAll<T>(
    Type t,
    Stream stm,
    IList<T> lst
)
where T : class, new()

Public Shared Sub ReadAll(Of T As {Class, New}) ( _
    t As Type, _
    stm As Stream, _
    lst As IList(Of T) _
)

public:
generic<typename T>
where T : ref class, gcnew()
static void ReadAll(
    Type^ t,
    Stream^ stm,
    IList<T>^ lst
)
```

Parameters

t

Type

Type.

stm

Stream

Stream.

lst

IList<(Of <(<'T>)>)>

List of objects.

Type Parameters

T

Type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util Class](#)

[ReadAll Overload](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::ReadAll<(Of <(<'T>)>) Method (Type, Stream,
Util....::ObjectHandlerProcess<(Of <(<'T>)>)>)

Read array of struct in stream and processes them by handler. Note: does not work with structs containing VARSTR fields and STRUCT fields.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static void ReadAll<T>(
    Type t,
    Stream stm,
    Util...:::ObjectHandlerProcess<T> ohp
)
where T : class, new()

Public Shared Sub ReadAll(Of T As {Class, New}) ( _
    t As Type, _
    stm As Stream, _
    ohp As Util...:::ObjectHandlerProcess(Of T) _
)

public:
generic<typename T>
where T : ref class, gcnew()
static void ReadAll(
    Type^ t,
    Stream^ stm,
    Util...:::ObjectHandlerProcess<T>^ ohp
)
```

Parameters

t

Type

Type.

stm

Stream

Stream.

ohp

Util...:::ObjectHandlerProcess<(Of <(<'T>)>)>

Processor of objects.

Type Parameters

T

Type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util Class](#)

[ReadAll Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::WriteAll Method

Overload List

Name	Description
<u>WriteAll<(Of <<'(T>)>>)(Type, IList<(Of <<'(T>)>>))</u>	Write List of objects into array of struct in byte array. Note: does not work with structs containing VARSTR fields and STRUCT fields.
<u>WriteAll<(Of <<'(T>)>>)(Type, IList<(Of <<'(T>)>>), Stream)</u>	Write List of objects into array of struct in stream. Note: does not work with structs containing VARSTR fields and STRUCT fields.

See Also

[Util Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::WriteAll<(Of <('T)>) Method (Type, IList<(Of <('T)>)>)

Write List of objects into array of struct in byte array. Note: does not work with
structs containing VARSTR fields and STRUCT fields.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static byte[] WriteAll<T>(
    Type t,
    IList<T> lst
)

Public Shared Function WriteAll(Of T) ( _
    t As Type, _
    lst As IList(Of T) _
) As Byte()

public:
generic<typename T>
static array<unsigned char>^ WriteAll(
    Type^ t,
    IList<T>^ lst
)
```

Parameters

t

Type
Type.

lst

IList<(Of <(<'T>)>)>
List of objects.

Type Parameters

T

Type.

Return Value

Byte array.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If problem with record definition.

See Also

[Util Class](#)

[WriteAll Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util...::WriteAll<(Of <('T)>)> Method (Type, IList<(Of <('T)>)>, Stream)

Write List of objects into array of struct in stream. Note: does not work with
structs containing VARSTR fields and STRUCT fields.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static void WriteAll<T>(
    Type t,
    IList<T> lst,
    Stream stm
)

Public Shared Sub WriteAll(Of T) ( _
    t As Type, _
    lst As IList(Of T), _
    stm As Stream _
)

public:
generic<typename T>
static void WriteAll(
    Type^ t,
    IList<T>^ lst,
    Stream^ stm
)
```

Parameters

t

Type

Type.

lst

IList<(Of <(<'T>)>)>

list of object.

stm

Stream

Stream.

Type Parameters

T

Type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util Class](#)

[WriteAll Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util....ObjectHandlerProcess<(Of <('T)>)> Delegate

Process object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public delegate void ObjectHandlerProcess<T>(  
    T o  
)  
  
Public Delegate Sub ObjectHandlerProcess(Of T) ( _  
    o As T _  
)  
  
generic<typename T>  
public delegate void ObjectHandlerProcess(  
    T o  
)
```

Parameters

o
T
Object.

Type Parameters

T

Type.

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util....TransformerConvert<(Of <('T1, T2)>)> Delegate

Convert object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public delegate T2 TransformerConvert<T1, T2>(
    T1 o
)

Public Delegate Function TransformerConvert(Of T1, T2) ( _
    o As T1 _
) As T2

generic<typename T1, typename T2>
public delegate T2 TransformerConvert(
    T1 o
)
```

Parameters

o

T1

From object.

