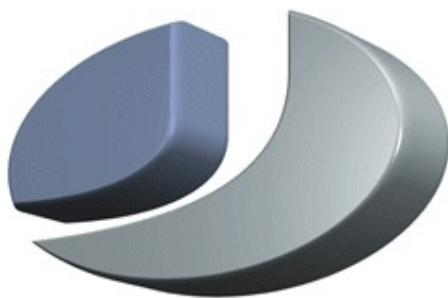


JUSTCROFT INTERNATIONAL  
IMAGE DATA MANAGEMENT

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# **JustIMAGE 5.4 User Manual**

**Justcroft International**

# **JustIMAGE 5.4 User Manual**

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## Introduction

JustIMAGE 5.4 is a product suite for viewing, converting and plotting image files. JustIMAGE 5.4 is available for Windows™ and Linux.

This manual will show you, as a user, how to work with JustIMAGE 5.4 in various situations. Application administrators and advanced users should read the “JustIMAGE 5.4 Reference Manual”.

JustIMAGE 5.4 comes with several files you can use to test the functionality of JustIMAGE 5.4. These test files are located under the `testfiles` sub-directory of the installation. These test files are used in the examples of this manual.



## General Information

### ***What Is JustIMAGE 5.4?***

JustIMAGE 5.4 is a product suite for viewing, converting and plotting large, complex image files. JustIMAGE 5.4 is available for Windows™ and Linux.

We are proud of our CGM interpreter support. Unlike other CGM interpreters, we strive for 100% support of the CGM standard including CGM version 4. We support the special CGM+, CGM\*PIP extensions, which are required by the Oil & Gas Industry. We have also extended our CGM interpretation with ATA and WebCGM support. There are no additional license costs for CGM+, CGM\*PIP, ATA or WebCGM support.

Our CGM interpreter core has some special features that reduce common CGM interpretation problems:

- Automatic package profile detection for automatic CGM interpretation correction.
- Automatic CGM cell array splitting.
- CGM Element limits based on CGM\*PIP/II, ATA and WebCGM.

### ***The Modules***

The JustIMAGE 5.4 program suite consists of a number of modules. Some of these modules are also available as command line programs.

The JustIMAGE 5.4 User Interface is the main program that gives you access to the different JustIMAGE 5.4 modules. The graphical user interface allows you to control the various modules in a consistent way, so that any module is seamlessly integrated.

You need a license for the JustIMAGE 5.4 product suite. Each module of the JustIMAGE 5.4 program suite is license restricted with one or more license features. This is a technical method of enforcing the license restriction. Contact Justcroft International for an overview of what is licensed.

### **Viewer Module**

The Viewer module allows you to preview files. You can rotate, zoom and pan on the picture you are previewing. This module also allows you to analyze CGM files and create statistical reports with our CGM Analyser. Advanced users can also run the CGM Analyser on the command line.

## General Information

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### Input File Converter Module

This module allows you to load non-CGM graphics formats into the JustIMAGE 5.4 Viewer. JustEDIT, JustMONTAGE and The Batch Processor also use the Input File Converter module.

Conversion is either vector graphics to CGM vector graphics or bitmap graphics to CGM cell arrays. The following formats are supported.

Format	Remarks
BMP	Windows® device independent bitmap. Supported are 1, 4, 8 and 24 bits. OS/2 bitmaps are not supported. The generated CGM is always abstract.
CalComp 906/907	Limited HCBS support. Conversion is to CGM version 3 vector graphics. The generated CGM is always metric.
CalComp 925	Conversion is to CGM vector graphics. The generated CGM is always metric.
CALS	CALS type 1 and type 2. The generated CGM is always metric. By default the image will be automatically rotated to landscape during conversion if the height is larger than the width.
DGN V7	MicroStation V7 Design files. Requires an additional license. See “MicroStation Design File Converter Module” below for details.
ECW	Enhanced Compressed Wavelet files. Requires an additional license. See “Enhanced Compressed Wavelet Converter Module” below for details.
EMF	Conversion is to CGM version 3 vector graphics. The generated CGM is always metric.
GIF	Each GIF picture is converted to a CGM picture. The generated CGM is always metric.
HP-GL	Only the first HP-GL picture is converted. Conversion is to CGM vector graphics. The generated CGM is always metric.
HP-GL/2	HP-RTL is not supported. Only the first HP-GL picture is converted. Conversion is to CGM vector graphics. The generated CGM is always metric.
Insight Raster	Only Black & White raster files are supported. The generated CGM is always metric.
JPEG	The generated CGM is always metric.
PDF	PDF version 1.3 and higher with restrictions. Conversion is, by default,



	to CGM vector graphics. There is also an optional PDF to CGM bitmap converter. The generated CGM is always metric.
PDS	Schlumberger Picture Description Standard files. See “Schlumberger PDS Files” below for details.
PNG	The generated CGM is always metric.
PostScript	PostScript language level 1, 2 and 3. Conversion is usually a bitmap CGM. The generated CGM is always metric.
Raw Print	Raw Print format file with a fixed scan size and resolution. Conversion to a CGM bitmap. The generated CGM is always metric.
TIFF	Baseline TIFF is supported. JPEG compression, Deflate compression and the FAX G3/G4 extensions are supported. The generated CGM is always metric. By default the image will be automatically rotated to landscape during conversion if the width:height ratio is larger or equal to 1:2.
WebP	Web Portable format. The generated CGM is always metric.
WMF	Conversion is to CGM version 3 vector graphics. The generated CGM is always metric.
XWD	The generated CGM is always abstract.

The Input File Converter module is part of the JustIMAGE 5.4 installation but is licensed separately.

### Output File Converter Module

The Output File Converter module allows you to export the picture you are currently previewing. You can export to several popular bitmap formats such as TIFF, GIF and PNG at any size or resolution. You can also save to Adobe Portable Document Format (PDF) and Scalable Vector Graphics format (SVG). Both PDF export and SVG export is vector output, including true text support.

Use the Batch Processor if you want to convert multiple files to a specific file format. Advanced users can run the Output File Converter as a command line program if needed.

The Output File Converter module is part of the JustIMAGE 5.4 installation but is licensed separately.

### **Print Management Module**

The Print Management module allows you to print files to any supported printer. There are several printing options available. The Batch Processor also uses these printing options.

#### ***OS System Driver***

The OS System Driver option is mainly intended for text printing on small paper sizes and is not intended for complex graphics printing. It relies on the native printing architecture of the OS.

#### ***Justcroft Printer Driver***

Justcroft International has many years of experience with printing complex CGM graphics on UNIX® and Windows® systems. Our own printer drivers will give you the benefit of high-performance, high-quality output.

By using a virtual raster device, we can guarantee no differences in output between different printers.

Justcroft printer drivers are less resource intensive. You can get amazingly large plots with the least amount of printer memory and disk space. Our drivers can handle up to 500 meters length output.

There are two types of Justcroft printer drivers:

- Raster driver output in general suitable for printers and plotters that allow raw raster data. The device can print at maximum speed, because no special interpretation needs to be done except, possibly, raster data decompression. The raster data is generated off-line which ensures that the printer and plotter are only occupied during the physical printing process. JustIMAGE 5.4 will use the CPU power and memory of your Operating System. There is no need to buy extra memory for your printer or plotter. Supported raster types include: PCL, HP-RTL, Epson ESC/P, iSys RTL, Printrex raster, Neuralog, Versatec, OYO, Graphtec, Canon GARO and TIFF mono raster.
- PostScript vector driver output. PostScript is a graphics vector description language, which is very popular for Desktop Publishing (DTP). Because it also a programming language you can create complex graphics with relatively small file sizes.

The Print Management module requires a license.

### **JustPLOT Submit**

JustPLOT is Justcroft's system for printing and plotting in a mixed network environment. The JustPLOT submit option is part of the JustIMAGE 5.4 installation. You do need to have one or more JustPLOT Servers installed in order to be able to submit print jobs.

### **JustIMAGE Driver**

Until now, when our customers wanted to print or export an image from one of their Windows Geological and Geophysical applications (G&G) they first had to export the image to an output file, start up JustIMAGE 5.4 and then load the image file into JustIMAGE 5.4.

To remove these extra steps and improve the work-flow we have developed the "JustIMAGE Driver". Now a user can use the File -> Print window within the G&G Windows application to put the image directly into a JustIMAGE 5.4 Viewer, Print or Export window.

The JustIMAGE Driver module is part of the JustIMAGE 5.4 download but must be explicitly enabled during the installation. The module itself does not require a separate license but the various selectable modules (Viewer, Print, Export) do require a license.

### **CGM Optimiser Module**

The CGM Optimiser is an application that allows you to convert CGM, CGM+ and CGM\*PIP files so that these can be loaded into graphics applications.

Because CGM is an all-purpose graphics standard, there are many aspects of the file format that are not specifically defined in the standard.

Another problem is the general complexity of the CGM format. Not only are there three different ways to encode the file, but also the large number of CGM graphics elements and the complexity of these elements make it difficult to support every possible feature of the CGM format.

Most programs support only a specific subset of the CGM standard, mostly because –unlike the CGM Optimiser– it is not the native file format of the program.

The third category of problems is caused by industry specific extensions such as CGM+ and CGM\*PIP. General drawing packages such as CorelDRAW™ or MicroStation™ do not support these extensions.

The CGM Optimiser solves CGM problems by analyzing the CGM file and converting the original CGM into a format that is better suited for import into a drawing packages. It takes the CGM file you want to convert and changes it into one or more other files that can be imported in the drawing package.

## General Information

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The converter performs several default analyzes and conversions:

- Correction of certain CGM file constructions that are known to cause problems. For example, CGM Metafile defaults are moved to the CGM Begin Picture State.
- Direct color output is generated if color index values higher than 255 were used in the original CGM file. Most drawing packages can handle only 256 index colors.
- A clear text CGM file is converted to a binary CGM. Most drawing packages only support the binary CGM encoding.
- If the input file is a CGM+ or CGM\*PIP file and seismic sections are detected a seismic rendering is performed. The non-seismic CGM elements (the standard CGM elements) are kept in a CGM output file. Rectangle(s) are drawn in the output CGM file to help in placing the associated rendered seismic sections when the user wishes to re-combine the output files.
- The rendered seismic sections are placed in a separate bitmap file. This file can then be imported in the drawing package and combined with the converted CGM file.
- Large Cell arrays are split into smaller cell arrays.
- Common CGM graphics elements that are outside the active clip are removed from the CGM output, both reducing the file size and making import into drawing packages simpler.
- Line joining and Fill joining reduces the number of CGM elements making import into drawing packages simpler.

The CGM Optimiser can be run for multiple files using the Batch Processor or can be started from the command line.

The CGM Optimiser module is part of the JustIMAGE 5.4 installation but is licensed separately.

## JustMONTAGE Module

The JustMONTAGE module is a program that allows you to create compositions of CGM images in combination with graphical shapes on a canvas. The composition can be created as a single CGM suitable for plotting, rendering to a bitmap format or importing into other graphics packages. JustMONTAGE will preserve the CGM seismic extensions in the resulting composition CGM. JustMONTAGE can also translate raster or vector data into CGM so that it can be used in the composition.

JustMONTAGE stores a composition in a simple XML format whose structure is based on the Scalable Vector Graphics (SVG) standard of the World Wide Web Consortium (W3C).

The JustMONTAGE module is part of the JustIMAGE 5.4 installation but is licensed separately.

## **JustEDIT Module**

The JustEDIT module is a program that allows you to edit graphics files, primarily CGM files. Many of the features within JustEDIT have been developed following requests from our customers who were not totally happy with their current graphics Editor. As a result, as well as the normal editing functionality, the following special functionality has been included:

- *Smooth*. Smooth a line by adding more vertices.
- *Find and Replace*. Replace all objects fitting specific attributes such as edge color, line width, etc.
- *Close Gaps*. Close the gaps between disjoint lines.
- *Cut Line*. Discard a part of a (poly) line.
- *Split Line*. Cut a (poly) line into two separate lines.
- *Insert Fill*: Create transparent fills between lines or turn a single poly line into a (filled) polygon.
- *To Unconformity*. Convert a line into a sinusoidal wave.
- *Fill with Symbols* and *Fill with Images*. Fill a polygon with symbols or a small image.

The JustEDIT module is part of the JustIMAGE 5.4 installation but is licensed separately.

## **JustSEARCH Module**

When was the last time you were looking for an image file? You know roughly when it was created, by whom and some idea of its title — but where to start looking among the workstations and servers out there?

Well, help is at hand. We have created a JustSEARCH module that can help you find that file quickly and easily. It allows users to retrieve a file by specifying any known attributes without needing to know its location. These attributes could include: file name (or part of the file name), file type, date created, date modified, creator, etc.

JustSEARCH works by initially creating an Index of all image files held in a given set of locations. These locations could be file-systems, disk arrays, cloud location, etc. For each image file it finds, it stores the precise location of the file, its attributes and a thumbnail of the image.

JustSEARCH is a client / server system. The client API is integrated in the Viewer module,

## General Information

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JustEDIT module and JustMONTAGE module but is licensed separately. A manager interface for JustSEARCH is part of the JustIMAGE 5.4 installation. The server is part of a separate installation.

### **MicroStation Design File Converter Module**

You can convert MicroStation DGN V7 files to a CGM using our MicroStation Design File Converter. This converter includes support for the Zeh specific plotting extensions (Zeh Level Definition).

The MicroStation Design converter is part of the JustIMAGE 5.4 installation but is licensed separately.

### **Export to PowerPoint**

The Export to PowerPoint module allows you to quickly and easily create PowerPoint 2007 slides from an image.

The Export to PowerPoint module is part of the standard JustIMAGE 5.4 Windows installation but is licensed separately from JustIMAGE 5.4. It is not available for platforms other than Windows.

### **Enhanced Compressed Wavelet Converter Module**

The Enhanced Compressed Wavelet converter allows you to download ECW images and convert these to a CGM file.

The Enhanced Compressed Wavelet converter is part of the JustIMAGE 5.4 installation but is licensed separately from JustIMAGE 5.4 and falls under the US export restrictions.

### **Schlumberger PDS Files**

Schlumberger PDS files can be imported through the Schlumberger PDS2CGM converter. The PDS2CGM converter is part of the Schlumberger GeoFrame suite. On Windows you will need [PDSView](#).

### **Screen Capture**

You can make screen captures with JustIMAGE 5.4 and this is available at no extra cost.

### **Movie**

The Movie tool allows you to make time-lap screen captures and turn them into an AVI movie.

Movie is part of the JustIMAGE 5.4 installation and is available at no extra cost.

## **Batch Processor**

The Batch Processor allows you to convert multiple files in one run. In addition there is also a hot directory mode. The Batch Processor runs independently from the JustIMAGE 5.4 User Interface so that you can continue working while the Batch Processor is running.

The following processing types are possible:

- *Convert to CGM.* Convert one or more files to a CGM.
- *Convert to non-CGM.* Convert one or more files to a bitmap, PDF or SVG.
- *Optimise files.* Perform line joining and fill joining on the specified files.
- *Process for graphics applications.* Run the CGM Optimiser to import files into a PC drawing package. Split CGM+, CGM\*PIP into a normal vector CGM and a raster file for the seismic.
- *Merge PDFs.* Merge two or more PDF files into a single multi-page PDF.
- *Print files.* Print multiple files.

The Batch Processor is part of the JustIMAGE 5.4 installation.

## **Contact Information**

### **Customer Support Center**

Telephone: +31 70 364 4131

Email: [support@justcroft.com](mailto:support@justcroft.com)

Support web site: [support.justcroft.com](http://support.justcroft.com)

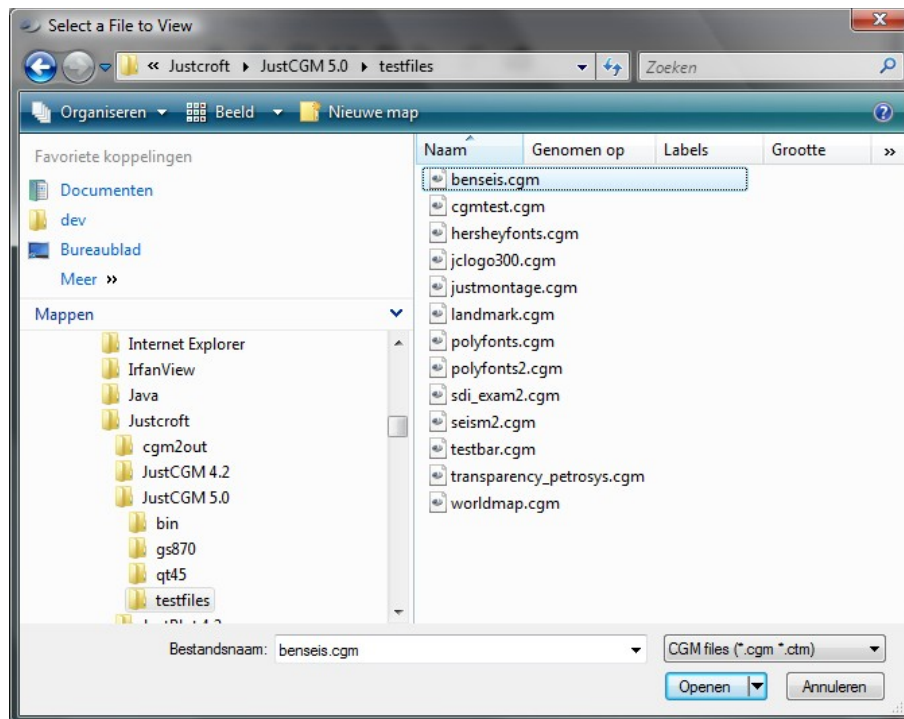




# Previewing

## Opening a File

You can open a file by selecting the “Open” command from the File menu. The File Open dialog box is shown<sup>1</sup>:



*Illustration 1: The File Open dialog box.*

Type the name or select the file you want to open. The Files list box shows all the files with the extension as specified under the Files of type field. JustIMAGE 5.4 will load the file once you click on Open and the file format is supported.

You can also open a file by dragging a file from the File Explorer to the preview area. The last eight opened files can be selected from the File menu.

➡ The File ⇌ Next File and File ⇌ Previous File commands allows you to quickly browse through a directory of files. Note: The directory and file type are based on the selection in the File Open dialog box.

<sup>1</sup> The actual dialog box shown depends on the OS platform you are using and your current language.

## Previewing

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If you don't know the exact name or location of a file, you could use the `File ⇒ Retrieve` assuming JustSEARCH has been setup. See the “How to Retrieve a file” chapter for more information.



Use the `File ⇒ Close` command if you want to close the current open file. This is useful if the file needs to be overwritten by another program such as JustEDIT.

## How to Import Different File Types

You can import BMP, CalComp 906, CalComp 907, CalComp 925, CALS, MicroStation DGN V7<sup>2</sup>, EMF, GIF, HP-GL, HP-GL/2, Insight Raster, JPEG, PDF, PDS<sup>3</sup>, PNG, PostScript, TIFF, WebP, WMF and XWD files. These are converted into (temporary) CGM files. You can open these types of files through the File Open dialog box or by drag and drop to the preview area.

Multi page TIFF, PostScript and PDF files can be saved as a multi-picture CGM file. Each picture will be saved as a separate TIFF/PostScript/PDF page.

## Stitching

You can merge or join pages of PDF files, PostScript files or TIFF files together into a single CGM image. Use the `File ⇒ Close` first if you have already a file in the previewer. You can skip this if you already have the PDF/PostScript/TIFF file loaded in the previewer. Now select the “Stitch...” command from the `Tools` menu.

## Rotating

You can rotate the on screen picture in steps of 90 degrees. Picture rotations will be reset to zero degrees if you select another picture or another file.



Select the “Rotate clockwise” command from the `View` menu or click the button on the toolbar. This will rotate the current picture 90 degrees clockwise.



Select the “Rotate anti-clockwise” command from the `View` menu or click the button on the toolbar. This will rotate the current picture 90-degree counter clockwise.

To rotate a picture 180 degrees, repeat either rotate command twice.


## Zooming


There are several ways to zoom in on a picture. Note that each picture will initially fit the window of the preview area.

2 DGN V7 support requires a special separate licensed module.

3 PDS requires PDSView on Windows and the GeoFrame suite on Linux/Solaris.

## Scaled Zoom

 You can zoom in steps of 25%. Either select the “Scale +25%” command from the `View` ⇒ `Zoom` menu or click on the zoom in button on the toolbar.


 You can zoom out in steps of 25%. Either select the “Scale -25%” command from the `View` ⇒ `Zoom` menu or click on the zoom out button on the toolbar.

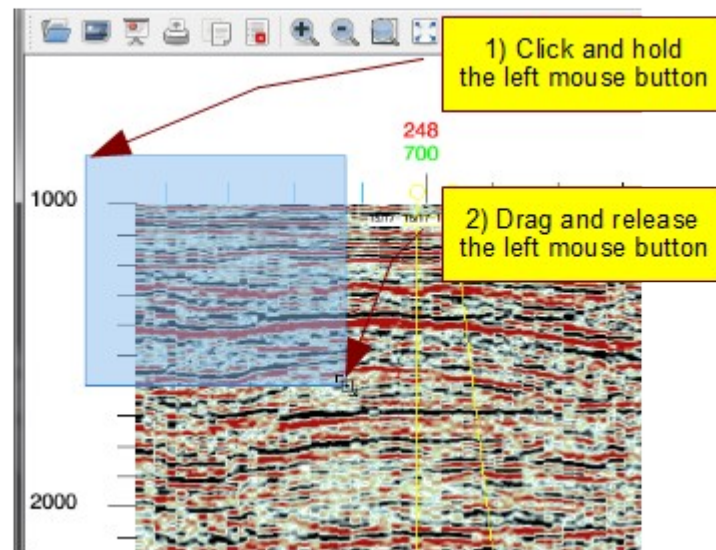
You can also zoom in and zoom out by using the mouse wheel while holding the `Ctrl` key pressed down.

There are also three fixed scale zoom possibilities:

- Zoom to 50%. Scale the image to half its metric size.
- Zoom to 100%. Scale the image to its metric size.
- Zoom to 200%. Scale the image to double its size.


## Rectangle Zoom

 The rectangle zoom allows you to zoom in on a part of the picture by dragging a rectangle with the mouse. Either select the “Zoom Rectangle...” command from the `View` ⇒ `Zoom` menu or click on the rectangle zoom button on the toolbar. The cursor will change into the Zoom cursor. Go with the mouse to the part of the picture you want to zoom in on, and click and hold the left mouse button. Drag the mouse to the desired size of the rectangle and let go of the mouse button.



*Illustration 2: Performing a rectangle zoom.*


### Page Zoom

 To fit the picture to the complete preview area, select the “Whole Page” command from the View ⇒ Zoom menu. Alternatively, click on the “Whole Page” zoom button on the toolbar.


The page width zoom allows you to match the width of the image to the width of the preview area. Select the “Page Width” command from the View ⇒ Zoom menu.

