

Image Navigator Help

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The Image Navigator is a library of over 4,000 symbols for industrial automation including pumps, pipes, valves, tanks, mixers, motors, ducts, electrical symbols, flow meters, material handling, sensors, PLCs, transmitters, and ISA symbols.

To navigate this help file, use the **Contents** and **Search** buttons at the top of this window.

For more information about this help file, refer to the following topics:

<u>Conventions</u>—formatting and typographical conventions in this help file

Important Information

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Configuring the Image Navigator

To configure the Image Navigator, choose **Options**»**Configure**.

Category File Path

Normally, this field should be blank, which causes the Image Navigator to look for the category (*.cat) files in the same directory as the Image Navigator program. If your category files are stored in a separate location, you may specify that directory in this field. Relative paths such as \symbols are supported. Click **Browse** to select a folder.

Always on top

Check this box to make the Image Navigator stay on top of other windows.

Automatically minimize after copying

Check this box to automatically minimize the Image Navigator after copying a symbol to the clipboard.

Do not tile textures

Normally, when a texture is copied to the clipboard, a large bitmap consisting of many tiles is copied. If this box is checked, then only a single tile is copied.

Always copy as picture

This setting controls the default behavior of the **Copy** button on the main Image Navigator screen. When this box is unchecked, clicking the **Copy** button does the same thing as choosing **Copy to Clipboard** from the **Edit** menu. When this box is checked, clicking the **Copy** button does the same thing as choosing **Copy as Picture (wmf) Only** from the **Edit** menu.

Thumbnail size

This determines the size of the symbol thumbnails, in pixels. Enter a number between 26 and 256.

Picture optimization

This determines the amount of picture optimization that is performed automatically. Optimization occurs automatically for all symbol operations including exporting, loading from the hard drive, copying to the clipboard, and adding your own symbols.

No optimizationPictures will not be optimized.Lossless optimizationPicture data size will be reduced moderately, but image quality will not be harmed.Maximum
optimizationPicture data size will be reduced as much as possible, with a slight loss of picture quality.

Picture optimization is important because it results in smaller, leaner metafiles, which usually load and draw faster. Optimization has no effect on bitmaps or textures.

Defaults Button

Click this button to return all configuration settings to their default values.

Image Navigator Limitations

Supported Drawing Programs

The Image Navigator was specifically designed to properly handle metafiles created by CorelDRAW 5, 7, or 10, or Adobe Illustrator 9. If you are having trouble adding your own metafiles to the Image Navigator, try copying your metafiles into one of these drawing programs first, then paste them into the Image Navigator.

Metafile Limitations

Not all metafiles are supported by the Image Navigator. Metafiles vary widely according to the drawing program used to create them—some drawing programs create metafiles that are compatible with many other applications; some do not. Windows metafiles can contain a rich set of commands, most of which are not used by clipart today. The Image Navigator supports the subset of metafile commands that is used by the majority of clipart vendors. The drawing objects supported include line, polyline, polygon, polypolygon, rectangle, and ellipse.

Number of Categories

There is no set limit on the number of categories that you can have. However, a large number of categories will slow the performance of the Image Navigator main screen.

Symbol Size

There is no set limit on the size (in bytes) of a symbol that the Image Navigator can contain. However, the larger a symbol is, the slower the Image Navigator will respond when drawing, resizing, deleting, or moving that symbol.

Accuracy of Symbols

The Image Navigator symbols and their descriptions are provided "as-is"—there is no warranty or guarantee with regard to their accuracy, correctness, or completeness with respect to the actual objects that they represent. The library may contain symbols that deviate from industry standards or symbols that have non-standard or erroneous descriptions.

Image Format Conversion

When converting image files from one format to another, there may be slight distortions, degradations, or minor differences due to the inherent complexities and limitations of image conversion.

LabVIEW and Lookout Instructions

Using Image Navigator with Lookout

- 1. Select a symbol in the Image Navigator.
- 2. Export the selected symbol from the **File**»**Export** menu. Save the file into the Lookout\Graphics directory.
- 3. Switch to Lookout and import the symbol from the **Import**»**Graphic** menu.

Using Image Navigator with LabVIEW

Select a symbol in the Image Navigator and drag it onto the LabVIEW front panel. You can also copy the symbol in the Image Navigator then select **Edit**»**Paste** in LabVIEW.

Preview Window

Resizing the Preview Window

To resize the Preview window, drag the splitter bars that are on the right and bottom side of the Preview window.

Full Screen Preview

To create a full-screen preview, choose **View**»**Full Screen Preview**. To close the full-screen preview, click the **Close** button.

Finding a Symbol

To display the Find dialog, choose **Edit**»**Find**.

Find what

Type in a word or phrase that you want to find.

Find Next

Click this button to find the next symbol whose description contains the search phrase. The search begins with the currently-selected symbol, and the search wraps around to the first category once you reach the end of the symbols.

Match case

If this box is checked, then the case of search phrase must match the case of the symbol's description. If unchecked, then case does not matter.