Type Parameters

T1

From type.

T2

To type.

Return Value

To object.

See Also

[Vajhoej.Record Namespace](#)

□ | ▶

○ C#

○ Visual Basic

○ Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

Util2 Class

Utility class to process lists and to work with files instead of byte arrays trying to work even with variable length structs.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class Util2
```

```
Public Class Util2
```

```
public ref class Util2
```

Members

All Members Constructors Methods

Public Instance Declared XNA Framework Only 

Protected Static  Inherited .NET Compact Framework Only 

Member	Description
 Util2 	Initializes a new instance of the Util2 class
  CopyAll<(Of <<'(T1, T2)>>)(Type, array<Byte>[], Type, Util2:::TransformerConvert<(Of <<'(T1, T2)>>), LengthProvider, MaxLengthProvider, ElementsProvider)	Convert array of struct in bytes into array of struct in bytes.
  CopyAll<(Of <<'(T1, T2)>>)(Type, Stream, Type, Stream, Util2:::TransformerConvert<(Of <<'(T1, T2)>>), LengthProvider, MaxLengthProvider, ElementsProvider)	Convert array of struct in stream into array of struct in stream.
  Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
  Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
  GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
	Gets the type of the current



[GetType\(\)](#)

instance.

(Inherited from [Object](#).)

Creates a shallow copy of the current [Object](#).

(Inherited from [Object](#).)



[MemberwiseClone\(\)](#)

Read array of struct in byte array into List of objects.

[ReadAll<\(Of <<'\(T\)>>\)\(Type, array<Byte>\[\], LengthProvider, MaxLengthProvider, ElementsProvider\)](#)

[ReadAll<\(Of <<'\(T\)>>\)\(Type, Stream, IList<\(Of <<'\(T\)>>\), LengthProvider, MaxLengthProvider, ElementsProvider\)](#)

[ReadAll<\(Of <<'\(T\)>>\)\(Type, Stream, Util2...:::ObjectHandlerProcess<\(Of <<'\(T\)>>\), LengthProvider, MaxLengthProvider, ElementsProvider\)](#)



[ToString\(\)](#)

Read array of struct in stream into List of objects.

Read array of struct in stream and processes them by handler.

Returns a string that represents the current object.

(Inherited from [Object](#).)

Write List of objects into array of struct in byte array.

[WriteAll<\(Of <<'\(T\)>>\)\(Type, IList<\(Of <<'\(T\)>>\), LengthProvider, MaxLengthProvider, ElementsProvider\)](#)

[WriteAll<\(Of <<'\(T\)>>\)\(Type, IList<\(Of <<'\(T\)>>\), Stream, LengthProvider, MaxLengthProvider, ElementsProvider\)](#)

Write List of objects into array of struct in stream.

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::Util2

See Also

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2 Constructor

Initializes a new instance of the [Util2](#) class

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public Util2()
```

```
Public Sub New
```

```
public:  
Util2()
```

See Also

[Util2 Class](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2 Methods

The [Util2](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
CopyAll<(Of <<'(T1, T2)>>)(Type, array<Byte>[], Type, Util2:::TransformerConvert<(Of <<'(T1, T2)>>), LengthProvider, MaxLengthProvider, ElementsProvider)	Convert array of struct in bytes into array of struct in bytes.
CopyAll<(Of <<'(T1, T2)>>)(Type, Stream, Type, Stream, Util2:::TransformerConvert<(Of <<'(T1, T2)>>), LengthProvider, MaxLengthProvider, ElementsProvider)	Convert array of struct in stream into array of struct in stream.
Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
GetType()	Gets the type of the current instance. (Inherited from Object .)
MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)