The page height zoom allows you to match the height of the image to the height of the preview area. Select the “Page Height” command from the View ⇒ Zoom menu.

### Shortest Side

 Use this command to fit the shortest side of the picture (regardless of the metric size) to the size of the main window. This is useful when viewing long images such as Well Logs. Select the “Shortest Side” command from the View ⇒ Zoom menu.

### Full Screen

 Use the View ⇒ Full Screen command to expand the main window to the entire screen. This will also hide the menu bar and the status bar. Use the shortcut key to switch back to the normal mode.

## Panning

You can pan the picture when you are zoomed in. Use the scroll bars around the preview to pan. You can also use you mouse scroll wheel to pan vertically.

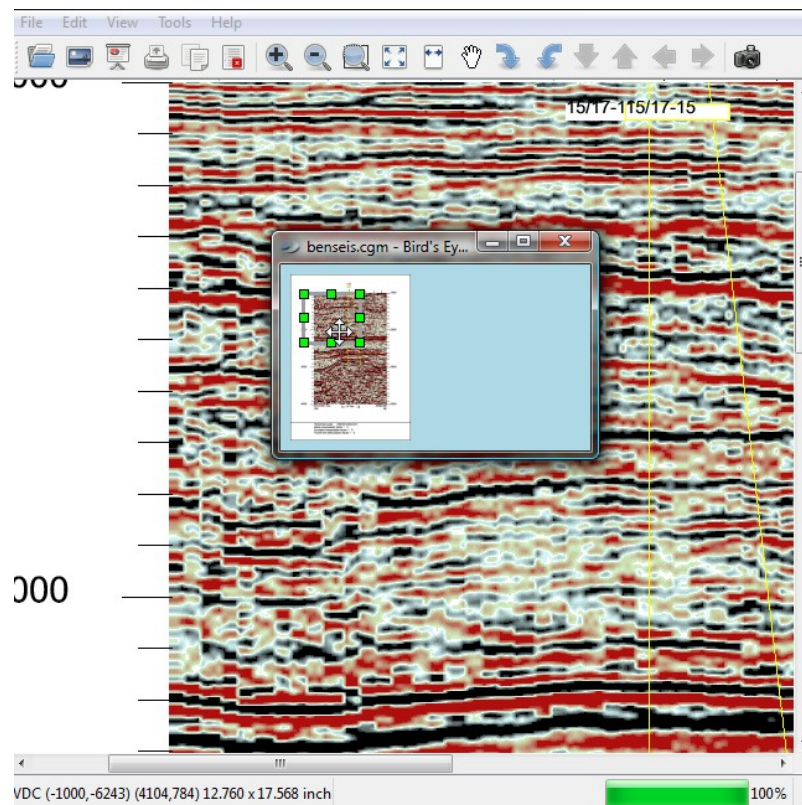


You can also switch to the mouse pan mode. Enable the mouse pan mode by either selecting “Pan Mode” command from the View menu or click on the pan hand icon on the toolbar. You can now pan by clicking and holding the mouse button pressed on the preview area. Move the mouse to pan.

## Bird's Eye View

The Bird's Eye View gives a miniature overview window of the picture that is currently loaded. This is an alternative method for zooming and panning.

Select the “Bird's Eye View” command from the View menu to open or close the window.



*Illustration 3: The Bird's Eye View window.*

A box frame is displayed over the miniature picture indicating the portion of the picture currently displayed in the main view area. This box frame can be resized and displaced to quickly move to any portion of the picture.

## Previewing

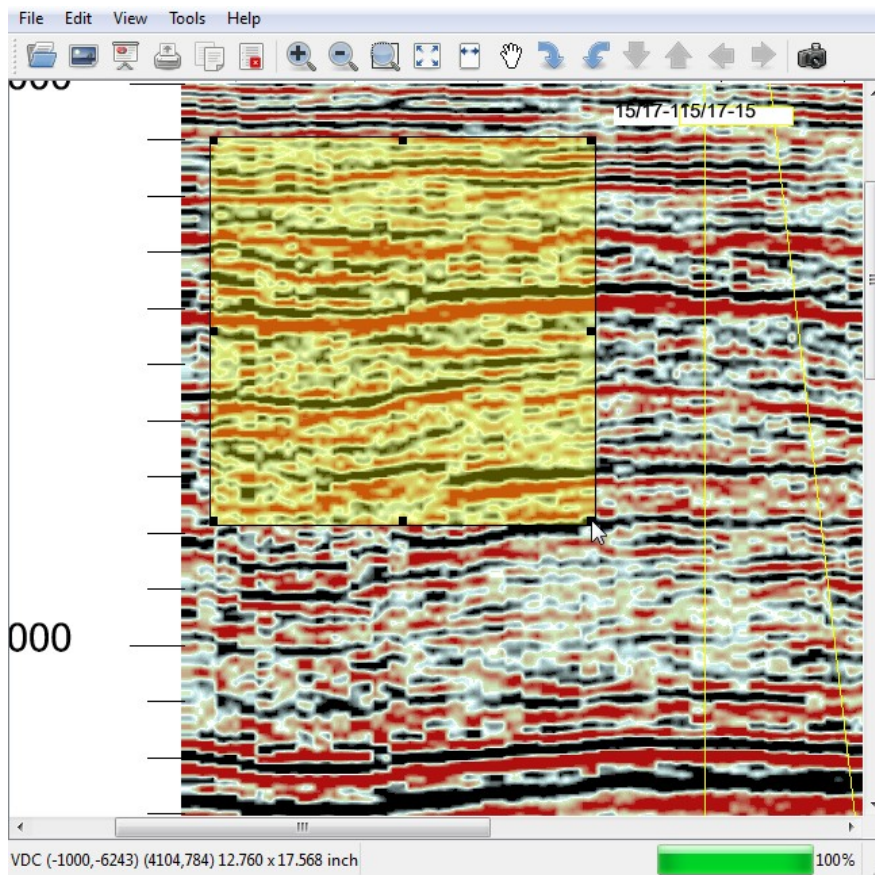
---

Zoom in or zoom out on the picture by resizing the box frame of the Bird's Eye View window. Use the left mouse button to click and hold one of the eight green squares of the box frame to size the box frame. Now resize the box frame and release the mouse button to update the main view window.

You can pan to another part of the picture by displacing the box frame of the Bird's eye view window. Use the left mouse button to click in the middle of the box frame. Hold and drag the box frame with the mouse to another portion of the picture. Release the mouse button to update the main view area.

## View Fence

You can place a view fence on the current loaded image. This gives you more control over what part of the image is exported or printed.



*Illustration 4: A View Fence selection.*


 Select **Edit** ⇒ **Fence Mode** from the menu bar. Now drag the rectangle fence over the canvas. Click and hold the left mouse button. Drag the box frame to another part of the


image while holding the mouse button. Release the mouse button to set the fence area. You can move and size the fence area as long as you do not select another picture.


You can disable a fence by selecting `Edit ⇒ Fence Mode` again from the menu bar.

## ***View Selection***


Both a zoomed-in area and a view fence area are used for the view selection when printing or exporting. A view fence always takes precedence over a zoomed-in area. You have the best control over what is saved and printed, by first zooming and panning to the area you are interested in. Then place a view fence for the precise selection.

## ***Multiple Picture CGM***

 JustIMAGE 5.4 allows you to browse through a multiple picture CGM. Each picture is shown as a separate picture. Use the `View ⇒ "Next picture"` to go the next picture within the CGM.

 The `View ⇒ "Previous picture"` will bring you back to the previous picture within the CGM. The "Select picture..." from the `View` menu allows you to select directly a picture.

## ***Copying to the Clipboard***

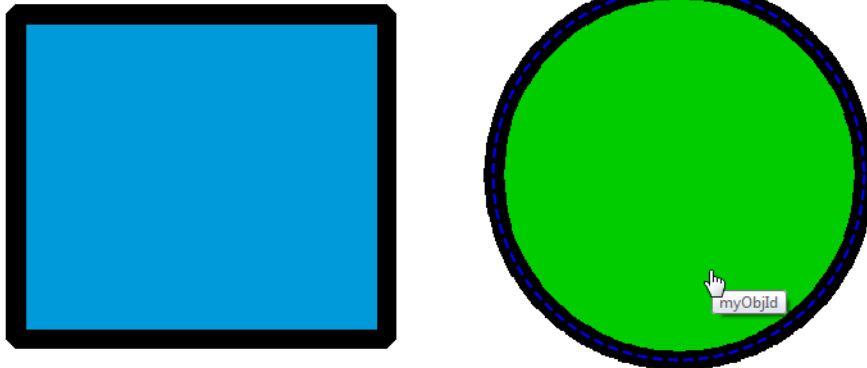
 You can copy the picture you see in the preview area to the clipboard. Either select the "Copy" command from the `Edit` menu, or click on the copy button on the toolbar.

Note that this creates a bitmap copy of what is in the preview area.

## ***WebCGM Hotspots***

WebCGM files with interactive areas also known as hotspots can be viewed. By default only hotspots that have a hyperlink, tool tip or a region will be visible if the mouse pointer hovers over the interactive area. Toggle the `View ⇒ Hotspots` option to view all possible hotspots.

2 links to: a raster image, and a page of HTML text from WebCGM 1.0




*Illustration 5: Circle with a WebCGM hotspot area.*

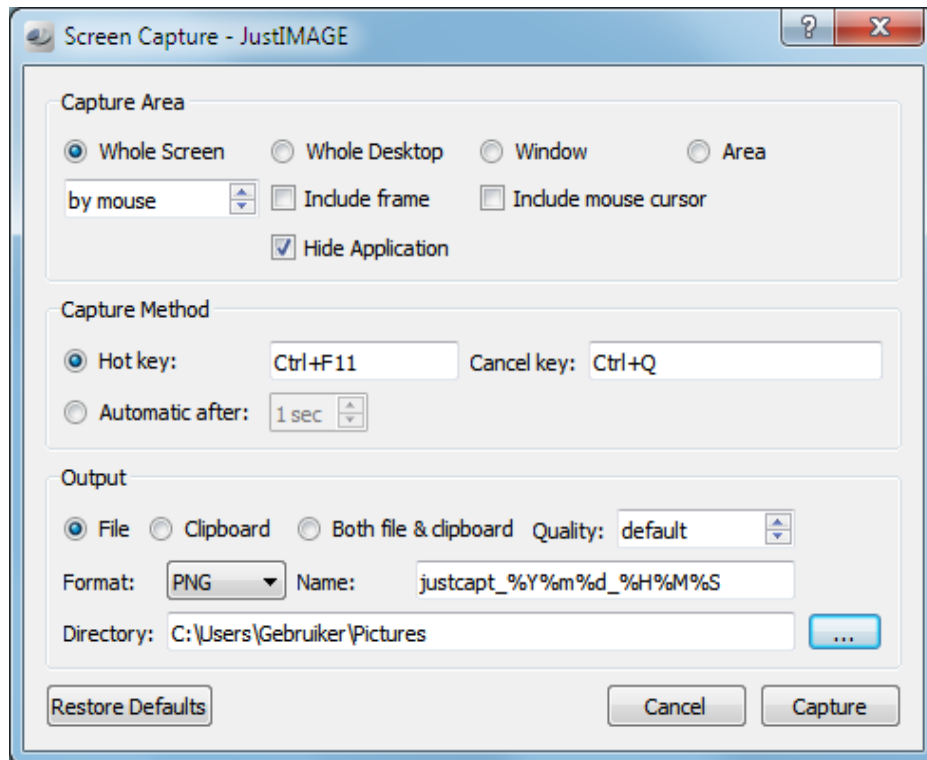
The cursor will change into a pointing finger should there be one or more hyperlinks associated with the hotspot. Clicking the mouse in the hotspot area in this case will cause the viewer to try to open the given hyperlink. A menu will be shown if there is more than one hyperlink associated with the hotspot.



# Making Screen Captures

## Making a Screen Capture in JustIMAGE 5.4

 Either click the screen capture toolbar button or select the “Screen Capture...” command from the **Tools** menu. The Screen Capture dialog box will appear.



*Illustration 6: The Screen Capture dialog box of JustIMAGE.*

You can specify whether to capture the “Whole Screen”, the “Whole Desktop”, the active “Window” or a screen “Area”. Other options are to include the window frame, hide JustIMAGE during the capture and to have the mouse cursor included in the screen capture.

The difference between “Whole Screen” and “Whole Desktop” is when you have a multi-monitor configuration. “Whole Screen” captures only a single monitor screen of your multi-monitor configuration. Which monitor screen is captured depends on where your mouse cursor is located at the time of the capture. You can also force a specific monitor screen to be captured if you so desire. “Whole Desktop” will capture your whole virtual desktop spanning all your monitors in your monitor configuration.

You can capture either by pressing a “Hot key” or capture “Automatically” after the given

## Making Screen Captures

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number of seconds (0–60) has passed. The cursor will change into a cross hair if the “Area” option was selected. Press and hold the left mouse button and drag to select the area, then release the left mouse button.

A screen capture can be to a file, the clipboard or to both a file and the clipboard. The file will be generated in the “Output Directory”. The default is to use your “My Pictures” directory. Use the browse button to change the directory.

The format of the generated file can be “CGM Version 3”, “CGM Version 1”, PNG, JPEG, BMP, TIFF or WebP. You should not use “CGM Version 3” or “CGM Version 1” if you want to import screen captures (also) into applications other than JustIMAGE 5.4. Select “CGM Version 1” if you have an older type of CGM application.


You can control the image quality of JPEG and WebP files. Higher values means a better quality, but with a larger file size. Select “default” for the best balance between image quality and file size.

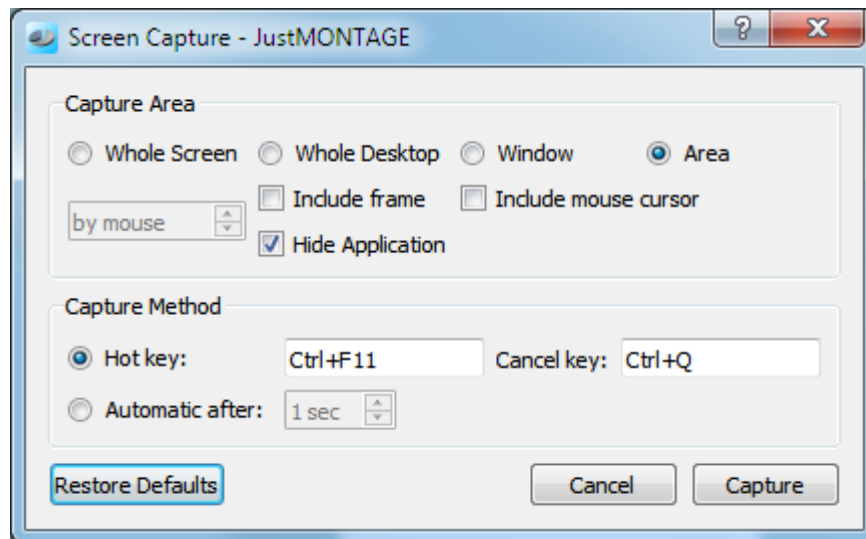
You can set a fixed output file name, use some time stamp pattern or a sequence number pattern. The default is: `justcapt_%Y%m%d_%H%M%S`. This will generate a file name with a time stamp, such as `justcapt_20071115_123620`. Pattern syntax: %d = day, %m = month, %Y = year, %H = hour, %M = minutes, %S = seconds, %% = %, # = sequence number digit. Use multiple # to specify a sequence number. For example, ### will result in the sequence 001, 002, etc. The file name extension is automatically added depending on the selected output format.

Press `Capture` to start the capture. Press `Cancel` to abort. To reset the settings to their defaults, press `Restore Defaults`. During the capture process you can press the “Cancel key” if you want to abort the capture.

The capture you make will automatically appear in the preview area.

## ***Making a Screen Capture in JustMONTAGE***

 You can make a screen capture and insert this on the canvas. Either click the screen capture toolbar button or select the “Screen Capture...” command from the Insert menu. The Screen Capture dialog box will appear.



*Illustration 7: The Screen Capture dialog box of JustMONTAGE.*

You can specify whether to capture the “Whole Screen”, the “Whole Desktop”, the active “Window” or a screen “Area”. Other options are to include the window frame, hide JustMONTAGE during the capture and to have the mouse cursor included in the screen capture.


The difference between “Whole Screen” and “Whole Desktop” is when you have a multi-monitor configuration. “Whole Screen” captures only a single monitor screen of your multi-monitor configuration. Which monitor screen is captured depends on where your mouse cursor is located at the time of the capture. You can also force a specific monitor screen to be captured if you so desire. “Whole Desktop” will capture your whole virtual desktop spanning all your monitors in your monitor configuration.

You can capture either by pressing a “Hot key” or capture “Automatically” after the given number of seconds (0–60) has passed. The cursor will change into a cross hair if the “Area” option was selected. Press and hold the left mouse button and drag to select the area, then release the left mouse button.

Press `Capture` to start the capture. Press `Cancel` to abort. To reset the settings to their defaults, press `Restore Defaults`. During the capture process you can press the “Cancel key” if you want to abort the capture.

The rest of the procedure is the same as inserting an image once the capture has been made.

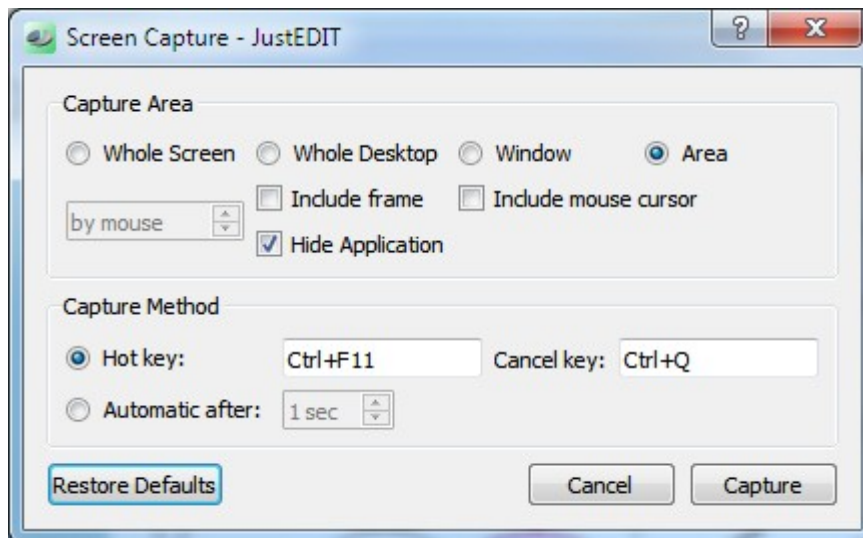
## ***Making a Screen Capture in JustEDIT***

 You can make a screen capture and insert this in the CGM you are editing. Either click the screen capture toolbar button or select the “Screen Capture...” command from the Insert

## Making Screen Captures

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menu. The Screen Capture dialog box will appear.



*Illustration 8: The Screen Capture dialog box of JustEDIT.*

You can specify whether to capture the “Whole Screen”, the “Whole Desktop”, the active “Window” or a screen “Area”. Other options are to include the window frame, hide JustEDIT during the capture and to have the mouse cursor included in the screen capture.

The difference between “Whole Screen” and “Whole Desktop” is when you have a multi-monitor configuration. “Whole Screen” captures only a single monitor screen of your multi-monitor configuration. Which monitor screen is captured depends on where your mouse cursor is located at the time of the capture. You can also force a specific monitor screen to be captured if you so desire. “Whole Desktop” will capture your whole virtual desktop spanning all your monitors in your monitor configuration.

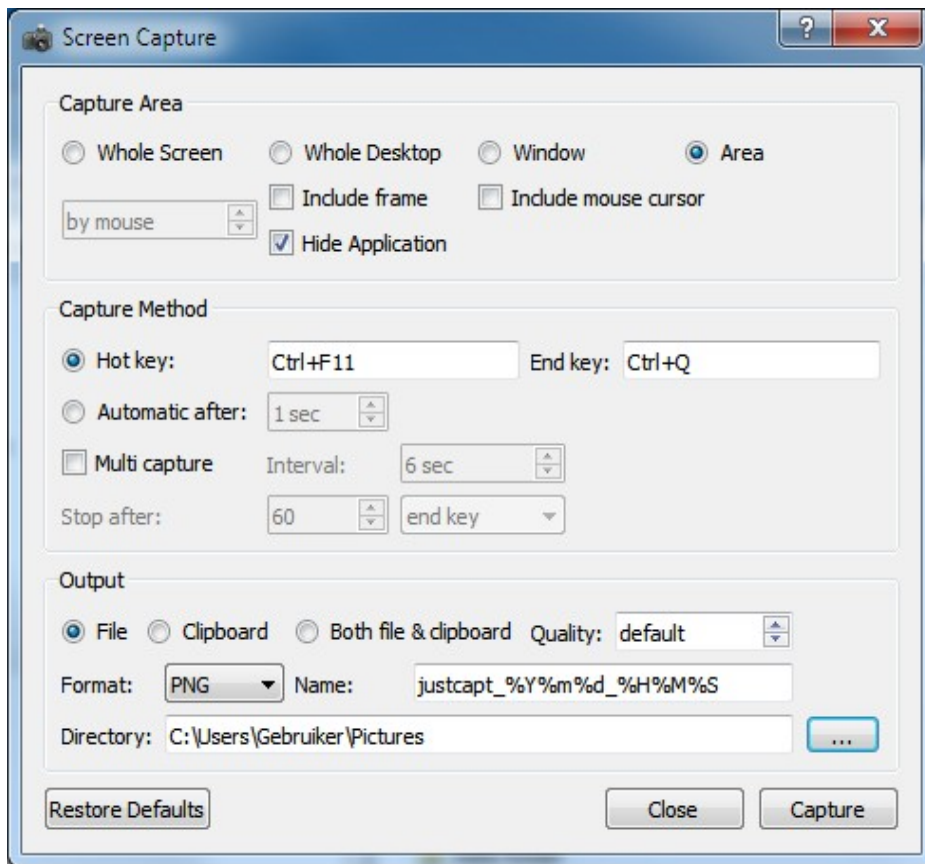
You can capture either by pressing a “Hot key” or capture “Automatically” after the given number of seconds (0–60) has passed. The cursor will change into a cross hair if the “Area” option was selected. Press and hold the left mouse button and drag to select the area, then release the left mouse button.

Press `Capture` to start the capture. Press `Cancel` to abort. To reset the settings to their defaults, press `Restore Defaults`. During the capture process you can press the “Cancel key” if you want to abort the capture.

The rest of the procedure is the same as inserting an image once the capture has been made.

### **The Standalone Screen Capture Tool**

A standalone screen capture tool can be found under `Start ⇒ Justcroft JustIMAGE 5.4 ⇒ Screen Capture` on Windows and as `bin/justcapt` under Linux.