Exporting Symbols

Exporting Bitmaps and Textures

To export a Bitmap or Texture from the Image Navigator:

- 1. Select a symbol to be exported.
- 2. Choose **File**»**Export As Bitmap**.
- 3. Choose a filename for the bitmap or texture.

Bitmaps and Textures are exported at the same color depth as the current display driver. For example, if your computer is in 256-color mode, exported bitmaps will contain a 256-color palette.

A Texture is normally exported at the size of the Preview window. If you want to export only a single tile of the texture, then check the **Do Not Tile Textures** box on the Configure Image Navigator dialog box.

Exporting Pictures

A Picture may be exported in any of the following formats:

| Metafile (*.wmf) | This is a standard vector-based image format that can be read by most Windows- based graphics programs. |
|-------------------------|---|
| Bitmap (*.bmp) | This is a standard pixel-based image format that can be read by most Windows-based graphics programs. |
| PNG (*.png) | This is a compressed pixel-based format designed for the internet. |
| SVG (*.svg) | This is a standard vector-based format that is used to display graphics on World Wide Web browsers. Currently, SVG files can be displayed using Adobe's SVG Viewer plug-in for Microsoft Internet Explorer. |
| SVG Compressed (*.svgz) | This is a compressed version of the SVG format. Typically, an SVGZ file is 25% of the size of the corresponding SVG file, which makes for a very quick download on the internet. |

The metafile format is generally preferred over the bitmap format. A metafile will stretch to any size much better than a bitmap. A Picture exported as a bitmap is approximately the size of the Preview window on the main Image Navigator screen.

To export a Picture from the Image Navigator:

- 1. Select a symbol to be exported.
- 2. Choose File»Export Symbol.
- 3. Select Metafile, Bitmap, or Scalable Vector Graphic from the **Save as type** drop-down box.
- 4. Choose a filename for the picture.

When Picture symbols are exported as bitmaps, they are exported at the size of the Preview window. To resize the Preview window, drag the splitter bars at its right or bottom side.

The background color of a Picture exported as a bitmap can be changed from the <u>Symbol Options</u> screen. This feature can be used to match symbols to the background in your application.

Symbol Types

There are four types of symbols that the Image Navigator can contain:

Picture

A Picture is a vector-based drawing that can be stretched without distortion. Pictures are implemented using a Windows metafile (*.wmf).

Simple Picture

A Simple Picture is a Picture that has only one fill color and one line color.

Bitmap

A Bitmap is a pixel-based drawing that looks best at its original size. Stretching a Bitmap can result in a jagged, distorted image.

Texture

A Texture is similar to a Bitmap, except you can tile it to form a never-ending pattern.

Symbol Properties

To view or change a symbol's properties, right-click the symbol and choose **Properties**.

Symbol Description

Type in a symbol description, up to 80 characters.

Data Size

Displays the size, in kilobytes, of the metafile or bitmap image data.

Туре

Displays the <u>type of symbol</u>.

Handle

This is a unique number assigned to every symbol.

Symbol Options

To display the Symbol Options dialog box, click **Options** in the main Image Navigator window or select **Options**»**Symbol Options**.

Fill Color Mode

| Original | Fill colors are not changed. |
|----------|--|
| Shaded | Fill colors are shaded according to the selected fill color. |
| Solid | Fill colors are solid according to the selected fill color. |
| Hollow | Fill colors are removed. |
| | |

Fill Color

Click on this box to change the fill color. The **Fill color** box is enabled only if the **Fill Color Mode** is set to **Shaded** or **Solid**.

Flip

| None | Picture will not be flipped. |
|------------|--|
| Horizontal | Picture will be flipped horizontally. |
| Vertical | Picture will be flipped vertically. |
| Both | Picture will be flipped horizontally and vertically. |

Rotation

| 0 | Picture will not be rotated. | |
|-----|--------------------------------------|--|
| 90 | Picture will be rotated 90 degrees. | |
| 180 | Picture will be rotated 180 degrees. | |
| 270 | Picture will be rotated 270 degrees. | |

Background Color

Click on this box to change the background color for exporting metafiles as bitmaps.

Defaults Button

Click on this button to return all symbol options to their default values.

Copying, Moving, and Deleting Symbols

To copy a symbol to the clipboard:

Select a symbol and do one of the following:

- Click the Copy button.
- Choose Edit»Copy to Clipboard.
- Press <Ctrl-C>.
- Double-click the symbol's thumbnail.

Pictures will be copied to the clipboard in both metafile and bitmap formats.

To copy a Picture to the clipboard as a metafile:

Select a symbol and do one of the following:

- Click the **Copy** button while holding down the <Shift> key.
- Choose **Edit**»**Copy as Picture (wmf) Only**.
- Press <Ctrl-Shift-C>.
- Double-click the symbol's thumbnail while holding down the <Shift> key.

This will copy the picture to the clipboard as a metafile, but not as a bitmap.

To move a symbol within the same category:

Drag the symbol's thumbnail to the desired location.