<code>ReadAll<(Of <<'(T>)>>)(Type, array<Byte>[], LengthProvider, MaxLengthProvider, ElementsProvider)</code>	Read array of struct in byte array into List of objects.
<code>ReadAll<(Of <<'(T>)>>)(Type, Stream, IList<(Of <<'(T>)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</code>	Read array of struct in stream into List of objects.
<code>ReadAll<(Of <<'(T>)>>)(Type, Stream, Util2...:::ObjectHandlerProcess<(Of <<'(T>)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</code>	Read array of struct in stream and processes them by handler.
<code>ToString()</code>	Returns a string that represents the current object. (Inherited from Object .)
<code>WriteAll<(Of <<'(T>)>>)(Type, IList<(Of <<'(T>)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</code>	Write List of objects into array of struct in byte array.
<code>WriteAll<(Of <<'(T>)>>)(Type, IList<(Of <<'(T>)>>), Stream, LengthProvider, MaxLengthProvider, ElementsProvider)</code>	Write List of objects into array of struct in stream.

See Also

[Util2 Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::CopyAll Method

Overload List

Name	Description
<u>CopyAll<(Of <<'(T1, T2>)>>)(Type, array<Byte>[][], Type, Util2..::..TransformerConvert<(Of <<'(T1, T2>)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Convert array of struct in bytes into array of struct in bytes.
<u>CopyAll<(Of <<'(T1, T2>)>>)(Type, Stream, Type, Stream, Util2..::..TransformerConvert<(Of <<'(T1, T2>)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Convert array of struct in stream into array of struct in stream.

See Also

[Util2 Class](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::CopyAll<(Of <('T1, T2)>)> Method (Type, array<Byte>[][][], Type, Util2...::TransformerConvert<(Of <('T1, T2)>)>, LengthProvider, MaxLengthProvider, ElementsProvider)

Convert array of struct in bytes into array of struct in bytes.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static byte[] CopyAll<T1, T2>(
    Type t1,
    byte[] b,
    Type t2,
    Util2....TransformerConvert<T1, T2> cvt,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)
where T1 : class, new()

Public Shared Function CopyAll(Of T1 As {Class, New}, T2) ( _
    t1 As Type, _
    b As Byte(), _
    t2 As Type, _
    cvt As Util2....TransformerConvert(Of T1, T2), _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
) As Byte()

public:
generic<typename T1, typename T2>
where T1 : ref class, gcnew()
static array<unsigned char>^ CopyAll(
    Type^ t1,
    array<unsigned char>^ b,
    Type^ t2,
    Util2....TransformerConvert<T1, T2>^ cvt,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t1

Type

From type.

b

array<[Byte](#)>[][]()

From byte array.

t2

Type

To type.

cvt

[Util2...:::TransformerConvert](#)<(Of <('T1, T2)>)>

Converter of objects.

lenpvd

[LengthProvider](#)

Length provider.

maxlenpvd

[MaxLengthProvider](#)

Max length provider.

elmpvd

[ElementsProvider](#)

Element provider.

Type Parameters

T1

From type.

T2

To type.

Return Value

To byte array.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If problem with record definition.

See Also

[Util2 Class](#)

[CopyAll Overload](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::CopyAll<(Of <('T1, T2)>) Method (Type, Stream, Type, Stream,
Util2...::TransformerConvert<(Of <('T1, T2)>)>, LengthProvider,
MaxLengthProvider, ElementsProvider)

Convert array of struct in stream into array of struct in stream.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static void CopyAll<T1, T2>(
    Type t1,
    Stream instm,
    Type t2,
    Stream outstm,
    Util2...:::TransformerConvert<T1, T2> cvt,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)
where T1 : class, new()

Public Shared Sub CopyAll(Of T1 As {Class, New}, T2) ( _
    t1 As Type, _
    instm As Stream, _
    t2 As Type, _
    outstm As Stream, _
    cvt As Util2...:::TransformerConvert(Of T1, T2), _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
)

public:
generic<typename T1, typename T2>
where T1 : ref class, gcnew()
static void CopyAll(
    Type^ t1,
    Stream^ instm,
    Type^ t2,
    Stream^ outstm,
    Util2...:::TransformerConvert<T1, T2>^ cvt,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t1

[Type](#)

From type.

instm

[Stream](#)

From stream.

t2

[Type](#)

To type.

outstm

[Stream](#)

To stream.

cvt

[Util2...:::TransformerConvert](#)<(Of <('T1, T2)>)>

Converter of objects.

lenpvd

[LengthProvider](#)

Length provider.

maxlenpvd

[MaxLengthProvider](#)

Max length provider.

elmpvd

[ElementsProvider](#)

Element provider.