*Illustration 9: The Standalone Screen Capture tool.*

You can specify whether to capture the “Whole Screen”, the “Whole Desktop”, the active “Window” or a screen “Area”. Other options are to include the window frame, hide the capture tool during the capture and to have the mouse cursor included in the screen capture.

The difference between “Whole Screen” and “Whole Desktop” is when you have a multi-monitor configuration. “Whole Screen” captures only a single monitor screen of your multi-monitor configuration. Which monitor screen is captured depends on where your mouse cursor is located at the time of the capture. You can also force a specific monitor screen to be captured if you so desire. “Whole Desktop” will capture your whole virtual desktop spanning all your monitors in your monitor configuration.

You can capture either by pressing a “Hot key” or capture “Automatically” after the given number of seconds (0–60) has passed. The cursor will change into a cross hair if the “Area” option was selected. Press and hold the left mouse button and drag to select the area, then release the left mouse button.

Select the “Multi Capture” option if you want to make multiple screen captures. You can specify the “Interval” of the captures (1–300 seconds). Using the “Hot key” will initiate the first capture. Subsequent captures will happen automatically.

## Making Screen Captures

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Taking screen captures will stop depending on the selected stop method:

- end key: Pressing the End key will stop the screen capture process.
- captures: The screen capture process will stop after the given number of screen captures.
- seconds: The screen capture process will stop after the given number of seconds. This timing will only start after the first capture.
- minutes: The screen capture process will stop after the given number of minutes. This timing will only start after the first capture.

Press the End key if you want to stop the multi capture earlier or to abort a single capture.

The format of the generated file(s) can be “CGM Version 3”, “CGM Version 1”, PNG, JPEG, BMP, TIFF or WebP. You should not use “CGM Version 3” or “CGM Version 1” if you want to import screen captures (also) into applications other than JustIMAGE 5.4. Select “CGM Version 1” if you have an older type of CGM application.

You can control the image quality of JPEG and WebP files. Higher values means a better quality, but with a larger file size. Select “default” for the best balance between image quality and file size.


A screen capture can be to a file, the clipboard or to both a file and the clipboard. The file will be generated in the “Output Directory”. The default is to use your “My Pictures” directory. Use the browse button to change the directory.

You can set a fixed output file name, use some time stamp pattern or a sequence number pattern. The default is: `justcapt_%Y%m%d_%H%M%S`. This will generate a file name with a time stamp, such as `justcapt_20071115_123620`. Pattern syntax: %d = day, %m = month, %Y = year, %H = hour, %M = minutes, %S = seconds, %% = %, # = sequence number digit. Use multiple # to specify a sequence number. For example, ### will result in the sequence 001, 002, etc. The file name extension is automatically added depending on the selected output format.

Press Capture to start the capture. Press Close to abort and close the Screen Capture tool. To reset the settings to their defaults, press Restore Defaults.

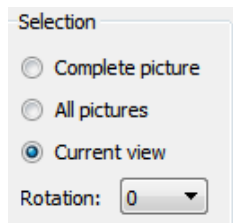
## How to Export to a Different File Type

An image can be converted into either raster based bitmaps, PDF, SVG or SVGZ from within the JustIMAGE 5.4 Viewer interface, Edit or Montage.

 You can export by selecting the “Export...” command from the File menu. Note: A more detailed description of all the various export options of the Export dialog box is given in the “Reference Manual”.

### Exporting only a Part of the Image

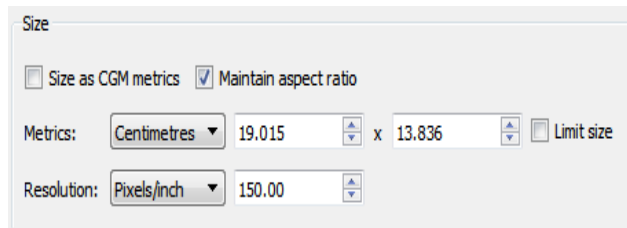
Both a zoomed-in area and a view fence area can be used for the export of only a part of the (preview) image. A view fence always takes precedence over a zoomed-in area. You have the best control over what is saved, by first zooming and panning to the area you are interested in. Then place a view fence for the precise selection.



Make sure that the “Current view” selection option is set in the Export dialog box. This is by default selected if there was a selection in the previewer. Selecting “Complete picture” overrides the selection and the whole image regardless of zoomed-in area and/or view fence is used.

### Creating a Bitmap

An image can be converted into BMP, GIF, JPEG, PBM, PGM, PPM, PNG or TIFF bitmap file. Select the format you want to use from the “Format” combo box.



It is recommended to limit the size of the bitmap especially if you want to create these for online publications. Check the metrics by setting the units to “Pixels”. Turn off the “Size as CGM metrics” option if you see values above 2048 pixels. Make sure that

“Maintain aspect ratio” is enabled. Lower the pixel size values to something around 1024-1600 pixels. Tip: Turning on the “Limit size” will restrict the bitmap to not become larger than the given size, but still allow it to be smaller.

Bitmaps with fine details may benefit from the “Anti alias 2x2” option. Anti aliasing reduces [visual artifacts](#) when rendering bitmaps at low resolutions. Text and thin lines will look better. The disadvantage is that the bitmap will take longer to create.

We recommend to leave both “Color Mapping” and “Compression” at their default values.

Save to the selected bitmap format by pressing the Convert button. The progress indicator

## How to Export to a Different File Type

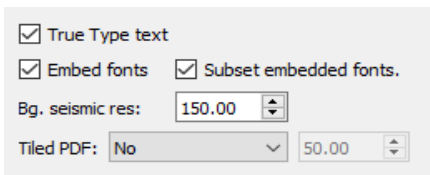
---

will give you some idea how long the conversion is going to take. Press the `Cancel` button to abort the conversion.

Press the `Cancel` button (again) to close the `Export` dialog box if the “Close window after successful conversion” option was not set.

### **Creating a PDF**

Select “PDF” from the “Format” combo box. In general you can leave the “Size as CGM metrics” option enabled as PDF is a vector format. Check that the “Resolution” is at least 300 dpi. The default is 600 dpi.



TrueType text in PDF output can be generated as text instead of being emulated. This makes text searching and selection possible. Editing those PDF files with TrueType text is possible with Acrobat Professional. The PDF is less portable if the font data is not embedded. Select “Embed fonts” to have the font data added to the PDF. This will make the PDF larger. By using “Subset embedded fonts” only the used characters will be stored in the PDF this will reduce the size of the file.

WebCGM Layer information and Hotspots information are automatically added to the PDF.

You can divide a PDF image into tiles. The PDF image will be tiled along the longest side of the input (taking the rotation into account). The length of each tile can be A4, Letter or a custom length specified in either millimeters (Custom mm) or inches (Custom inch). Note: This option is intended for Well Log images to make viewing and printing to sheets easier. It can also help as a workaround for limitations of the Acrobat Reader.

Create the PDF by pressing the `Convert` button. The progress indicator will give you some idea how long the conversion is going to take. Press the `Cancel` button to abort the conversion.

Press the `Cancel` button (again) to close the `Export` dialog box if the “Close window after successful conversion” option was not set.

### **Creating a SVG**

Select “SVG” from the “Format” combo box and make sure that “Compression” is set to “None”. In general you can leave the “Size as CGM metrics” option enabled as SVG is a vector format. Check that the “Resolution” is at least 300 dpi. The default is 600 dpi.

Select “Include Itedo SVG extensions” if you want WebCGM information added to the SVG specific for Itedo software. Select “Include Hotspots” if you want WebCGM information added to the SVG suitable for a web browser. Note that this only happens if the original file



already had this hotspot information.

Create the SVG by pressing the `Convert` button. The progress indicator will give you some idea how long the conversion is going to take. Press the `Cancel` button to abort the conversion.

Press the `Cancel` button (again) to close the Export dialog box if the “Close window after successful conversion” option was not set.

### ***Creating a SVGZ***

A SVGZ is the same as a SVG, but saved as a GNU Zip file using deflate compression. Select “SVG” from the “Format” combo box and make sure that “Compression” is set to “Deflate”. In general you can leave the “Size as CGM metrics” option enabled as SVGZ is a vector format. Check that the “Resolution” is at least 300 dpi. The default is 600 dpi.

Select “Include Itedo SVG extensions” if you want WebCGM hotspot information added to the SVGZ. Select “Include Hotspots” if you want WebCGM information added to the SVGZ suitable for a web browser. Note that this only happens if the original file already had this hotspot information.

Create the SVGZ by pressing the `Convert` button. The progress indicator will give you some idea how long the conversion is going to take. Press the `Cancel` button to abort the conversion.

Press the `Cancel` button (again) to close the Export dialog box if the “Close window after successful conversion” option was not set.

### ***Creating a PowerPoint File***

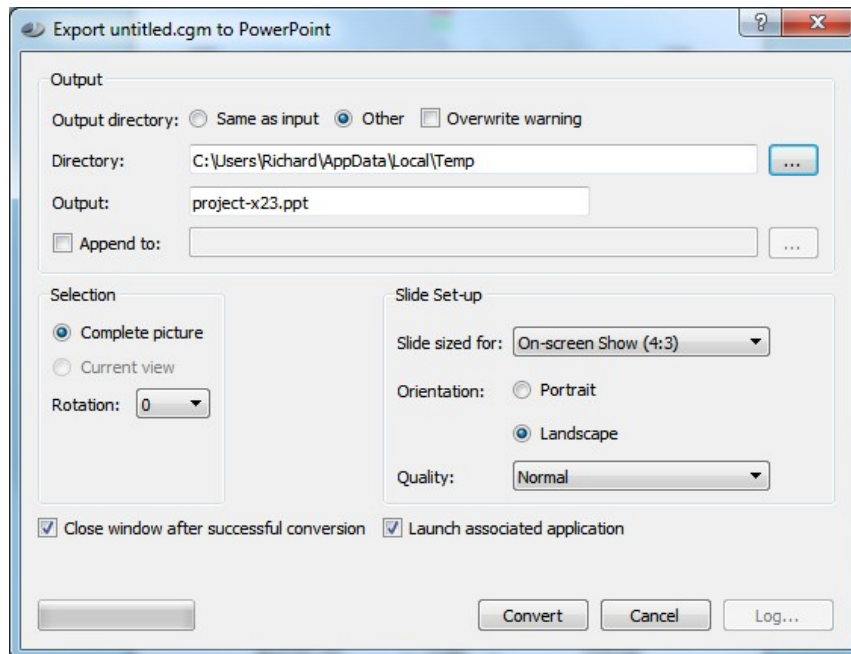
An image can be converted on Windows into a PowerPoint 2007 file from within the JustIMAGE 5.4 preview interface, Edit or Montage.



You can create a PowerPoint file by selecting the “Export to PowerPoint...” command from the File menu.

## How to Export to a Different File Type

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*Illustration 10: Dialog box settings for creating a PowerPoint file.*

Make sure that the “Append to:” option is deselected. Note that the file is created and any file that might already exist is overwritten.

Set under “Slide Setup” the size and orientation of the PowerPoint slides. The image quality can be controlled as well. Higher quality settings mean better details, especially in text and thin lines, at the expense of larger PowerPoint files and slower conversion.

Create the PowerPoint file by pressing the `Convert` button. Press the `Cancel` button to abort the creation process. Your default associated application such as PowerPoint will come up after the creation when the “Launch associated application” was selected.

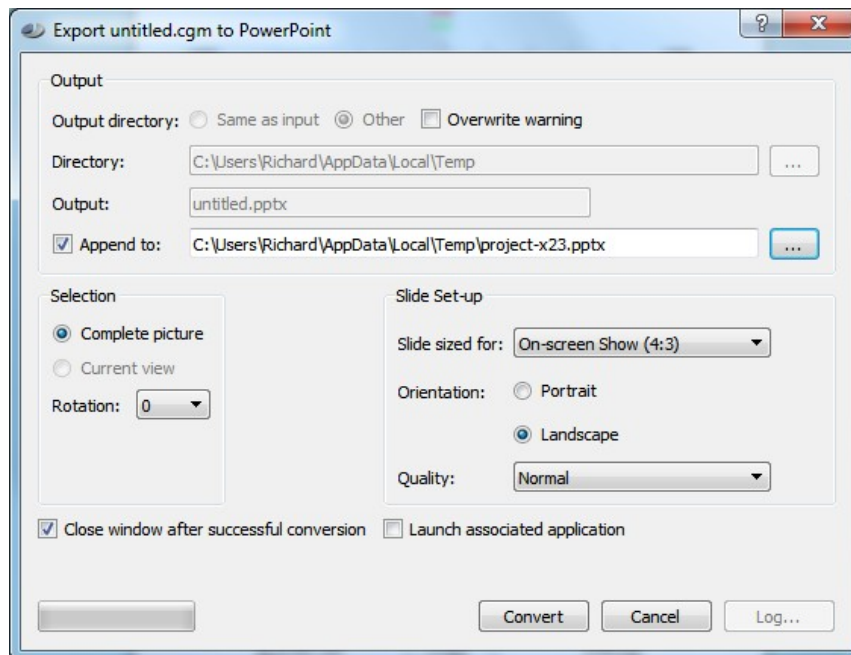
Press the `Cancel` button (again) to close the Export to PowerPoint dialog box if the “Close window after successful conversion” option was not set.

### **Creating a PowerPoint Slide**

An image can be converted on Windows into a PowerPoint 2007 slide from within the JustIMAGE 5.4 preview interface, Edit or Montage. The slide will be appended to an existing PowerPoint file.



You can create a PowerPoint slide by selecting the “Export to PowerPoint...” command from the File menu.



*Illustration 11: Dialog box settings for adding a PowerPoint slide to an existing file.*

Make sure that the “Append to:” option is selected and that you have selected an existing PowerPoint file. Note that the file must not have been opened by another application.

Create the PowerPoint slide by pressing the `Convert` button. Your default associated application such as PowerPoint will come up after the creation when the “Launch associated application” was selected.


You can abort the creation process by pressing the `Cancel` button. This is not recommended as the PowerPoint file might become partially corrupt.

Press the `Cancel` button (again) to close the Export to PowerPoint dialog box if the “Close window after successful conversion” option was not set.

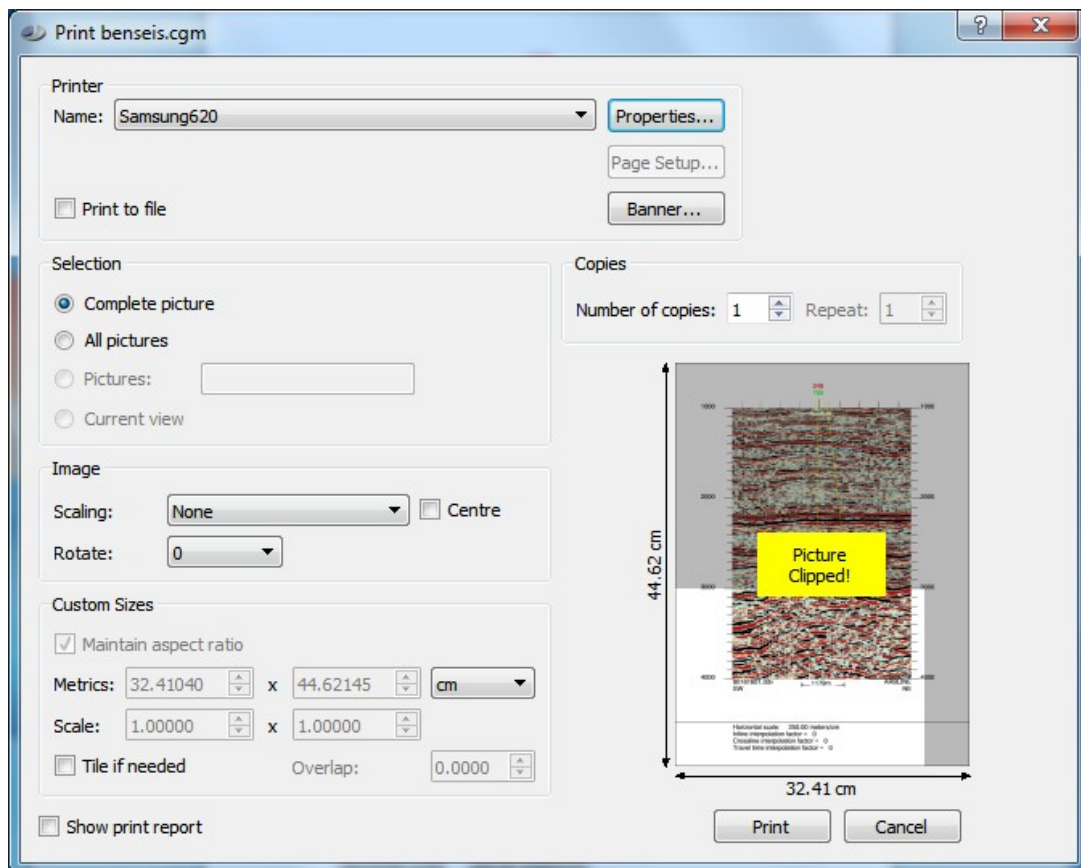


## How to Print

An image can be printed from within the JustIMAGE 5.4 Viewer interface, JustEDIT or JustMONTAGE.

 You can print by selecting the “Print...” command from the File menu. Note: Setup of a printer is described in the “JustIMAGE 5.4 Reference Manual”.

### The Print Dialog Box



*Illustration 12: The Print Dialog box.*

Select the printer you want to print to. Advanced users may want to adjust certain printer specific settings by selecting the Properties button. The margins and orientation can also be set for OS system printers by selecting the “Page Setup” button.

You can select “Print to file” if you want to print to a file. You will be prompted for the file name.

### Copies

You can specify if you want to have multiple copies. You can use the “Repeat” option as an alternative to copies. This option is only available if you have selected a raster roll plotter. If the repeat value is greater than 1 the software will try to put the image a multiple number of times on the paper in the width direction of the roll.

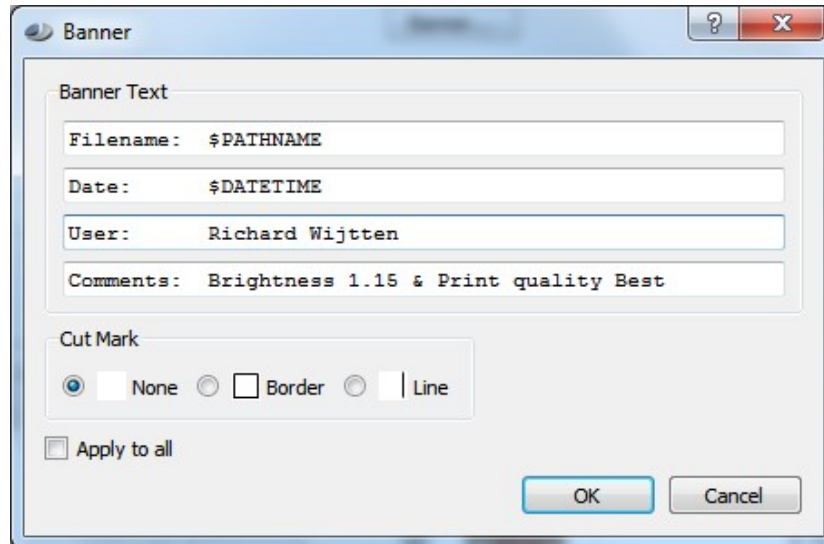
### Selection

There are three possible printing ranges:

- Complete picture. The complete picture will be printed, regardless of whether it was zoomed in. This is the default if you were not zoomed in while previewing.
- All pictures. Print all the pictures. Each picture is printed as a separate page (or pages if tiling is enabled).
- Pictures. Give a range of pictures in a multi-picture file. Examples are: “1-5”, “1, 3, 4, 5”, “1, 3-5”.
- Current view. Print the current zoomed/fenced area of the picture.

Both a zoomed-in area and a view fence area can be used to print only a part of the (preview) image. A view fence always takes precedence over a zoomed-in area. You have the best control over what is printed, by first zooming and panning to the area you are interested in. Then place a view fence for the precise selection.

## Banner



*Illustration 13: The banner settings of a print queue.*

You can specify up to four lines of banner text to be printed with the file. A JustIMAGE 5.4 banner logo will be printed as well if more than one line of banner text is specified. Specifying a banner reduces the printable area of a sheet printer/plotter. Each individual printer queue can have its own banner layout.

The banner is printed on the same sheet of paper as the picture. Each banner line can contain up to 80 characters. You can specify the following macro keywords:

\$FILENAME	Expands to the file name (without path).
\$PATHNAME	Expand to the file name including the path.
\$DATE	Expands to the localized date.
\$TIME	Expands to the localized time.
\$DATETIME	Expands to the localized date and time.
\$PRINTER	Expands to the printer queue name.
\$\$	Expands to \$.

You can disable the banner by setting every line to blank.

Banner settings can be applied to individual print queues or to all printer queues by enabling

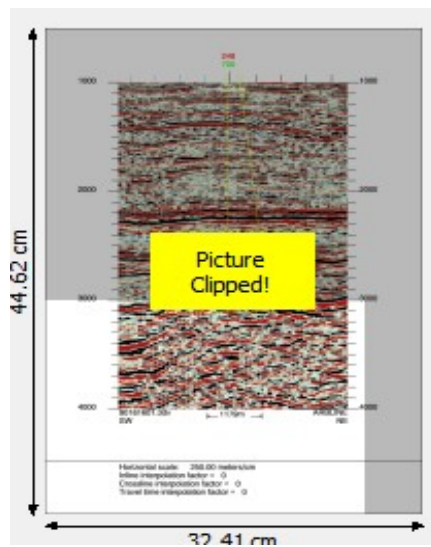
## How to Print

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the “Apply to all” toggle.

### **Printing to size**

JustIMAGE 5.4, by default, keeps metric CGMs metric scaled 1:1. You can see the metric size of the CGM under the sizes section of the print dialog box. You can toggle between millimeters, centimeters or inches. The sizes shown are for the width and the height of the picture.



*Illustration 14: Print Preview:  
Picture will be clipped by the  
printer.*

Typical Oil & Gas CGMs are too big to be printed on small sheet printers for Letter/A4. You will see a warning appear on the preview window.

You can scale the picture to fit the printable area with one of the image scaling options. This may change the metric size, so it may not always be suitable to your situation. You can scale in the following ways:

- None. The image is not scaled.
- Fit to printable area. The image is scaled up or scaled down to fit the printable area of the printer.
- Shrink to printable area. The image is only scaled down if it doesn't fit the printable area of the printer. This option is not available for abstract images.
- Fit to roll width. This option is only available on roll plotters and causes an anisotropic scale. It is intended for Well Log plots for which the width of the image is not as critical as the length. Use the “rotate” option to orientate the image correctly on



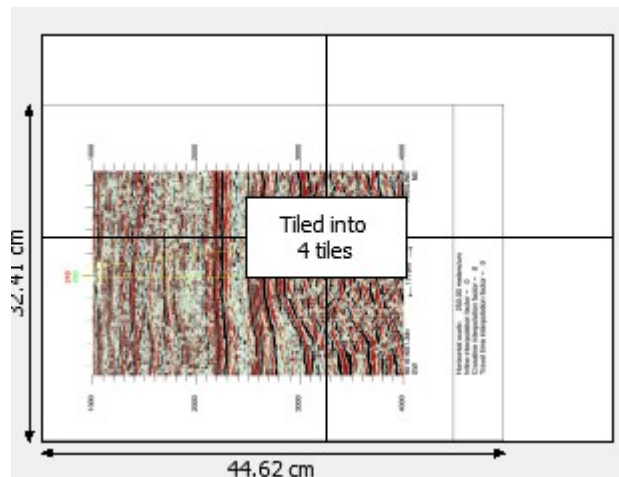
the roll plotter.