To copy a symbol into another category:

Drag the symbol's thumbnail onto a category in the **Category** listbox.

To move a symbol into another category:

Drag the symbol's thumbnail onto a category in the **Category** listbox while holding down the <Shift> key.

To delete a symbol:

Select a symbol and choose **Edit**»**Delete**.

Adding Your Own Symbols

You can add your own symbols to the Image Navigator in several ways: pasting, importing, or dragging.

Pasting Graphics from the Clipboard

You can copy graphic objects from other Windows programs and add them to the Image Navigator as follows:

- 1. Switch to another graphics application such as CorelDRAW or Adobe Illustrator.
- 2. Select an object.
- 3. Select **Edit**»**Copy**.
- 4. Switch back to the Image Navigator.
- 5. Choose **Edit**»**Paste from clipboard**.
- 6. Type in an optional description for the symbol (80 characters maximum).
- 7. Select an available <u>symbol type</u>.
- 8. Select the category into which you want to add the symbol, or <u>create a</u> <u>new category</u> by clicking **Create New Category**.
- 9. Click **OK**. The symbol is added to the end of the selected category.

Importing a Graphics File

You can import graphics files and add them as follows:

- 1. Choose File»Import Symbol.
- 2. Select a file to import. Picture files (*.wmf) and bitmap files (*.bmp) are supported.
- 3. Type in an optional description for the symbol (80 characters maximum).
- 4. Select an available <u>symbol type</u>.
- 5. Select the category into which you want to add the symbol, or <u>create a</u> <u>new category</u> by clicking **Create New Category**.
- 6. Click **OK**. The symbol is added to the end of the selected category.

Using Drag-And-Drop

Many graphics programs support drag-and-drop, which allows you to drag a graphic from one program and drop it in another. To add a graphic using drag-and-drop:

- 1. Drag a graphic from another program and drop it onto the Image Navigator.
- 2. Type in an optional description for the symbol (80 characters maximum).
- 3. Select an available <u>symbol type</u>.
- 4. Select the category into which you want to add the symbol, or <u>create a</u> <u>new category</u> by clicking the **Create New Category** button.
- 5. Click **OK**. The symbol is added to the end of the selected category.

Category Properties

To view or change a category's properties, right-click the category and choose **Properties**.

Description

Type in a description for the category, up to 40 characters.

Symbol count

This is the total number of symbols in the category. Maximum is 32,767.

Filename

This is the full path of the category file (*.cat) that contains all of the symbol data for this category. These files can be freely copied or moved to other computers.

File size

This is the size of the category file, in kilobytes.

Category version

This is the version number for this category. Currently, all categories are version 1.

Read-only

This displays whether or not the category file is read-only. This can be changed using Windows Explorer.

Creating a New Category

To display the Create New Category dialog, choose **File**»**Create New Category**.

Category Description

Enter a description for the new category, up to 40 characters. Spaces and symbols are allowed.

Filename

Type in a valid filename for the new category. The file extension must be .cat. Long filenames are supported, but short filenames can be used to maintain compatibility with older versions of the Image Navigator. Do not include a path or drive letter in the filename. The new category is created in the directory specified by the **Category File Path** field in the <u>Configure Image Navigator</u> dialog box.

Deleting a Category

To delete an entire category, use Windows Explorer to delete the category (*.cat) file. To determine a category's filename, right-click the category and choose **Properties**.

Making a Category Read-Only

You may want to make a category read-only so that users can use the symbols without deleting or rearranging them. To make a category read-only, set the read-only file attribute for the category file using Windows Explorer. To determine the filename of a category, right-click the category and choose **Properties**.

When a category is set as read-only, users cannot delete, move, rename, or add to its symbols.

Repairing a Category

To repair a category, right-click a category and choose **Repair Category**.

Rarely, a category may become corrupt, perhaps from adding and deleting many symbols. Repairing a category restores a category back to regular function. For categories that are not corrupted, this is a harmless procedure.

Important Information

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Conventions

This help file uses the following conventions:

| <> | Angle brackets that contain numbers separated by an ellipsis represent a range of values associated with a bit or signal name—for example, DBIO<30>. |
|-------------------------|---|
| » | The » symbol leads you through nested menu items and dialog box options to a final action. The sequence File » Page Setup » Options directs you to pull down the File menu, select the Page Setup item, and select Options from the last dialog box. |
| $\overline{\mathbb{N}}$ | This icon denotes a note, which alerts you to important information. |
| bold | Bold text denotes items that you must select or click on in the software, such as menu items and dialog box options. Bold text also denotes parameter names, emphasis, or an introduction to a key concept. |
| green | Underlined text in this color denotes a link to a help topic, help file, or Web address. |
| monospace | Text in this font denotes text or characters that you should enter from the keyboard, sections of code, programming examples, and syntax examples. This font is also used for the proper names of disk drives, paths, directories, programs, subprograms, subroutines, device names, functions, operations, variables, filenames and extensions, and code excerpts. |

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