Type Parameters

T1

From type.

T2

To type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util2 Class](#)

[CopyAll Overload](#)

[Vajhoej.Record Namespace](#)

-  | 
-  C#
-  Visual Basic
-  Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::ReadAll Method

Overload List

Name	Description
<u>ReadAll<(Of <<'(T)>>)(Type, array<Byte>[], LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Read array of struct in byte array into List of objects.
<u>ReadAll<(Of <<'(T)>>)(Type, Stream, IList<(Of <<'(T)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Read array of struct in stream into List of objects.
<u>ReadAll<(Of <<'(T)>>)(Type, Stream, Util2..::..ObjectHandlerProcess<(Of <<'(T)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Read array of struct in stream and processes them by handler.

See Also

[Util2 Class](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::ReadAll<(Of <('T)>)> Method (Type, array<Byte>[][], LengthProvider, MaxLengthProvider, ElementsProvider)

Read array of struct in byte array into List of objects.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static IList<T> ReadAll<T>(
    Type t,
    byte[] b,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)
where T : class, new()

Public Shared Function ReadAll(Of T As {Class, New}) ( _
    t As Type, _
    b As Byte(), _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
) As IList(Of T)

public:
generic<typename T>
where T : ref class, gcnew()
static IList<T>^ ReadAll(
    Type^ t,
    array<unsigned char>^ b,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t

Type

Type.

b

array<Byte>[][][]

Byte array.

lenpvd

[LengthProvider](#)

Length provider.

maxlenpvd

[MaxLengthProvider](#)

Max length provider.

elmpvd

[ElementsProvider](#)

Element provider.

Type Parameters

T

Type.

Return Value

List of objects.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If problem with record definition.

See Also

[Util2 Class](#)

[ReadAll Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::ReadAll<(Of <('T)>)> Method (Type, Stream, IList<(Of <('T)>)>, LengthProvider, MaxLengthProvider, ElementsProvider)

Read array of struct in stream into List of objects.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static void ReadAll<T>(
    Type t,
    Stream stm,
    IList<T> lst,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)
where T : class, new()

Public Shared Sub ReadAll(Of T As {Class, New}) ( _
    t As Type, _
    stm As Stream, _
    lst As IList(Of T), _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
)

public:
generic<typename T>
where T : ref class, gcnew()
static void ReadAll(
    Type^ t,
    Stream^ stm,
    IList<T>^ lst,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t

Type

Type.

stm

[Stream](#)

Stream.

lst

[IList<\(Of <\('T\)>\)>](#)

List of objects.

lenpvd

[LengthProvider](#)

Length provider.

maxlenpvd

[MaxLengthProvider](#)

Max length provider.

elmpvd

[ElementsProvider](#)

Element provider.

Type Parameters

T

Type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util2 Class](#)

[ReadAll Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::ReadAll<(Of <('T)>)> Method (Type, Stream,
Util2...::ObjectHandlerProcess<(Of <('T)>)>, LengthProvider,
MaxLengthProvider, ElementsProvider)

Read array of struct in stream and processes them by handler.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static void ReadAll<T>(
    Type t,
    Stream stm,
    Util2...::::ObjectHandlerProcess<T> ohp,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)
where T : class, new()

Public Shared Sub ReadAll(Of T As {Class, New}) ( _
    t As Type, _
    stm As Stream, _
    ohp As Util2...::::ObjectHandlerProcess(Of T), _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
)

public:
generic<typename T>
where T : ref class, gcnew()
static void ReadAll(
    Type^ t,
    Stream^ stm,
    Util2...::::ObjectHandlerProcess<T>^ ohp,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t

Type

Type.

stm

[Stream](#)

Stream.

ohp

[Util2...:::ObjectHandlerProcess](#)<(Of <("T")>)>

Processor of objects.

lenpvd

[LengthProvider](#)

Length provider.

maxlenpvd

[MaxLengthProvider](#)

Max length provider.

elmpvd

[ElementsProvider](#)

Element provider.

Type Parameters

T

Type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util2 Class](#)

[ReadAll Overload](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::WriteAll Method

Overload List

Name	Description
<u>WriteAll<(Of <<'(T)>>)(Type, IList<(Of <<'(T)>>), LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Write List of objects into array of struct in byte array.
<u>WriteAll<(Of <<'(T)>>)(Type, IList<(Of <<'(T)>>), Stream, LengthProvider, MaxLengthProvider, ElementsProvider)</u>	Write List of objects into array of struct in stream.