- Custom. Specify a metric size for the image under “Custom Sizes”. You can enter values either as absolute sizes or as scale factors if the image is metric. Abstract images can only be specified with an absolute size. Deselect the “Maintain aspect ratio” toggle if you want to size the width and height independently.

Note: The Print dialog comes by default with no scaling applied to the image. You can enable the “Last used Scaling” in the Preferences dialog in which case the last used image scaling in the Print dialog is restored when reopening the Print dialog.

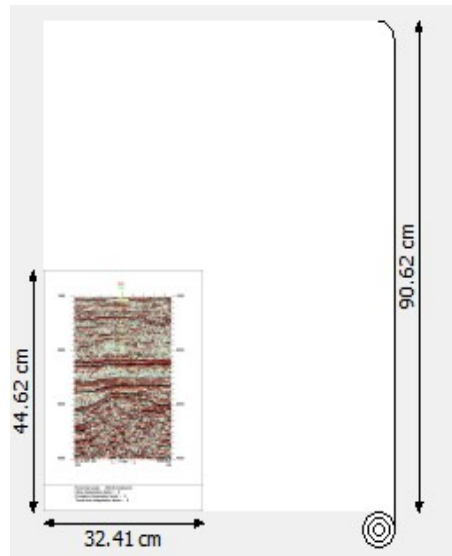
Use the “Rotate” option to change the orientation of the picture on paper. Select “Best fit” for the rotation to let JustIMAGE 5.4 decide which orientation requires the least amount of paper. You can enable the “Last used Rotate” in the Preferences dialog in which case the last used image rotation option is restored when reopening the Print dialog.

Select the “Tile if needed option” if you want to keep the picture at the exact scale, but tiled over multiple sheets of paper. This is also known as paneling. By default, no overlap is used for each tile but you can specify an overlap for each tile if you wish.



*Illustration 15: Print Preview: The picture will be tiled over four sheets of paper.*

The number of tiles in X (horizontal) and tiles in Y (vertical) are shown in the preview area. Rotating the image may further reduce the number of sheets that have to be printed.



*Illustration 16: Print Preview:  
Picture on roll plotter.*

However, you may decide that a roll plotter, if available, is a better option for this type of print job.

### **iSys iTerra Mi875**

The iSys iTerra Mi875 can be setup as a continuous roll plotter on Windows. Check the following if the print preview does not show the iTerra Mi875 as a roll plotter.

Select "Page Setup...". In the Page Setup dialog box make sure that top margin and bottom margin are both set to zero, and that the "Page Size" is set to "8.75 x 11 in".

See also the "JustIMAGE 5.4 Reference Manual" for further configuration details.

### **Canon GARO Plotters**

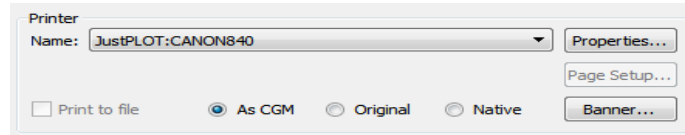
Justcroft printer drivers for Canon GARO plotters are available, but require a specific configuration. See the "JustIMAGE 5.4 Reference Manual" for further details.

### **Epson HTM Plotters**

Justcroft printer drivers for Epson SureColor plotters are available using the Epson HTM software, but require a specific configuration. See the "JustIMAGE 5.4 Reference Manual" for further details.

## **Submit to JustPLOT**

A printer queue can be configured to print the file through Justcroft's JustPLOT system. There are some differences in how printing works.



*Illustration 17: The JustPLOT submit options.*

You cannot select "Print to file". Instead if you have loaded a non-CGM you can choose from three different options. The "As CGM" is in general the best option. Advanced users may want to select the other two options. "Original" means that the non-CGM is passed to the JustPLOT system. It causes the JustPLOT system to reconvert the file into a CGM before printing. "Native" causes the file to be directly passed to the printer without any processing. This might give better results in some cases if the non-CGM is a HP-GL/2, PDF or PostScript file.

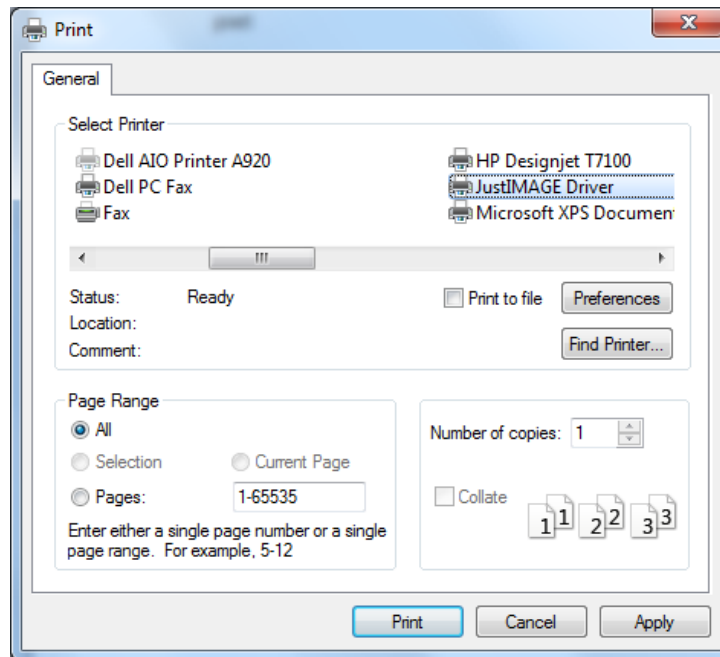
*Important:* Always use the "As CGM" option if you have stitched the image. Using the other options will yield an incorrect printed result.

## **Printing use the JustIMAGE Driver**

If the JustIMAGE Driver is installed you can print from any Windows application. Just select the JustIMAGE Driver in the application.

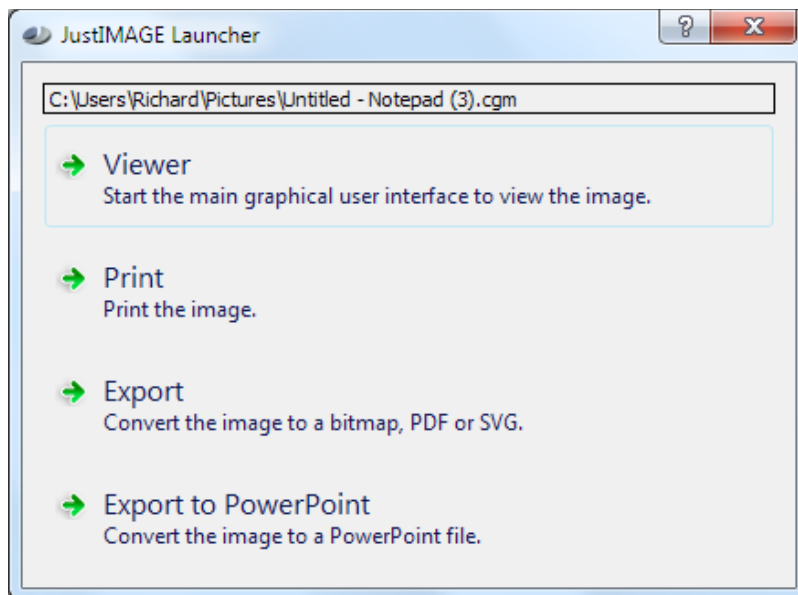
## How to Print

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*Illustration 18: Select JustIMAGE Driver in Windows print window*

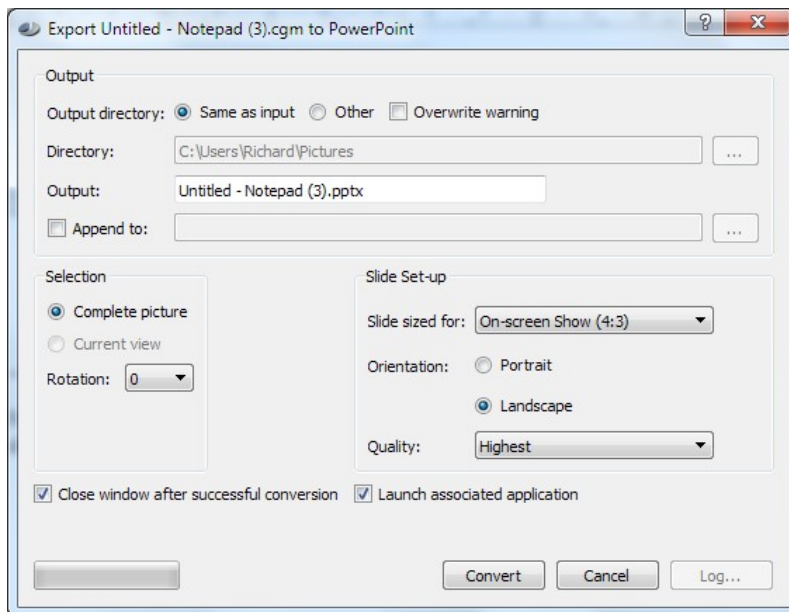
You will get the JustIMAGE Launcher and then you are able to make your selection.



*Illustration 19: JustIMAGE Launcher*

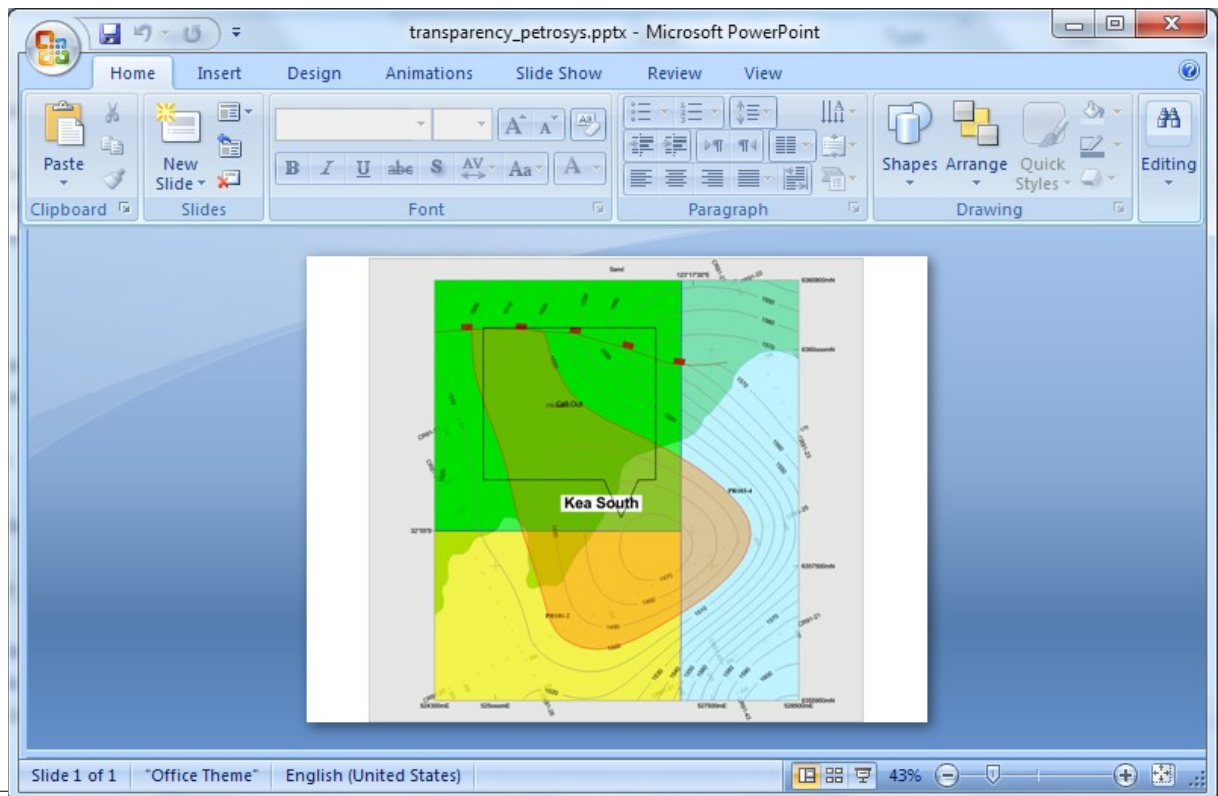
For example, select Export to PowerPoint and you will get the Export to PowerPoint window

within JustIMAGE 5.4.



*Illustration 20: JustIMAGE Export to PowerPoint*

PowerPoint will be started with the created file.



*Illustration 21: PowerPoint with the created file with JustIMAGE*



# How To Import Seismic Files

## ***How To Import Seismic Files Into CorelDRAW***

CorelDRAW has no direct support for importing CGM+ or CGM\*PIP files. You can use the CGM Optimiser application to split the original CGM+ or CGM\*PIP file into a filtered CGM without the seismic sections and a TIFF file that will contain the seismic sections. You can then recombine the filtered CGM with the TIFF file to recreate the original seismic image.

As an example, we show you how to import our CGM+ test file `benseis.cgm` into CorelDRAW X3.

## **Converting the Seismic CGM file**

Start the CGM Optimiser Interface. Select the “Filter CGM” conversion mode. By default, the CGM Optimiser will create two (or more) output files in the output directory:

- A filtered CGM file without any seismic sections. The file name has a percentage sign (%) appended and the file extension `.cgm`. Rectangles are drawn where the original seismic sections were.
- One or more TIFF files containing seismic sections and, optionally, converted cell arrays from the input file. The file name has a percentage sign (%) appended and the file extension `.tif`.

You can alter the output names if needed.

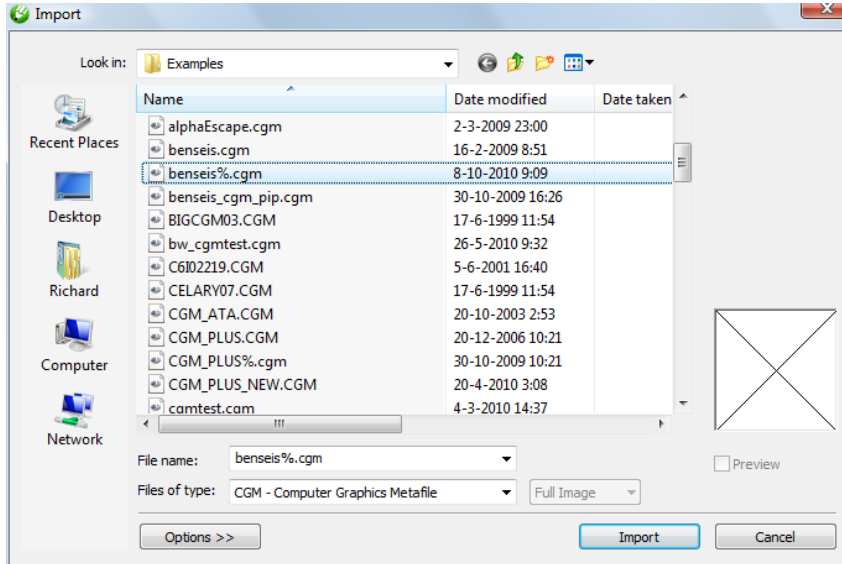
Select the CorelDRAW profile from the Profile option menu. It is recommended to first try the conversion with both Line joining and Fill joining enabled but with zero tolerance factors. Later you can experiment with non-zero tolerance factors.

You may want to increase the resolution of the TIFF file. Recommended values are between 75 and 150 for background seismic sections. Higher resolution values will look better at the expense of longer conversion times and a larger TIFF file.

## How To Import Seismic Files

### Import Conversion result into CorelDRAW

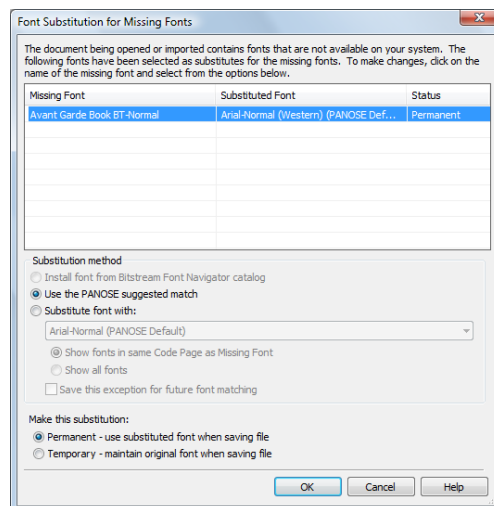
Select the Import command from the File menu. The import dialog box will appear.



*Illustration 22: The Import dialog box of CorelDRAW.*

Select the filtered CGM file `benseis%.cgm` and click on the Import button.

If the CGM file being imported contains fonts that are not available on your system you will get a Fonts Substitution for Missing Fonts Window.

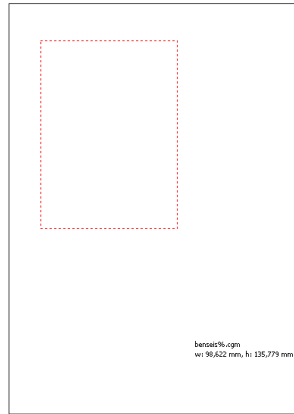


*Illustration 23: The Font Substitution for Missing Fonts dialog box of CorelDRAW.*

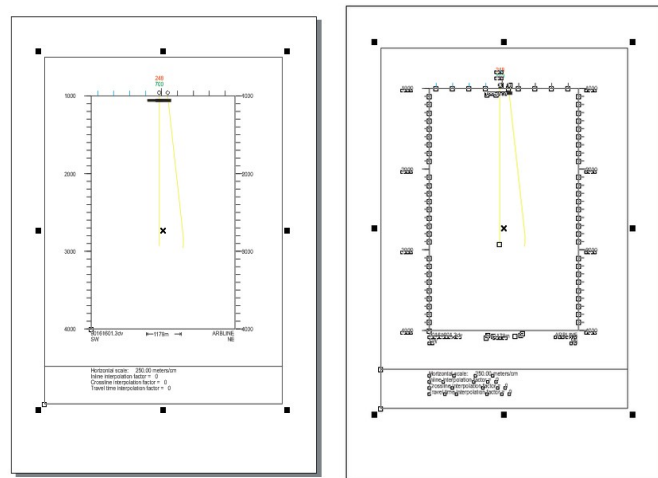
Position the CGM image onto the drawing area. Go to the place where you want to position



the upper left corner of the CGM image. Click and hold the left mouse button. Now drag the mouse to the lower right corner and release the mouse button. Notice that the aspect ratio will be retained by CorelDRAW.



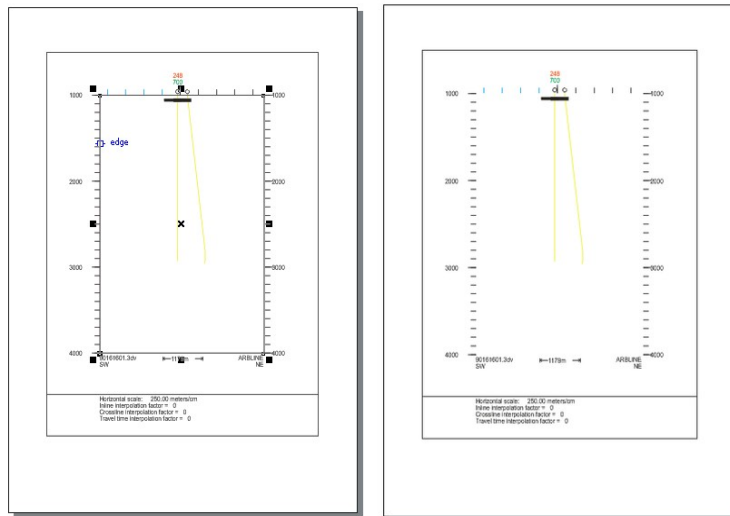
Do not click and release the left mouse button immediately. CorelDRAW will, in this case, position the filtered CGM with its original size on the screen. The original size may not fit on the drawing area, forcing you to move and resize the image by hand.



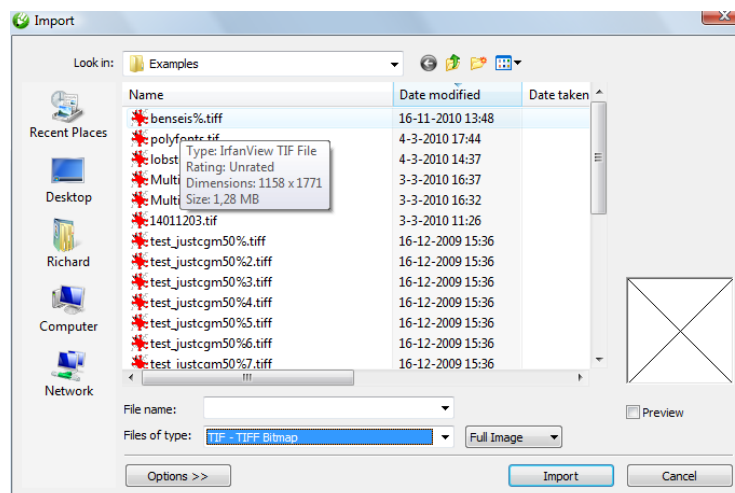
Select the “Ungroup All” command from the Arrange menu.

You may want to remove the rectangle that was placed by the CGM Optimiser around the original seismic section. Select the rectangle and press the Delete key.

## How To Import Seismic Files

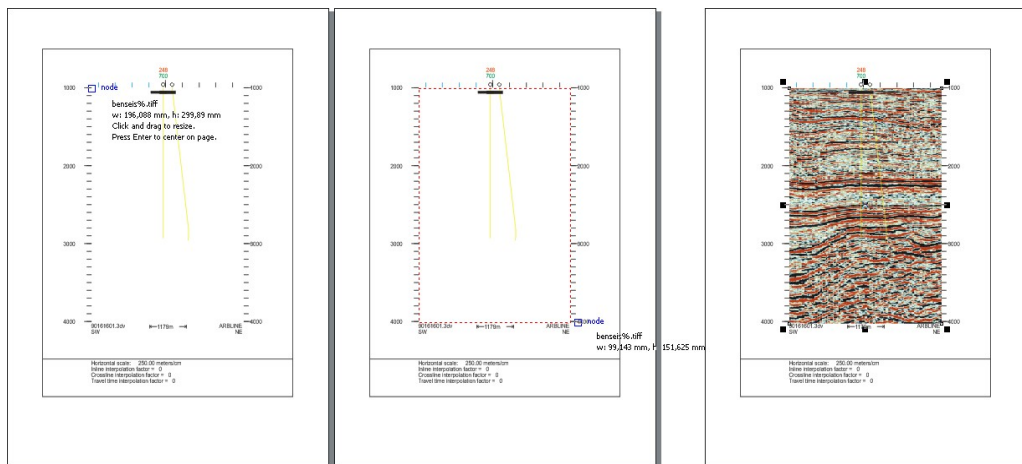


The next step is to import the TIFF file into CorelDRAW. Select the “Import” command from the File menu.



*Illustration 24: Importing the TIFF image into CorelDRAW.*

Select the `benseis%.tif` file and click on the Import Button. Position the TIFF image onto the drawing area. Go to the place where you want to position the upper left corner of the TIFF image. Click and hold the left mouse button. Now drag the mouse to the lower right corner and release the mouse button. Notice that the aspect ratio will be retained by CorelDRAW.



The original size may not fit on the drawing area forcing you to move and resize the image by hand.

## How To Import Seismic Files Into Canvas 7

Canvas 7 has, as standard, no direct support for importing CGM+ and CGM\*PIP files. You can use the CGM Optimiser application to split the original CGM+ or CGM\*PIP file into a filtered CGM without the seismic sections and a TIFF file that will contain the seismic sections. You can then recombine the filtered CGM with the TIFF file to recreate the original seismic image.

As an example, we will show you how to import our CGM+ test file `bensesis.cgm` into Canvas 7.

### Converting the Seismic CGM file

Start the CGM Optimiser. Select the “Filter CGM” conversion mode. By default, the CGM Optimiser will create two (or more) output files in the output directory:

- A filtered CGM file without any seismic sections. The file name has a percentage sign (%) appended and the file extension `.cgm`. Rectangles are drawn where the original seismic sections were.
- One or more TIFF files containing seismic sections and, optionally, converted cell arrays from the input file. The file name has a percentage sign (%) appended and the file extension `.tif`.

Select the Canvas 10/11 profile from the Profile option menu. It is recommended to first try the conversion with both Line joining and Fill joining enabled but with zero tolerance factors.

## How To Import Seismic Files

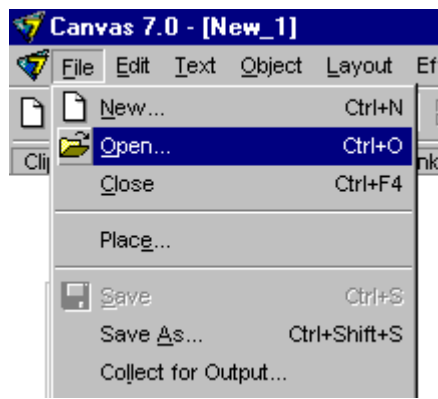
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Later you can experiment with non-zero tolerance factors.

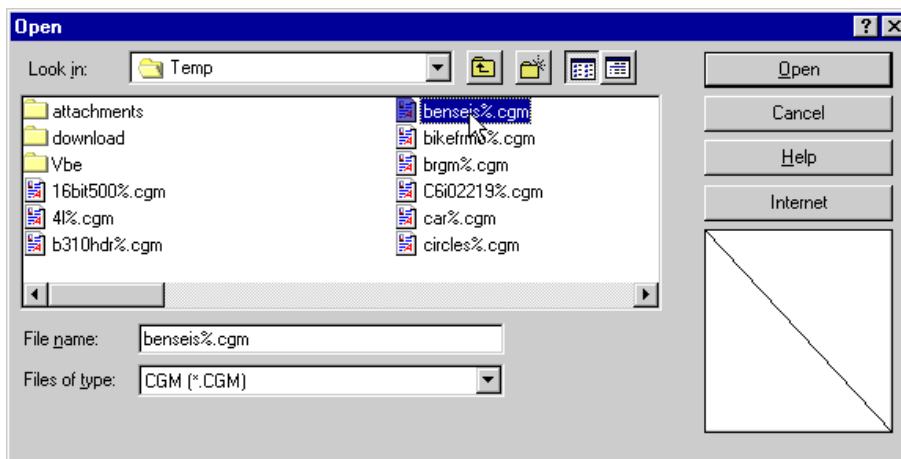
You may want to increase the resolution of the TIFF file. Recommended values are between 75 and 150 for background seismic sections. Higher resolution values will look better at the expense of longer conversion times and a larger TIFF file.

## Import Conversion result into Canvas 7

There are several ways to import the CGM Optimiser result into Canvas 7. The following method allows you to import the CGM with the original metric size using File ⇒ Open. If you want to create a composite of multiple seismic CGM files, it is better to create a canvas first and then use the File ⇒ Place command.

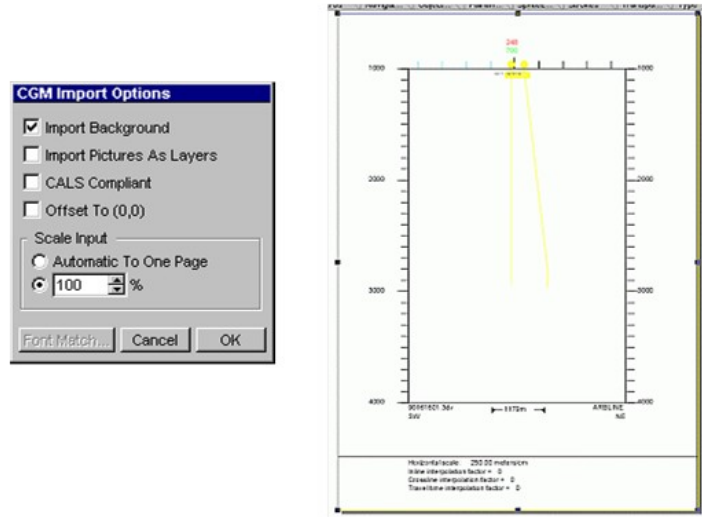


Select the File ⇒ Open command from the menu bar.

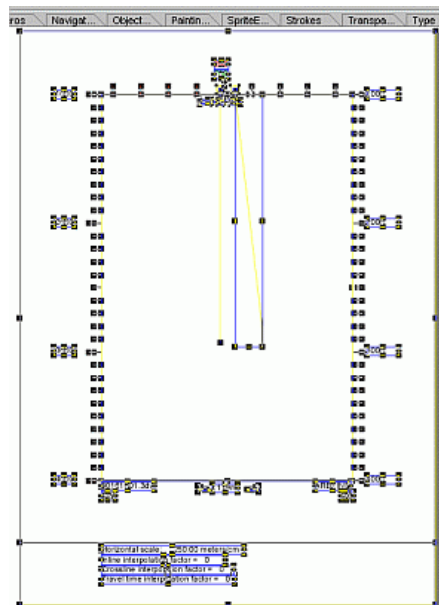


*Illustration 25: The Open dialog box of Canvas 7.*

Select the filtered CGM file `benseis%.cgm` and click on the Open button. The Import Options dialog will appear. In this case, we want to retain the original metric size, so we specify scale 100%.



Select the “Ungroup” command from the Object menu

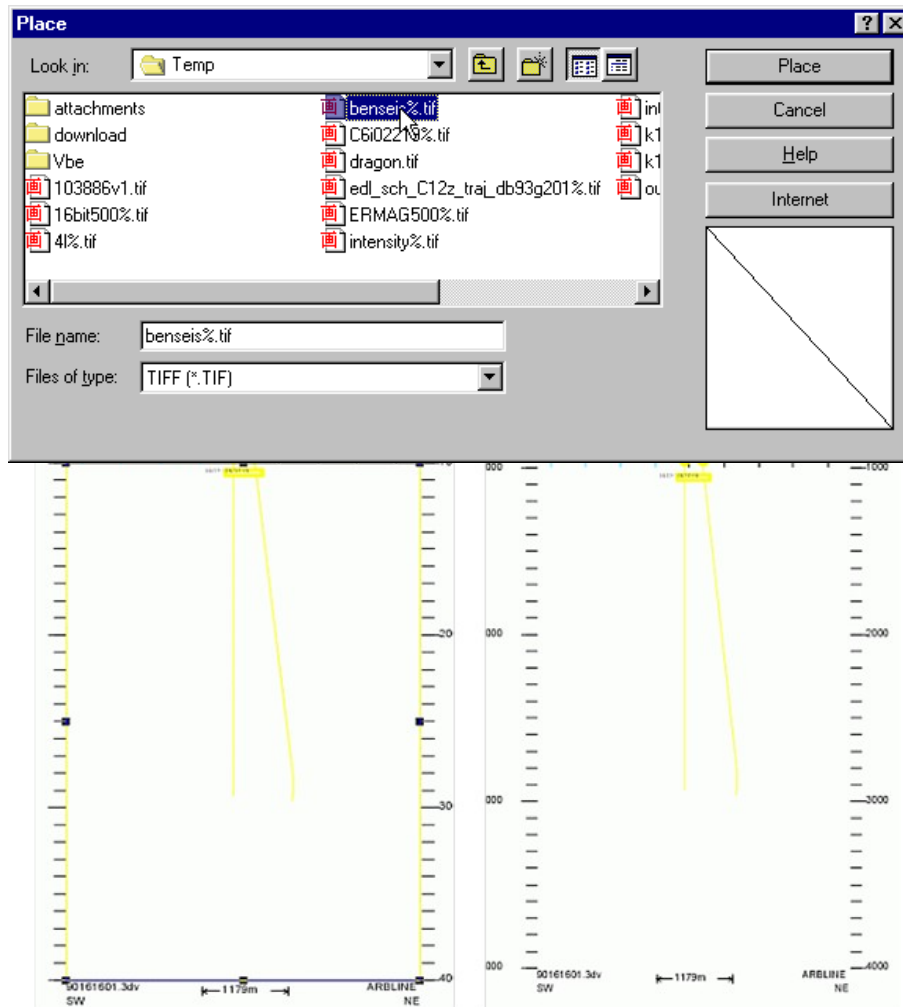


You may want to remove the rectangle that was placed by the CGM Optimiser around the original seismic section. Select the rectangle and press the Delete key.

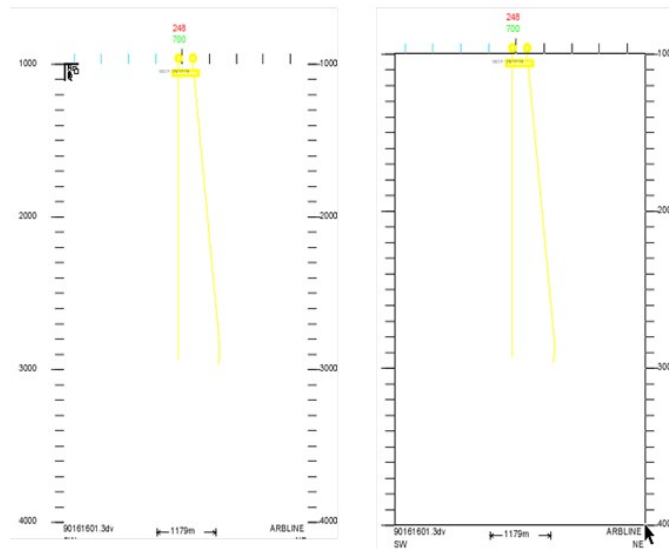
## How To Import Seismic Files

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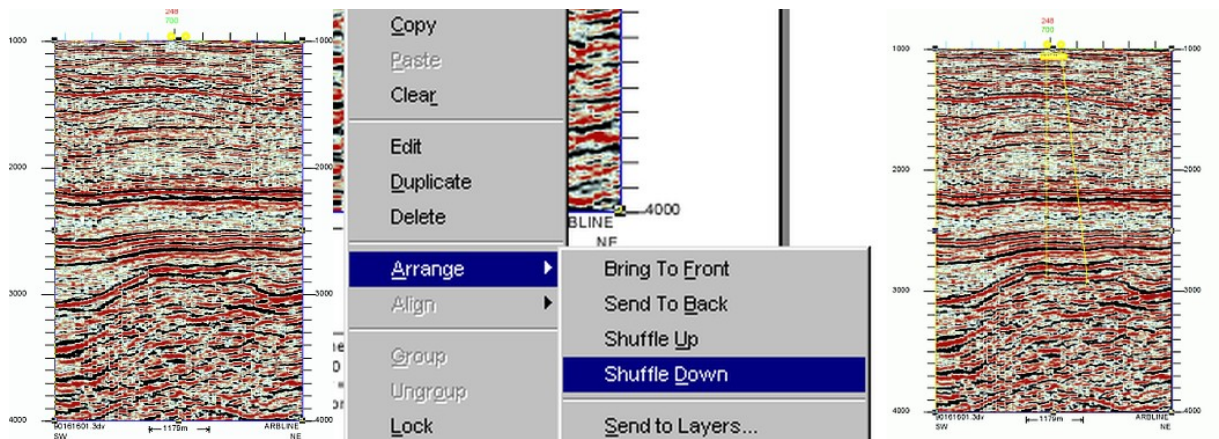
The next step is to import the TIFF file into Canvas. Select the “Place” command from the File menu.



Select the `benseis%.tif` file and click on the Place button. Position the TIFF image onto the drawing area. Go to the place where you want to position the upper left corner of the TIFF image. Click and hold the left mouse button. Now drag the mouse to the lower right corner, while holding the shift button. The latter is necessary to retain the aspect ratio of the image.



The TIFF image is now positioned on top of the CGM image. You have to move the TIFF image to the background to restore the original CGM+ image. Select the TIFF image (if not already selected). Select the “Shuffle Down” command from the Object ⇨ Arrange menu. You can also right click on the image and select the “Shuffle Down” command form Arrange menu.



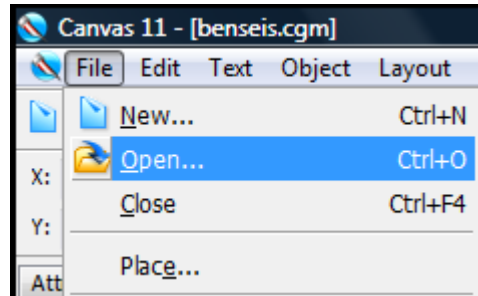
## ***How To Import Seismic Files Into Canvas 11***

Canvas 11 has, as standard, direct support for importing CGM+ and CGM\*PIP files.

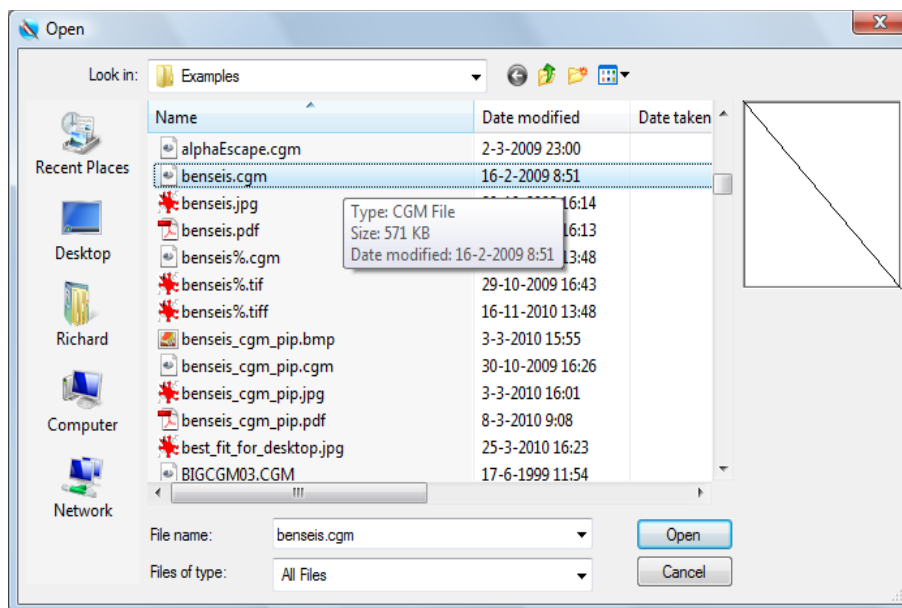
As an example, we will show you how to import our CGM+ test file `benseis.cgm` into Canvas 11.

## How To Import Seismic Files

There are several ways to import the CGM+ and CGM\*PIP files into Canvas 11. The following method allows you to import the CGM with the original metric size using File ⇒ Open. If you want to create a composite of multiple seismic CGM files, it is better to create a canvas first and then use the File ⇒ Place command.



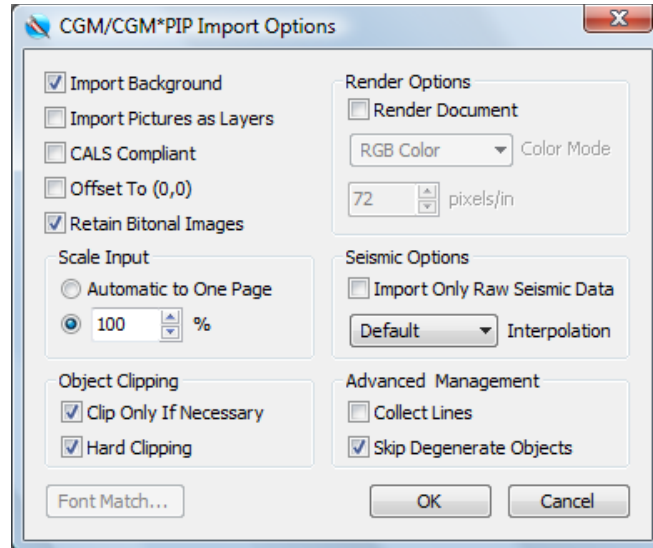
Select the File ⇒ Open command from the menu bar.



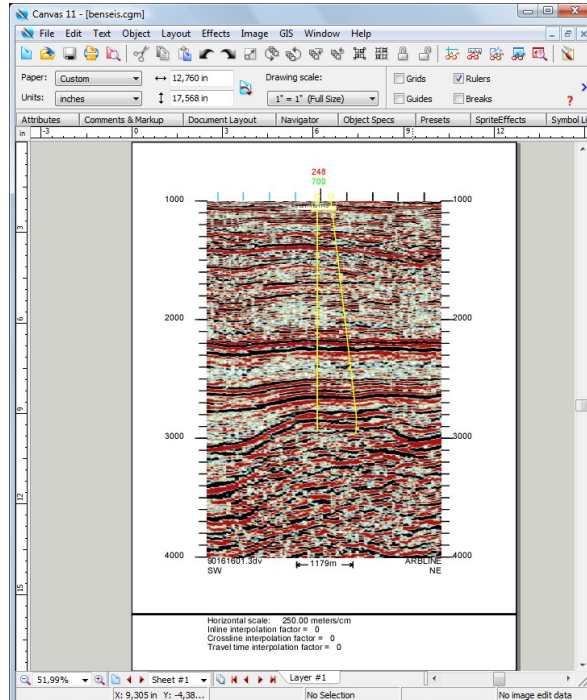
*Illustration 26: The File Open dialog box of Canvas 11.*



Select the filtered CGM file `benseis.cgm` and click on the Open button. The CGM/CGM\*PIP Import Options dialog will appear. In this case, we want to retain the original metric size, so we specify Scale Input 100%.



*Illustration 27: The CGM/CGM\*PIP Import Options dialog box of Canvas 11.*

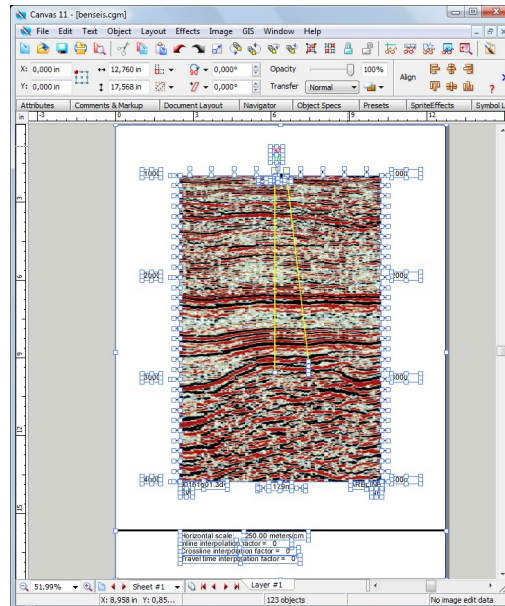


*Illustration 28: benseis.cgm loaded into Canvas 11.*

## How To Import Seismic Files

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Select the “Ungroup” command from the Object menu



## ***How To Import Seismic Files Into MicroStation***

MicroStation has no direct support for importing CGM+ or CGM\*PIP files. You can use the CGM Optimiser application to split the original CGM+ or CGM\*PIP file into a filtered CGM without the seismic sections and a TIFF file that will contain the seismic sections. You can then recombine the filtered CGM with the TIFF file to recreate the original seismic image.

As an example, we show you how to import our CGM+ test file `benseis.cgm` into MicroStation V8.

Some things to consider when using the CGM Optimiser for MicroStation:

- It is very important that you select the correct profile of your MicroStation version you are using. There are subtle differences between the MicroStation SE, MicroStation J and MicroStation V8.
- The MicroStation profiles we supply assume the regular CGM import filter of MicroStation. It could be that you use a CGM import filter supplied by a third party that requires some tuning. See, for example, the “Escape -350” option.
- MicroStation can use, at most, 256 colors in any given design file. It is recommended to attach the CGM Optimiser generated raster files using the raster manager.
- Cell arrays (e.g. raster data) in a CGM are, as standard, converted to separate raster files. This is also to work around the 256 color problems.

- The MicroStation import filter assumes that one VDC unit should be mapped to either a master unit or a sub-unit. You should set the “VDC Unit” option to the correct unit translation to keep the metric sizes correct. The “VDC Unit” option can be found under the Advanced Options dialog box.

## Converting the Seismic CGM file

Start the CGM Optimiser Interface. Select the “Filter CGM” conversion mode. By default, the CGM Optimiser will create two (or more) output files in the output directory:

- A filtered CGM file without any seismic sections. The file name has a percentage sign (%) appended and the file extension `.cgm`. Rectangles are drawn where the original seismic sections were.
- One or more TIFF files containing seismic sections and, optionally, converted cell arrays from the input file. The file name has a percentage sign (%) appended and the file extension `.tif`.

You can alter the output names if needed.

Select the “MicroStation V8” profile option. It is recommended to first try the conversion with both Line joining and Fill joining enabled but with zero tolerance factors. Later you can experiment with non-zero tolerance factors.