See Also

[Util2 Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::WriteAll<(Of <(<'T>)>) Method (Type, IList<(Of <(<'T>)>)>, LengthProvider, MaxLengthProvider, ElementsProvider)

Write List of objects into array of struct in byte array.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

- Syntax

C# Visual Basic Visual C++

```
public static byte[] WriteAll<T>(
    Type t,
    IList<T> lst,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)

Public Shared Function WriteAll(Of T) ( _
    t As Type, _
    lst As IList(Of T), _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
) As Byte()

public:
generic<typename T>
static array<unsigned char>^ WriteAll(
    Type^ t,
    IList<T>^ lst,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t

Type

Type.

lst

IList<(Of <(<'T>)>)>

List of objects.

lenpvd

[LengthProvider](#)

Length provider.

maxlenpvd

[MaxLengthProvider](#)

Max length provider.

elmpvd

[ElementsProvider](#)

Element provider.

Type Parameters

T

Type.

Return Value

Byte array.

-Exceptions

Exception	Condition
<u>Vajhoej.Record...:::RecordException</u>	If problem with record definition.

See Also

[Util2 Class](#)

[WriteAll Overload](#)

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...::WriteAll<(Of <(<'T>)>) Method (Type, IList<(Of <(<'T>)>), Stream, LengthProvider, MaxLengthProvider, ElementsProvider)

Write List of objects into array of struct in stream.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public static void WriteAll<T>(
    Type t,
    IList<T> lst,
    Stream stm,
    LengthProvider lenpvd,
    MaxLengthProvider maxlenpvd,
    ElementsProvider elmpvd
)

Public Shared Sub WriteAll(Of T) ( _
    t As Type, _
    lst As IList(Of T), _
    stm As Stream, _
    lenpvd As LengthProvider, _
    maxlenpvd As MaxLengthProvider, _
    elmpvd As ElementsProvider _
)

public:
generic<typename T>
static void WriteAll(
    Type^ t,
    IList<T>^ lst,
    Stream^ stm,
    LengthProvider^ lenpvd,
    MaxLengthProvider^ maxlenpvd,
    ElementsProvider^ elmpvd
)
```

Parameters

t

Type
Type.

lst

[IList](#)<(Of <('T)>)>
list of object.

stm

[Stream](#)

Stream.

lenpvd

[LengthProvider](#)

Length provider.

maxlenpvd

[MaxLengthProvider](#)

Max length provider.

elmpvd

[ElementsProvider](#)

Element provider.

Type Parameters

T

Type.

-Exceptions

Exception	Condition
<u>Vajhoej.Record..:::RecordException</u>	If problem with record definition.
<u>System.IO..:::IOException</u>	If problem with stream.

See Also

[Util2 Class](#)

[WriteAll Overload](#)

[Vajhoej.Record Namespace](#)

- | 
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library
Util2...:::ObjectHandlerProcess<(Of <(<'T>)>) Delegate
Process object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public delegate void ObjectHandlerProcess<T>(
    T o
)

Public Delegate Sub ObjectHandlerProcess(Of T) ( _
    o As T _
)

generic<typename T>
public delegate void ObjectHandlerProcess(
    T o
)
```

Parameters

o
T
Object.

Type Parameters

T

Type.

See Also

[Vajhoej.Record Namespace](#)

- | ▶
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

Util2...:::TransformerConvert<(Of <(<'T1, T2>)>) Delegate

Convert object.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public delegate T2 TransformerConvert<T1, T2>(
    T1 o
)

Public Delegate Function TransformerConvert(Of T1, T2) ( _
    o As T1 _
) As T2

generic<typename T1, typename T2>
public delegate T2 TransformerConvert(
    T1 o
)
```

Parameters

o

T1

From object.

Type Parameters

T1

From type.

T2

To type.

Return Value

To object.