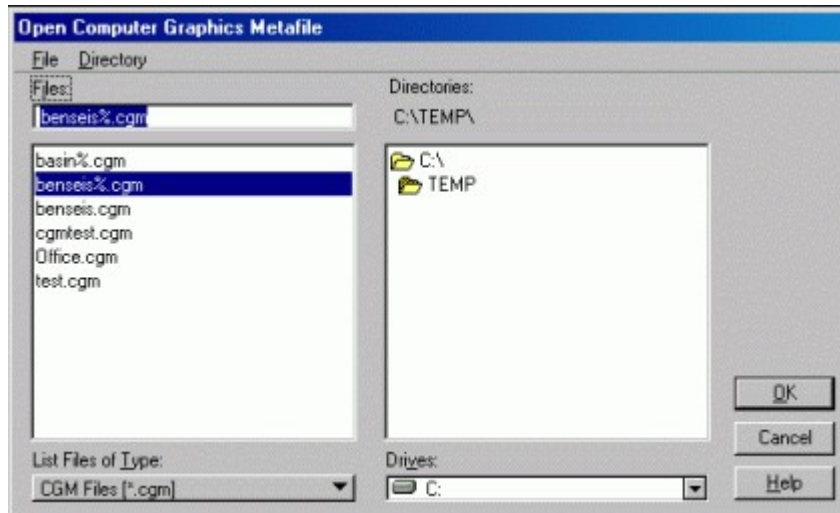
Make sure that the raster output is “TIFF-Deflate”. This is needed since the raster manager of MicroStation V8 does not support LZW compression. You may want to increase the resolution of the TIFF file. Recommended values are between 75 and 150 for background seismic sections. Higher resolution values will look better at the expense of longer conversion times and a larger TIFF file.

## Import Conversion result into MicroStation

Select the `Import ⇒ CGM` command from the `File` menu. The Open Computer Graphics Metafile dialog box will appear.

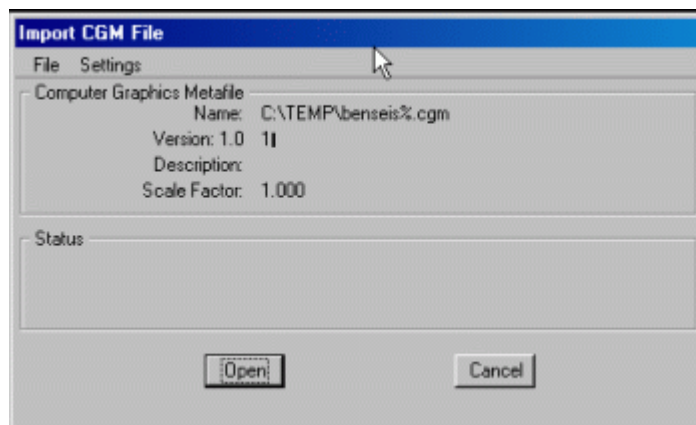
## How To Import Seismic Files

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*Illustration 29: The Open CGM dialog box of MicroStation.*

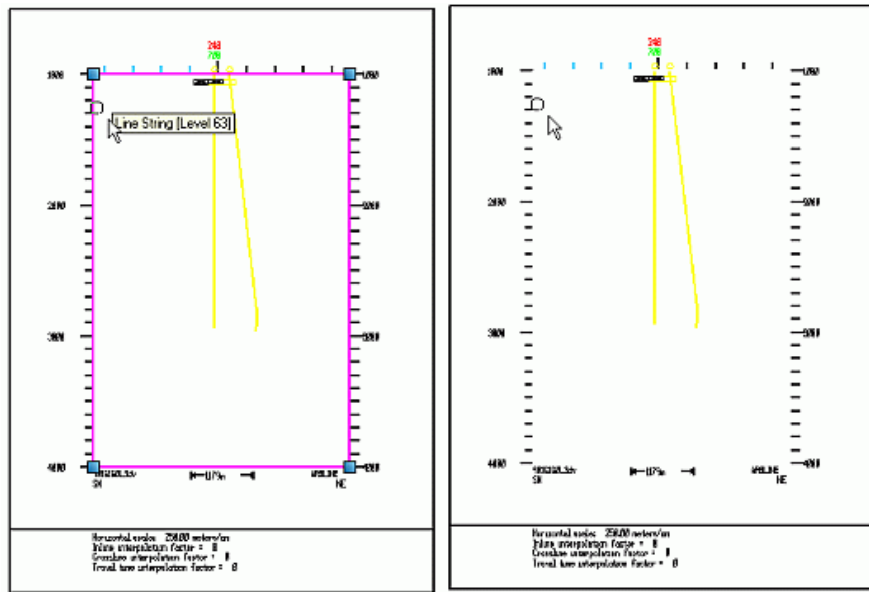
Select the filtered CGM file `benseis%.cgm` and click on the OK button. The Import CGM File dialog box will appear.



*Illustration 30: The Import CGM File dialog box of MicroStation.*

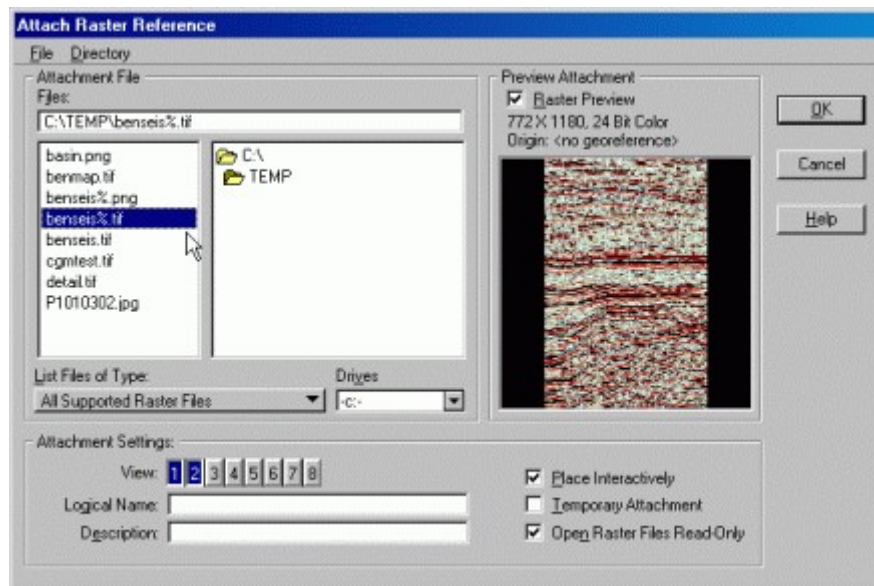
You can control the import process with the options you find under the Settings menu. The MicroStation defaults are used in this example. Click the Open button to start the import process. Wait until the import process has finished and click the “Fit View” button to make the image completely visible.

You may want to remove the rectangle that was placed by the CGM Optimiser around the original seismic section. Select the rectangle and press the Delete key.



The next step is to add the TIFF file into MicroStation. Select the Raster Manager from the File menu. The Raster Manager dialog box will appear.

Select from the Raster Manager dialog box the File ⇒ Attach command. The Attach Raster Reference dialog box will appear.



*Illustration 31: The Attach Raster Reference dialog box of MicroStation.*

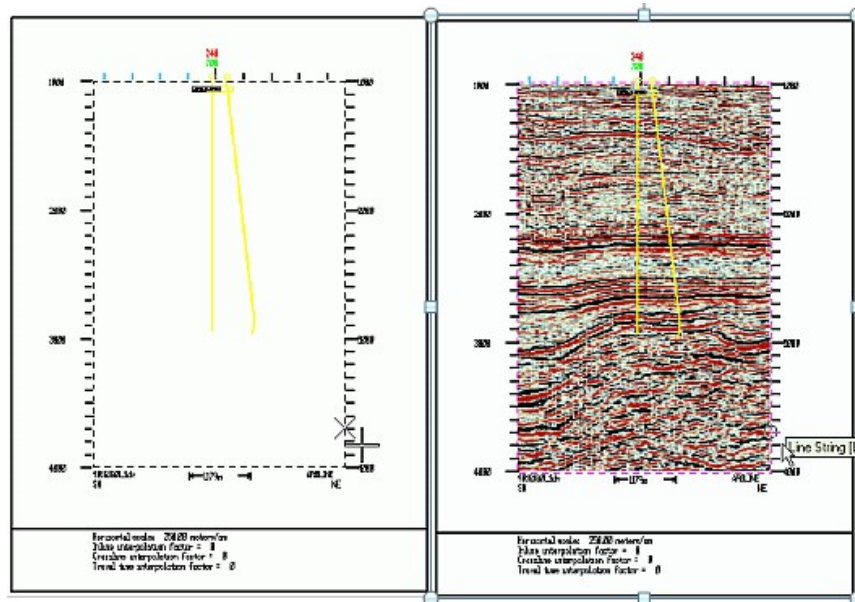
Select the benseis%.tif file and click on the OK button. Note that the Raster Manager

## How To Import Seismic Files

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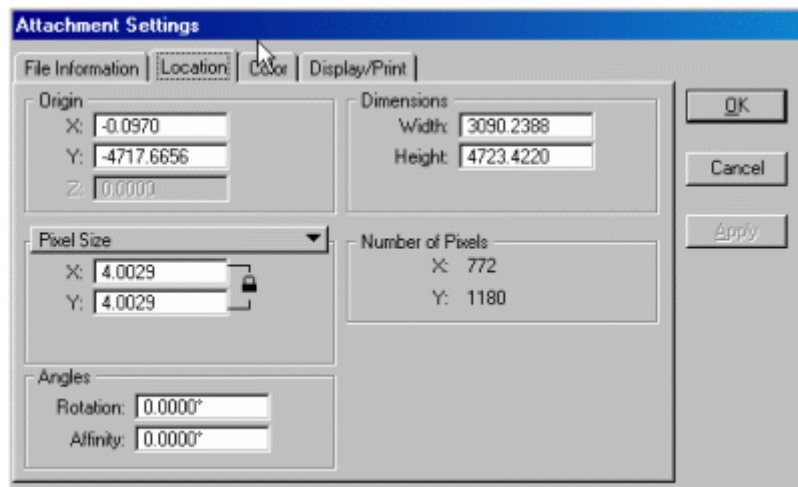
allows you to place the raster image interactively. It is usually a good idea to roughly position the raster image first.

Go to the place where you want to position the upper left corner of the TIFF image. Click and hold the left mouse button. Now drag the mouse to the lower right corner and release the mouse button. Notice that MicroStation will retain the aspect ratio.



The TIFF image is automatically positioned under the CGM vector data.

You may want to fine-tune the position and size of the TIFF image. You can do this by double clicking the `benseis%.tif` file from within the Raster Manager. Select the Location tab from the Raster Settings dialog box.



*Illustration 32: The Location tab of the Attachment Settings dialog box.*

## **How To Import Seismic Files Into PowerPoint 2010**

Microsoft PowerPoint 2010 has no direct support for importing CGM+ or CGM\*PIP files. You can use the CGM Optimiser application to split the original CGM+ or CGM\*PIP file into a filtered CGM without the seismic sections and a TIFF file that will contain the seismic sections. You can then recombine the filtered CGM with the TIFF file to recreate the original seismic image.

As an example, we show you how to import our CGM+ test file `benseis.cgm` into Microsoft PowerPoint 2010.

### **Converting the Seismic CGM file**

Start the CGM Optimiser Interface. Select the "Filter CGM" conversion mode. By default, the CGM Optimiser will create two (or more) output files in the output directory:

- A filtered CGM file without any seismic sections. The file name has a percentage sign (%) appended and the file extension `.cgm`. Rectangles are drawn where the original seismic sections were.
- One or more TIFF files containing seismic sections and, optionally, converted cell arrays from the input file. The file name has a percentage sign (%) appended and the file extension `.tif`.

You can alter the output names if needed.

## How To Import Seismic Files

Select the Office 2007/2010 profile from the Profile option menu. It is recommended to first try the conversion with both Line joining and Fill joining enabled but with zero tolerance factors. Later you can experiment with non-zero tolerance factors.

You may want to increase the resolution of the TIFF file. Recommended values are between 75 and 150 for background seismic sections. Higher resolution values will look better at the expense of longer conversion times and a larger TIFF file.

## Import Conversion result into PowerPoint 2010

Select the "Picture" command from the Insert menu. The import dialog box will appear.

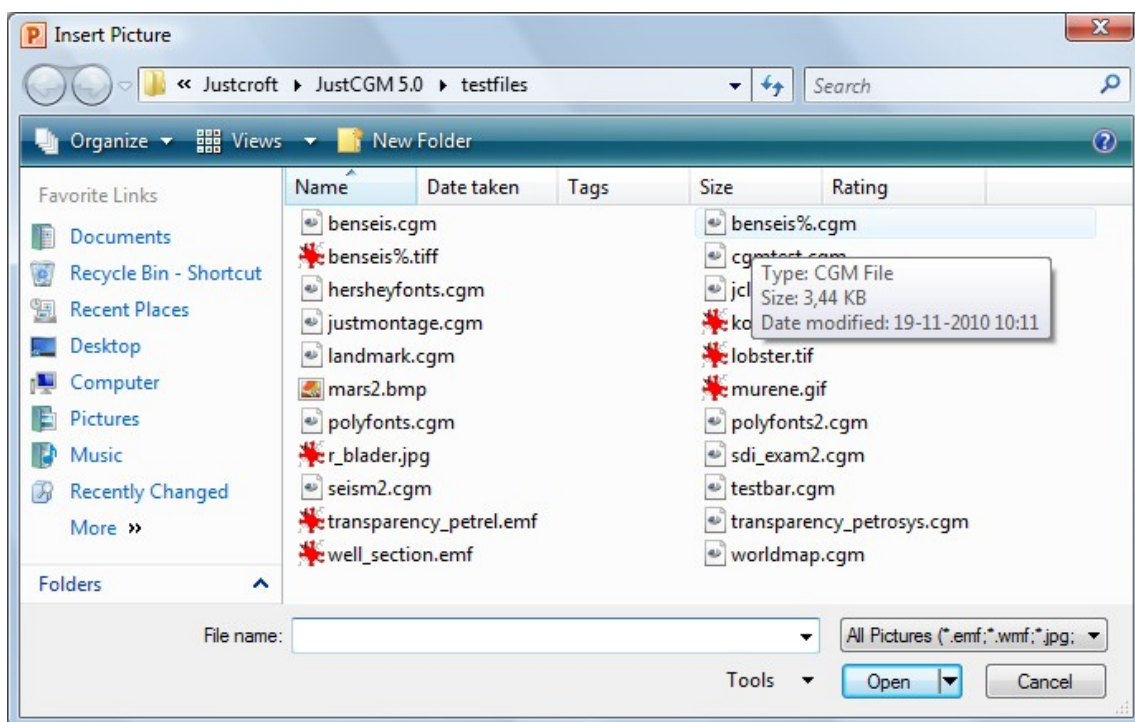
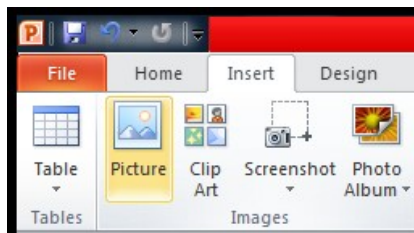
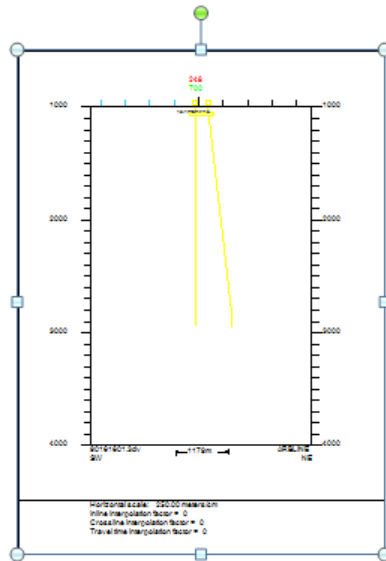


Illustration 33: The Insert Picture dialog box of PowerPoint.

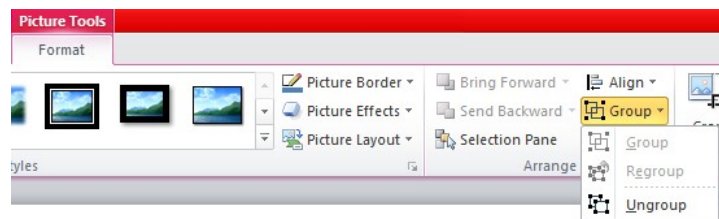
Select the filtered CGM file benseis%.cgm and click on the Insert button. The CGM image will be positioned on the drawing area. Notice that the aspect ratio will be retained by



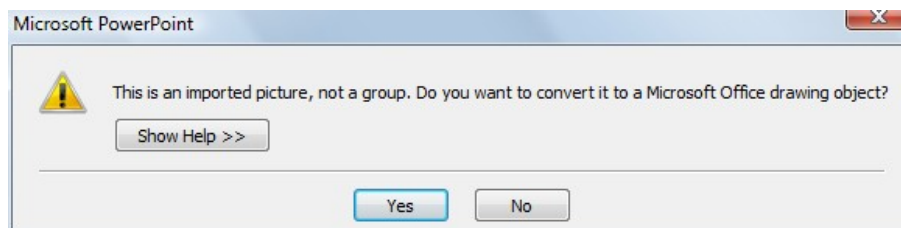
PowerPoint.



Select the Group command from the Format tab. Within the Group menu select the Ungroup command.



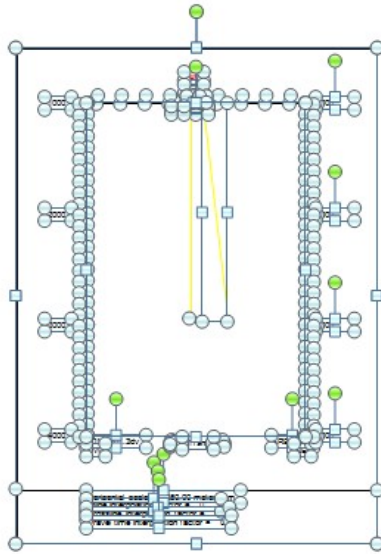
You will get a PowerPoint message, select the Yes button.



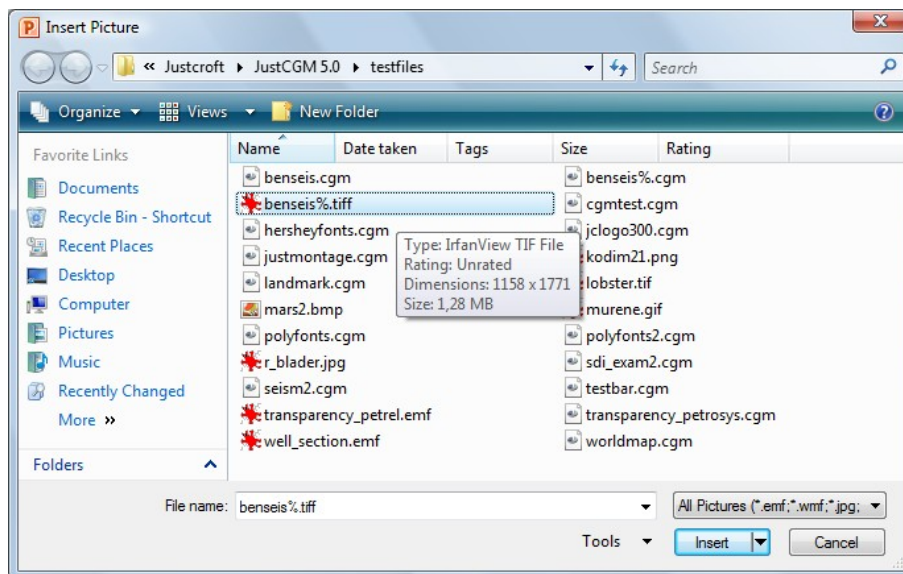
Sometimes it is necessary to Ungroup a couple of times.

## How To Import Seismic Files

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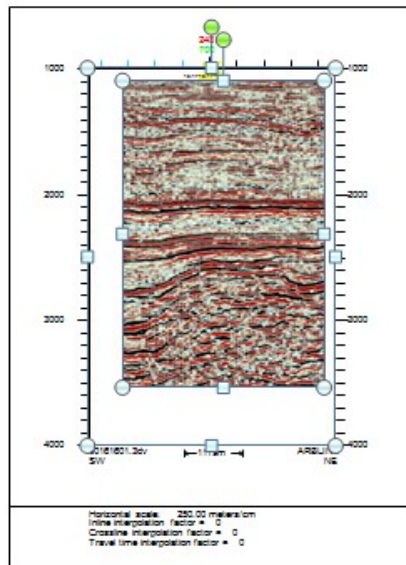


The next step is to import the TIFF file into PowerPoint. Select the Picture command from the Insert menu. The import dialog box will appear.

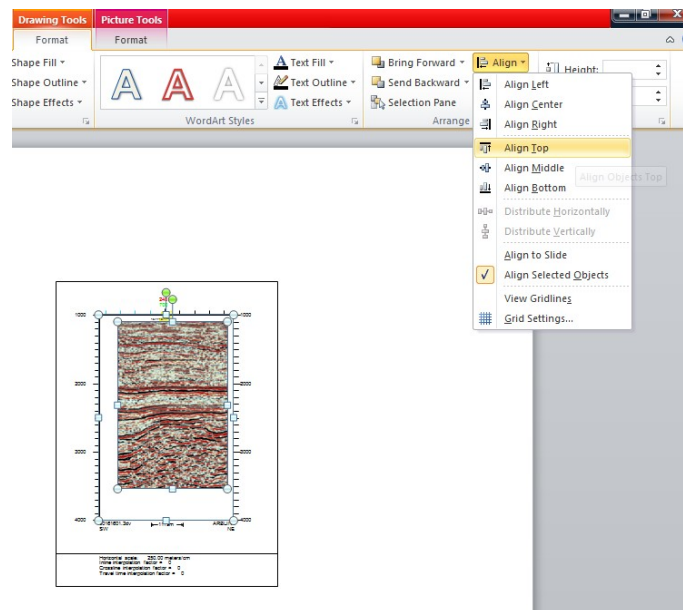


*Illustration 34: Inserting the TIFF image into PowerPoint.*

Select the `benseis%.tif` file and click on the Insert Button. Resize the TIFF image and position the image onto the drawing area. Select the rectangle which was drawn where the original seismic sections were.



Select the “Align” command from the Format tab. Within the Group menu select the “Align Top” command.

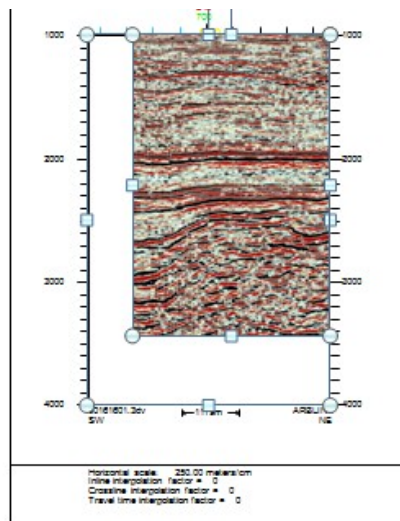
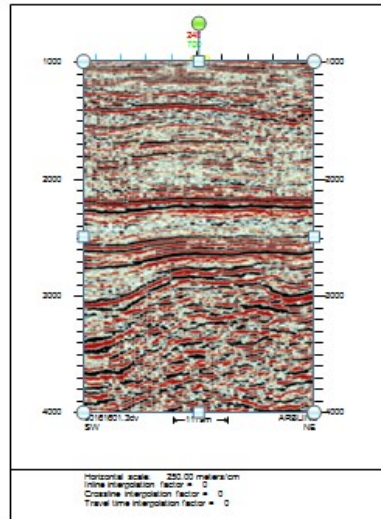


Select the “Align” command from the Format tab. Within the Group menu select the “Align Right” command.

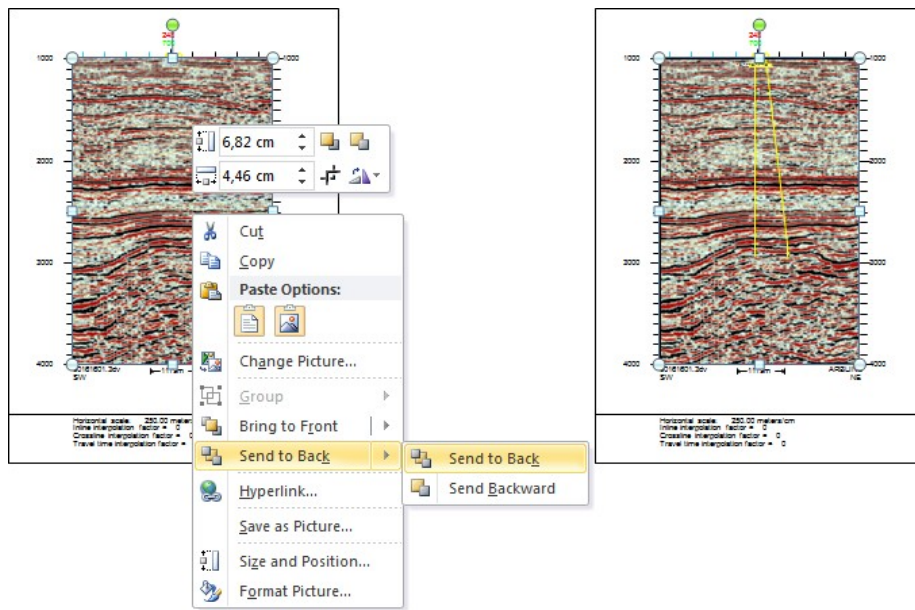
## How To Import Seismic Files

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Select only the seismic section and move the lower left corner to the lower left of the rectangle.



The Seismic section is now positioned on top of the CGM image. You have to move the Seismic section to the background to restore the original CGM+ image. Select the seismic section and with the right mouse click select Send to Back ⇨ Send to Back.





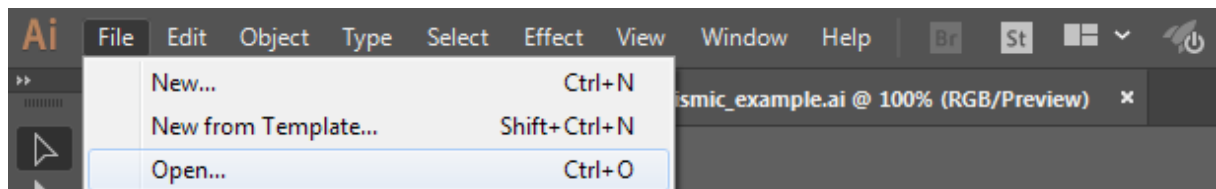
# Adobe Illustrator

## **Introduction**

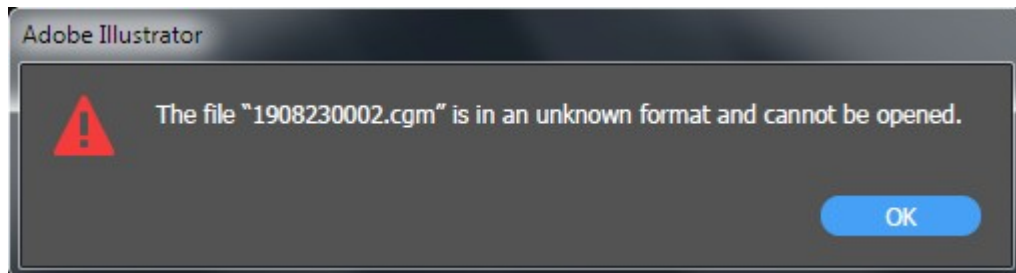
This chapter is intended for users who want to import JustIMAGE files into Adobe Illustrator. It explains the workflow on how to export from JustIMAGE and how to use the layers within Adobe Illustrator. Adobe Illustrator is a vector graphics editor developed and marketed by Adobe Inc. The examples in this chapter are created with Adobe Illustrator CC 2018.

## **Adobe Illustrator CGM support**

You can bring images into Adobe Illustrator using the **File** → **Open** command.



**Illustrator** has limited **CGM** import support. Some simple **CGM** files can be imported but often you get the following error message.

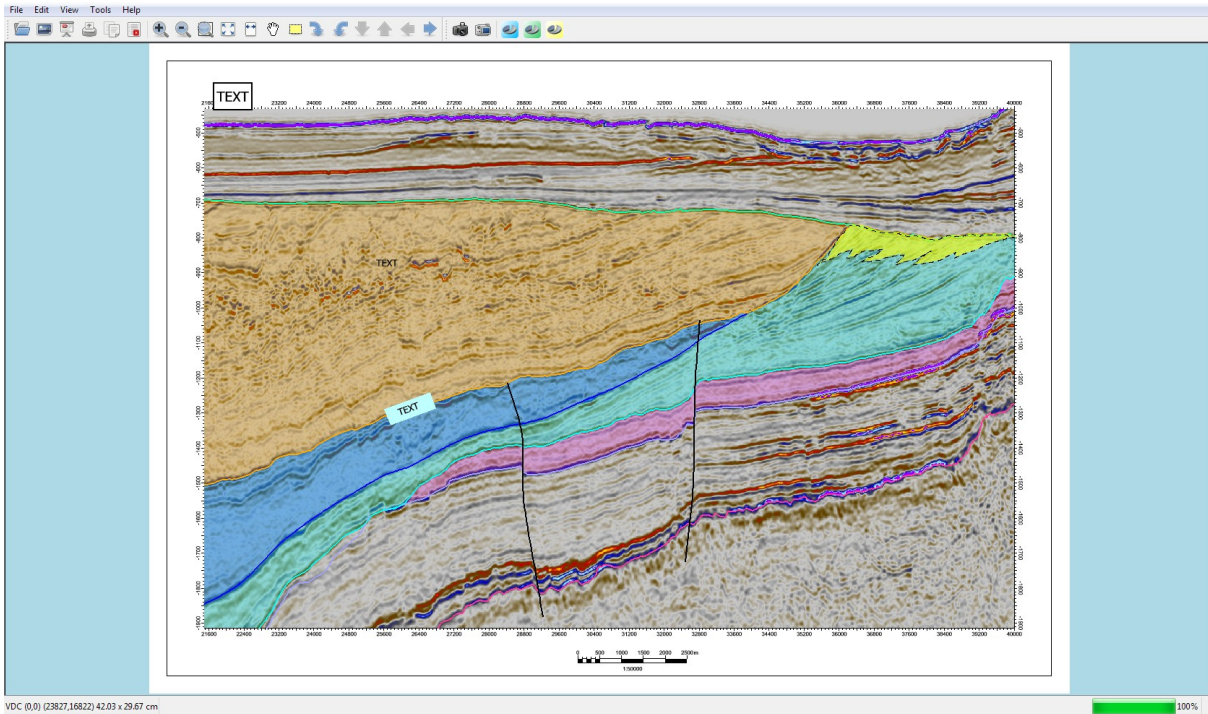


## **Adobe Illustrator PDF support**

Adobe Illustrator has **PDF** import support which seems to be a lot better than the **CGM** import.

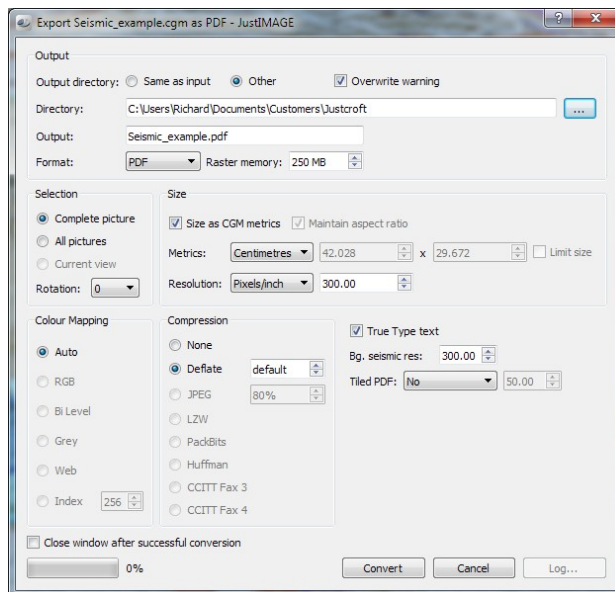
## JustIMAGE PDF export

You can bring images into JustIMAGE using the **File → Open** command.



Use the **File → Export** command to create the vector PDF file.

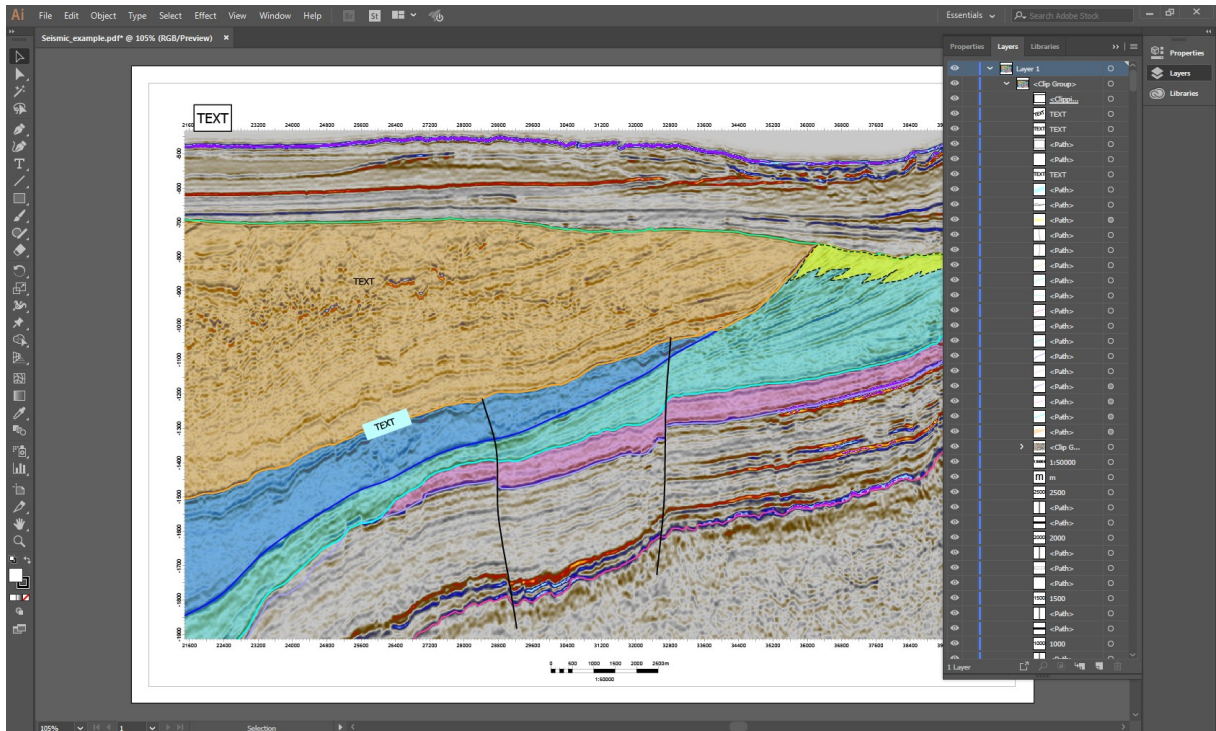
Make sure the “True Type text” box has been selected.





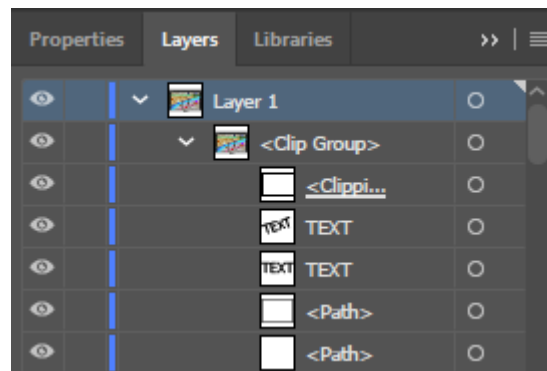
## Editing PDF in Adobe Illustrator

You can bring images from PDF files into Adobe Illustrator using the **Open** command, the **Place** command, the **Paste** command, and the drag-and-drop feature. Use the **Place** command with the **Link** option selected to import a **PDF** file (or one page of the **PDF** if it is a multi-page document) as a single image.



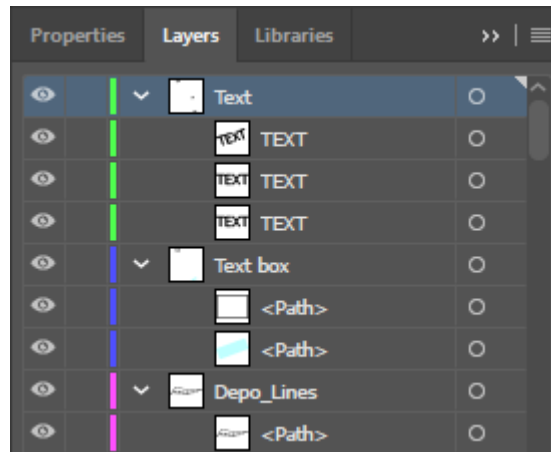
Once the **PDF** file is imported in the program, click on the "**Windows**" and select **Layers** to show the **Layers** window.

All the elements are visible but unfortunately only on one layer (Layer 1 → <Clip Group>).

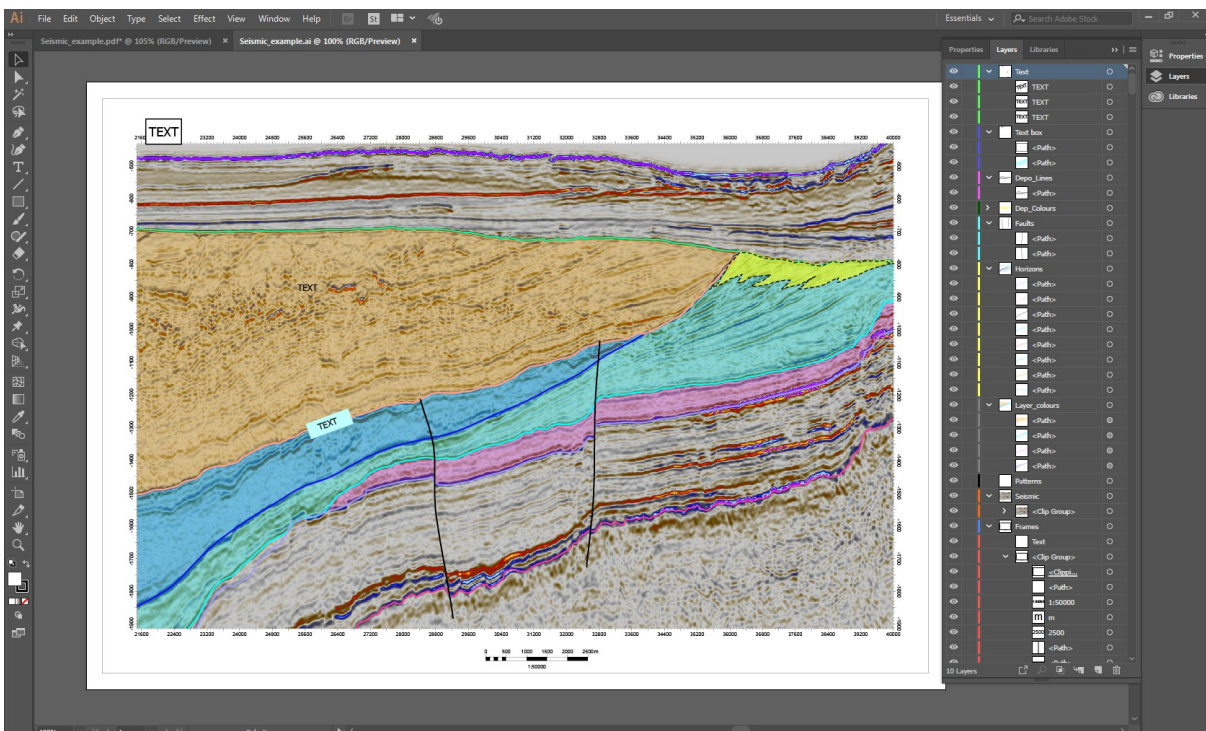


## Adobe Illustrator

In the **Layers** panel, click the name of the layer above which (or in which) you want to add the new layer. Select the **element** in the Layers panel and drag and drop it to the matching layer.

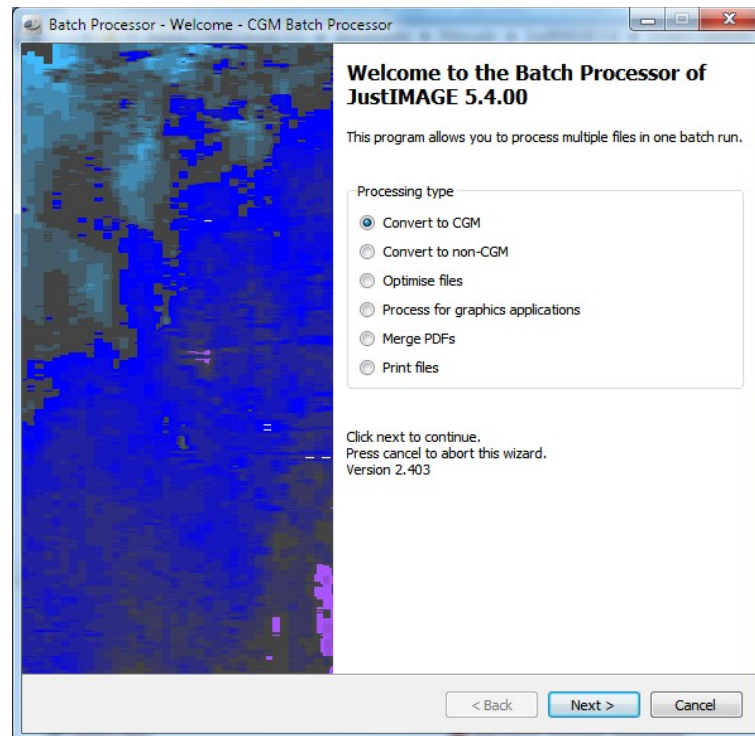


When all the **elements** are on the correct layers you can save the image as an AI file.



## Batch Processor

The Batch Processor allows you to convert multiple files in one run. The Batch Processor runs independently from the JustIMAGE 5.4 User Interface so that you can continue working while the Batch Processor is running. You can start the Batch Processor in the JustIMAGE 5.4 User Interface by selecting the “Batch Processor” command from the Tools menu.



*Illustration 35: Welcome screen of the Batch Processor.*

The following processing types are possible:

- *Convert to CGM.* Convert one or more files to a CGM.
- *Convert to non-CGM.* Convert one or more files to a bitmap, PDF or SVG.
- *Optimise files.* Perform line joining and fill joining on the specified files.
- *Process for graphics applications.* Run the CGM Optimiser to import files into a PC drawing package. Split CGM+, CGM\*PIP into a normal vector CGM and a raster file for the seismic.

## Batch Processor

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- *Merge PDFs.* Merge two or more PDF files into a single multi-page PDF.
- *Print files.* Print multiple files.

Important: One or more processing types might be disabled if you do not have one of the following module licenses: Input File Converter module, Output File Converter module, Printing modules and CGM Optimiser module.

The Batch Processor shares some of the settings with JustIMAGE 5.4. Shared settings will be saved if you press Finish after the batch run. Shared settings are:

- CGM Optimiser specific settings.
- Color redefinition.
- Advanced raster settings such as Anti Alias 2x2.

### ***Input file selection mode***

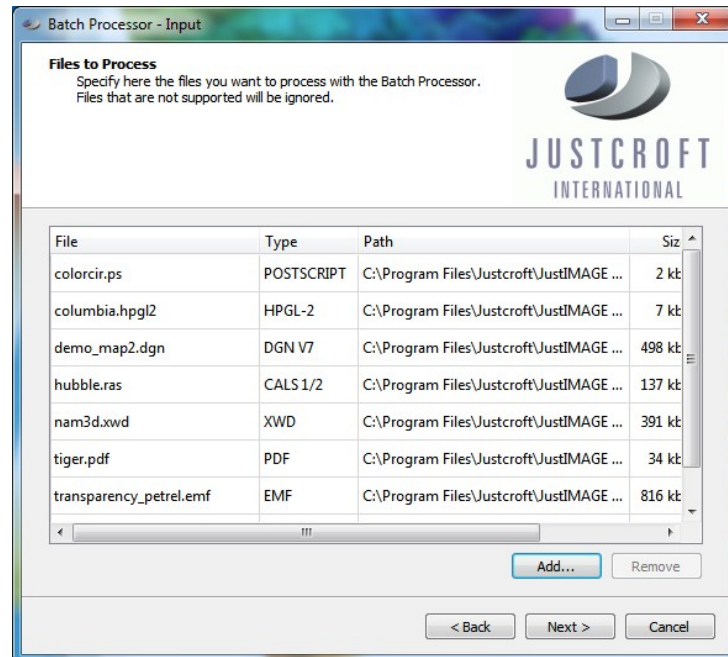
For all options except the Merge PDFs option it is possible to choose between the normal file selection and the hot directory mode.



*Illustration 36: Input mode selection.*

### **Normal mode**

Enter the files you want to process in the “Files to Process” screen.