See Also

[Vajhoej.Record Namespace](#)

| ▶

• C#

• Visual Basic

• Visual C++

| [Members](#) | [See Also](#)

A Sandcastle Documented Class Library

VAXFloatUtil Class

Class VAXFloatUtil converts between VAX floating point and IEEE floating point.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public class VAXFloatUtil  
Public Class VAXFloatUtil  
public ref class VAXFloatUtil
```

-Members

All Members Constructors ⌂ Methods ⌂

Public Instance Declared XNA Framework Only ✘

Protected Static ⚡ Inherited .NET Compact Framework Only 📦

Member	Description
≡ VAXFloatUtil()	Initializes a new instance of the VAXFloatUtil class
≡ Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
≡ ⚡ F2S(UInt32)	Convert from F floating to S floating.
≡ Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
≡ ⚡ G2T(UInt64)	Convert from G floating to T floating.
≡ GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
≡ GetType()	Gets the type of the current instance. (Inherited from Object .)
≡ MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
≡ ⚡ S2F(UInt32)	Convert from S floating to F floating.
≡ ⚡ T2G(UInt64)	Convert from T floating to G floating.
≡ ToString()	Returns a string that represents the current object. (Inherited from Object .)

-Inheritance Hierarchy

[System..:::Object](#)

Vajhoej.Record..:::VAXFloatUtil

See Also

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

VAXFloatUtil Constructor

Initializes a new instance of the [VAXFloatUtil](#) class

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

Syntax

C# Visual Basic Visual C++

```
public VAXFloatUtil()
```

```
Public Sub New
```

```
public:  
VAXFloatUtil()
```

See Also

[VAXFloatUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

VAXFloatUtil Methods

The [VAXFloatUtil](#) type exposes the following methods.

-Methods

Public Instance Declared XNA Framework Only

Protected Static Inherited .NET Compact Framework Only

Member	Description
 Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
 F2S(UInt32)	Convert from F floating to S floating.
 Finalize()	Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from Object .)
 G2T(UInt64)	Convert from G floating to T floating.
 GetHashCode()	Serves as a hash function for a particular type. (Inherited from Object .)
 GetType()	Gets the type of the current instance. (Inherited from Object .)
 MemberwiseClone()	Creates a shallow copy of the current Object . (Inherited from Object .)
 S2F(UInt32)	Convert from S floating to F floating.
 T2G(UInt64)	Convert from T floating to G floating.
 ToString()	Returns a string that represents the current object. (Inherited from Object .)

See Also

[VAXFloatUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

VAXFloatUtil...::F2S Method

Convert from F floating to S floating.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public static uint F2S(  
    uint v  
)  
  
Public Shared Function F2S ( _  
    v As UInteger _  
) As UInteger  
  
public:  
static unsigned int F2S(  
    unsigned int v  
)
```

Parameters

v
[UInt32](#)
F floating.

Return Value

S floating.

See Also

[VAXFloatUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

VAXFloatUtil...::G2T Method

Convert from G floating to T floating.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public static ulong G2T(  
    ulong v  
)  
  
Public Shared Function G2T ( _  
    v As ULong _  
) As ULong  
  
public:  
static unsigned long long G2T(  
    unsigned long long v  
)
```

Parameters

v

UInt64

G floating.

Return Value

T floating.

See Also

[VAXFloatUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

VAXFloatUtil...::S2F Method

Convert from S floating to F floating.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public static uint S2F(  
    uint v  
)  
  
Public Shared Function S2F ( _  
    v As UInteger _  
) As UInteger  
  
public:  
static unsigned int S2F(  
    unsigned int v  
)
```

Parameters

v
[UInt32](#)
S floating.

Return Value

F floating.

See Also

[VAXFloatUtil Class](#)

[Vajhoej.Record Namespace](#)

- |
- C#
- Visual Basic
- Visual C++

| [See Also](#)

A Sandcastle Documented Class Library

VAXFloatUtil...::T2G Method

Convert from T floating to G floating.

Namespace: [Vajhoej.Record](#)

Assembly: Record (in Record.dll) Version: 0.0.0.0

■ Syntax

C# Visual Basic Visual C++

```
public static ulong T2G(  
    ulong v  
)  
  
Public Shared Function T2G ( _  
    v As ULong _  
) As ULong  
  
public:  
static unsigned long long T2G(  
    unsigned long long v  
)
```

Parameters

v

[UInt64](#)

T floating.

Return Value

G floating.

See Also

[VAXFloatUtil Class](#)

[Vajhoej.Record Namespace](#)