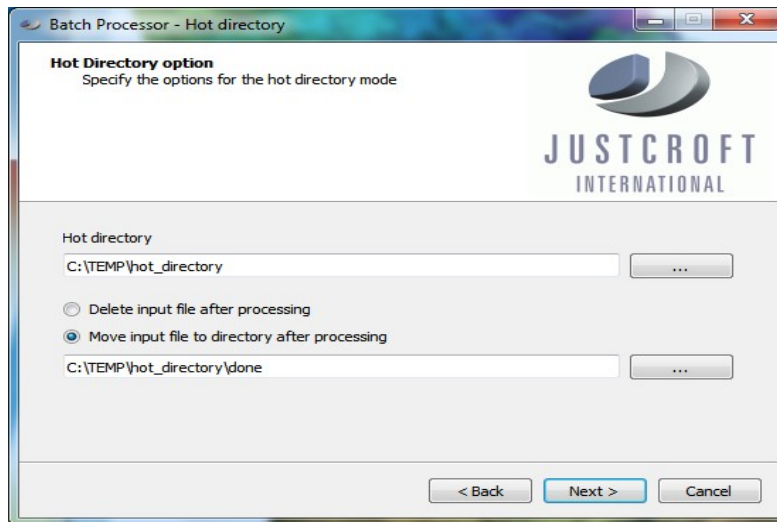
*Illustration 37: The Files to Process screen of the Batch Processor.*

You must specify at least one file before you can continue. Press the **Add** button to open a file selection dialog box. You can select multiple files at the same time from the file selection dialog box.

Select one or more entries from the list and press the **Remove** button to remove any files from the conversion. Click on **Next >** to continue.

### **Hot directory mode**

Specify here the directory from which the Batch Processor will pick up files for processing.



*Illustration 38: Hot directory mode settings*

If the files need to be kept after processing you can use the option “Move input file to directory after processing”. The files will then be placed in the specified directory.

### **Convert to CGM**

Select “Convert to CGM” in the Welcome screen of the Batch Processor and click on `Next`

Select the input files using the normal file selection mode or the hot directory mode and click on `Next >` to continue.

Enter in the “File Output” screen the output destination. The default is to create output files in the same directory as the input file. By selecting the “Other” option, a directory for the output file(s) can be selected.



*Illustration 39: The File Output screen of the Batch Processor.*

The “Allow output overwrite” option can be turned off if you want to prevent file overwrite during the conversion. Click on **Next >** to continue.

You will get the Converter options screen.



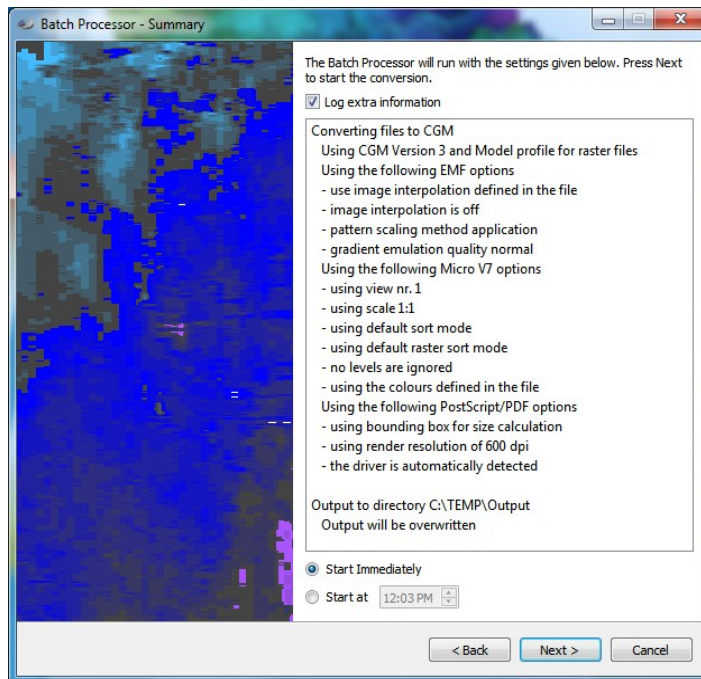
*Illustration 40: The Converter options screen of the Batch Processor.*

## Batch Processor

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You can set if necessary conversion options, but in general you can leave this alone. Click on `Next >` to continue.

You will first get a summary of the processing options you had specified in the previous screens. If needed you can log extra information.

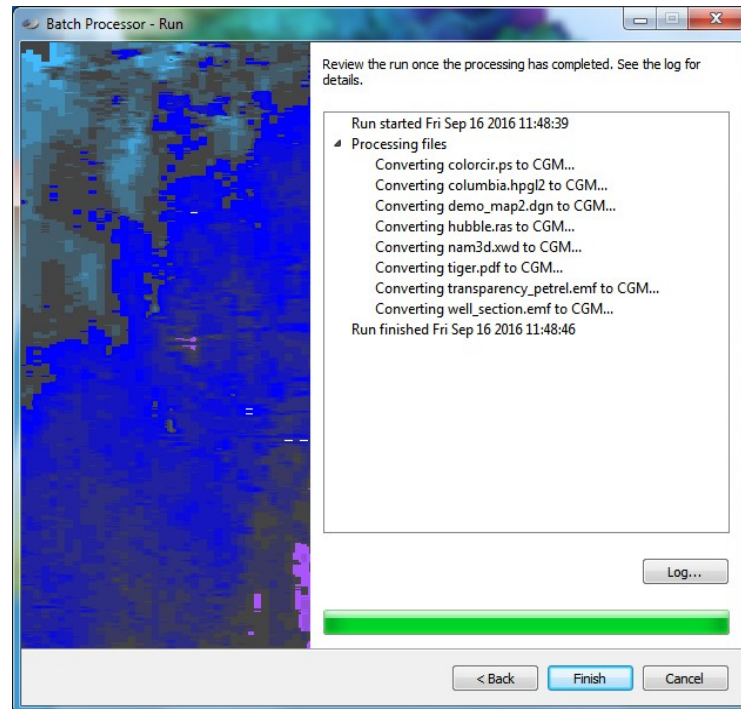


*Illustration 41: Converting files to CGM summary screen of the Batch Processor.*

Processing can be started immediately or at the specified time. The time should be specified in hours and minutes.

Press the `Next >` button to start the actual conversion process. Press the `< Back` button if you want to make changes to the options you had selected.





*Illustration 42: Converting files to CGM run screen of the Batch Processor.*

The Run window shows you the progress of the batch conversion. The progress bar gives you an indication of how many files are converted so far. Information is shown about the current file that is being processed.

The log summary keeps track of the batch process. You can find here information about the success or failure of a specific job. You can view this log after the Batch Processor has finished by pressing the Log... button.

Press **Cancel** if you want to abort the batch conversion run. You will be prompted whether you are sure you want to abort the process.

**Important:** Processing is not immediately aborted. The Batch Processor will always finish the current processing job first.

## ***Convert to Non-CGM***

Select "Convert to non-CGM" in the Welcome screen of the Batch Processor and click on **Next >**.

Select the input files using the normal file selection mode or the hot directory mode and click on **Next >** to continue.



*Illustration 43: File Output screen in convert to non-CGM mode.*

Enter in the “File Output” screen the output destination. The default is to create output files in the same directory as the input file. By selecting the “Other” option, a directory for the output file(s) can be selected.

The “Allow output overwrite” option can be turned off if you want to prevent file overwrite during the conversion.

Select from the “Format” combo box the format of the output. An image can be converted into BMP, GIF, JPEG, PBM, PGM, PPM, PDF, PNG, SVG or TIFF. Select the SVG format to create a SVGZ. The generation of SVGZ is controlled on the “Convert to non-CGM Options” screen later on in the wizard.

You can filter files through the CGM Optimiser if PDF or SVG is selected as output format.

Select the Resolution of the (raster) output file to be generated. Higher resolution gives better graphics details, however this will cost more memory and the conversion will take longer. PDF and SVG will support much higher resolutions since these are vector formats.

The “Raster memory” setting controls the maximum amount of cache memory to use for rendering seismic sections. You can raise this value if you have large amounts of physical memory in your computer and you want to have better performance.

With the “Rotation” option the output can be rotated 0, 90, 180 or 270 degrees.

You can use the CGM Optimiser in combination with PDF or SVG/SVGZ output to reduce the file size by selecting the “Optimiser files” option.

Click on `Next >` to continue.

You will get the converter options screen first if you had selected one or more non-CGM files. You can set if necessary conversion options, but in general you can leave this alone. Click on `Next >` to continue.

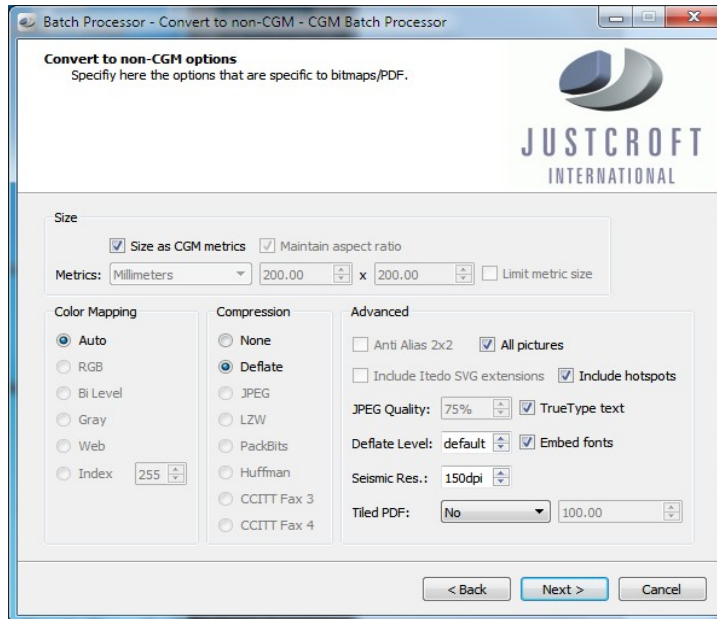


*Illustration 44: The Color Redefinition screen of the Batch Processor.*

Adjust if necessary the color redefinition. You can revert to the default color redefinition settings by pressing the `Reset` button. You can select the following options:

- **Color mode.** Select the color mode of the picture. The default mode is color and in this mode all colors stay unmodified. If gray scale is selected all colors are converted to a gray value. The Black/White option converts all colors not equal to white to black.
- **Invert Black/White.** Invert Black and White in the original image. This is useful if an image is created with a Black background and White as the foreground color.
- **Gamma correction.** Adjust the Red, Green and Blue gamma values to compensate for the non-linear reaction of your eyes to colors. The default is 1.00, which means no adjustment. Specify higher values to increase the intensity of the color component. Specify lower values to decrease the intensity. Disabling the “Adjust all” option allows you to adjust the individual gamma values.

Set the Color Redefinition options you want to use and click on `Next >` to continue.



*Illustration 45: The Convert to non-CGM options screen of the Batch Processor.*

In the size section, you can control the size of the output file. For a metric CGM, the default size will be the same as the size of the CGM (this is after rotation). If you disable the “Size as CGM metrics” option, the size (horizontal x vertical) can be changed. Abstract CGMs will get a size of 1000x1000 pixels by default, which can be changed.

Sizes can be specified in millimeters, inches or pixels depending on the value of the Metrics option menu. If you change one of the size fields the other is updated as well (after losing focus or pressing enter) so as to maintain the aspect ratio. The aspect ratio can be forced to an-isotropic by disabling the “Maintain aspect ratio” option.

The “Limit size” option prevents images becoming larger than the specified size. This is intended if you are creating a series of exports and you don't want images that are “blown up” too large.

We recommend leaving “Color Mapping” at the default value. The type of compression depends on the image format selected. If you want a SVG file make sure that “Compression” is set to “None”. If you want a SVGZ file make sure that “Compression is set to “Deflate”.

The quality of the JPEG files can be controlled. A higher value normally gives better quality than a lower value but the files will be bigger. The default value is 75 and should be good enough in most cases.

The level for the Deflate compression (PDF, PNG, SVGZ and TIFF) can be controlled. A higher value normally gives a smaller file but it takes more time to create the file. The value

“default” gives the best trade-of between speed and compression.

Bitmaps with fine details may benefit from the “Anti alias 2x2” option. Anti aliasing reduces [visual artifacts](#) when rendering bitmaps at low resolutions. Text and thin lines will look better. The disadvantage is that the bitmap will take longer to create.

TrueType text in PDF output can be generated as text instead of being emulated. This makes text searching and selection possible. The PDF is less portable if the font data is not embedded. Select “Embed fonts” to have the font data added to the PDF. This will make the PDF larger.

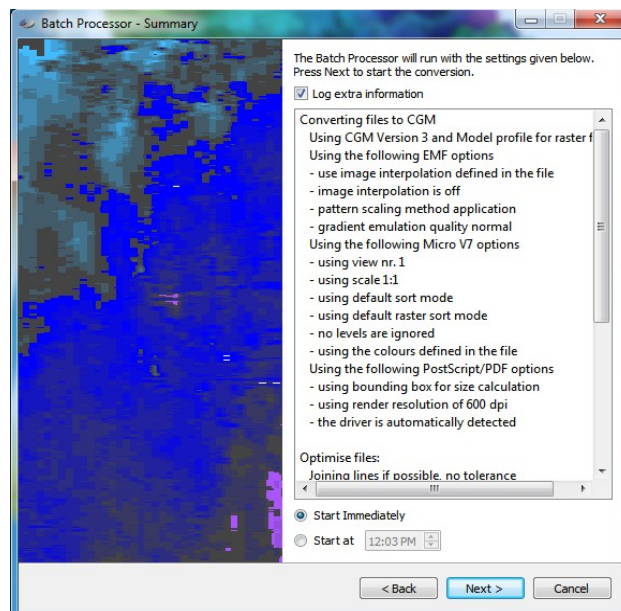
The “Include Itedo SVG extensions” is an advanced option which will add WebCGM meta information in the SVG/SVGZ file. WebCGM Layer information and Hotspots information are automatically added to the PDF.

The Seismic Resolution is used for the bitmap conversion of Seismic Background sections when generating PDF or SVG/SVGZ. The default value of 150dpi is normally good enough.

You can divide a PDF image into tiles. The PDF will be tiled along the longest side of the input (taking the rotation into account). The length of each tile can be A4, Letter or a custom length specified in either millimeters (Custom mm) or inches (Custom inch)

Click on `Next >` to continue.

You will first get a summary of the processing options you had specified in the previous screens. If needed you can log extra information.



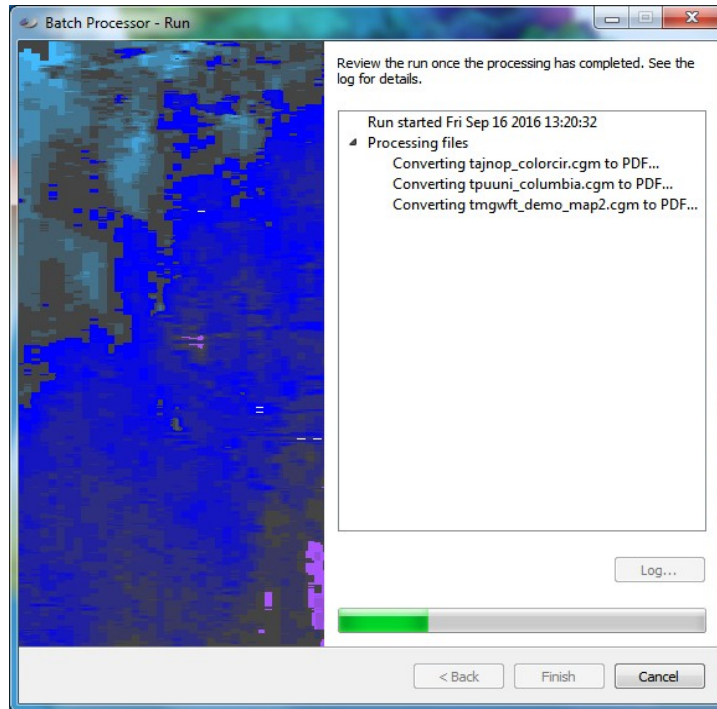
*Illustration 46: Converting files to non-CGM summary screen of the Batch Processor.*

## Batch Processor

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Processing can be started immediately or at the specified time. The time should be specified in hours and minutes.

Press the `Next >` button to start the actual conversion process. Press the `< Back` button if you want to make changes to the options you had selected.



*Illustration 47: Converting files to non-CGM run screen.*

The Run window shows you the progress of the batch conversion. The progress bar gives you an indication of how many files are converted so far. Information is shown about the current file that is being processed.

The log summary keeps track of the batch process. You can find here information about the success or failure of a specific job. You can view this log after the Batch Processor has finished by pressing the `Log...` button.

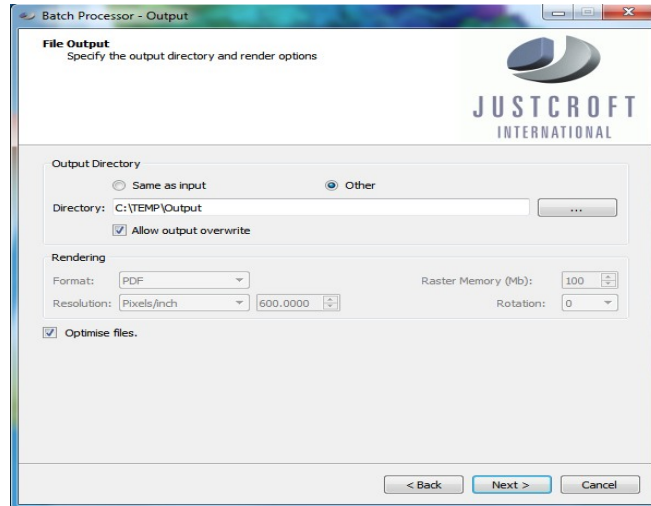
Press `Cancel` if you want to abort the batch conversion run. You will be prompted whether you are sure you want to abort the process.

**Important:** Processing is not immediately aborted. The Batch Processor will always finish the current processing job first.

## Optimise Files

Select “Optimise files” in the Welcome screen of the Batch Processor and click on **Next >**.

Select the input files using the normal file selection mode or the hot directory mode and click on **Next** to continue.



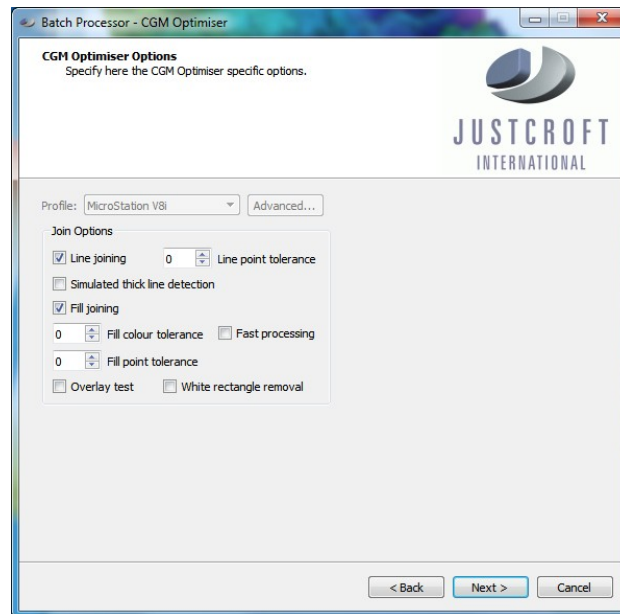
*Illustration 48: The File Output screen of the Batch Processor.*

The “Allow output overwrite” option can be turned off if you want to prevent file overwrite during the conversion. Click on **Next >** to continue.

You will get the converter options screen first if you had selected one or more non-CGM files. You can set if necessary conversion options, but in general you can leave this alone. Click on **Next >** to continue.

## Batch Processor

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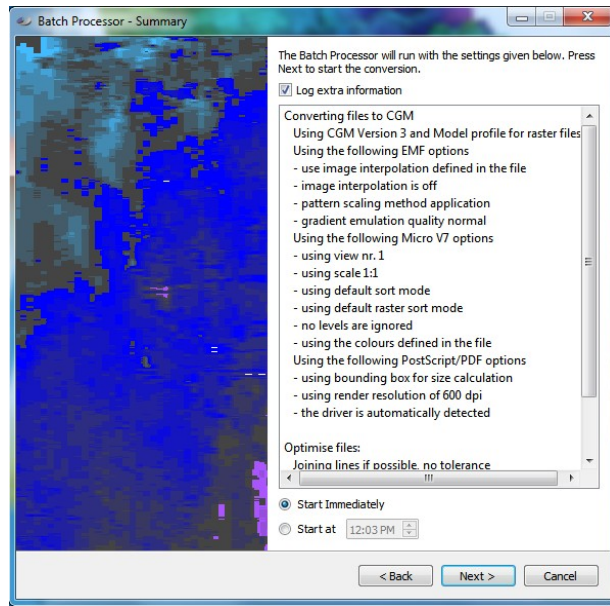


*Illustration 49: The CGM Optimiser options screen of the Batch Processor.*

In general, you can leave the join options in the CGM Optimiser Options screen at their default values. See the “CGM Optimiser” chapter in the Reference Manual for details on what these options can do. Click on `Next >` to continue.

You will first get a summary of the processing options you had specified in the previous screens. If needed you can log extra information.

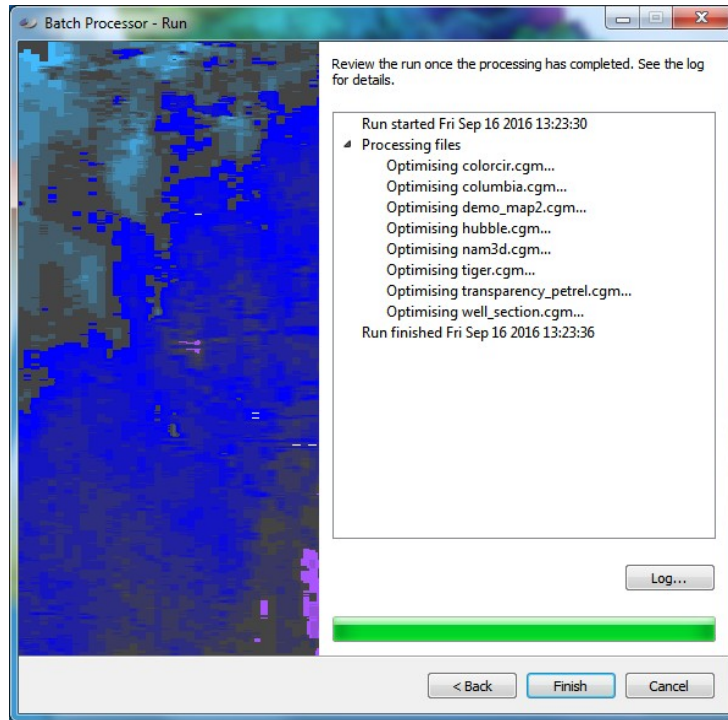




*Illustration 50: Optimizing files summary screen of the Batch Processor.*

Processing can be started immediately or at the specified time. The time should be specified in hours and minutes.

Press the `Next >` button to start the actual optimization process. Press the `< Back` button if you want to make changes to the options you had selected.



*Illustration 51: Optimization run screen of the Batch Processor.*

The Run window shows you the progress of the batch optimization. The progress bar gives you an indication of how many files are optimized so far. Information is shown about the current file that is being processed.

The log summary keeps track of the batch process. You can find here information about the success or failure of a specific job. You can view this log after the Batch Processor has finished by pressing the Log... button.

Press `Cancel` if you want to abort the batch optimization run. You will be prompted whether you are sure you want to abort the process.

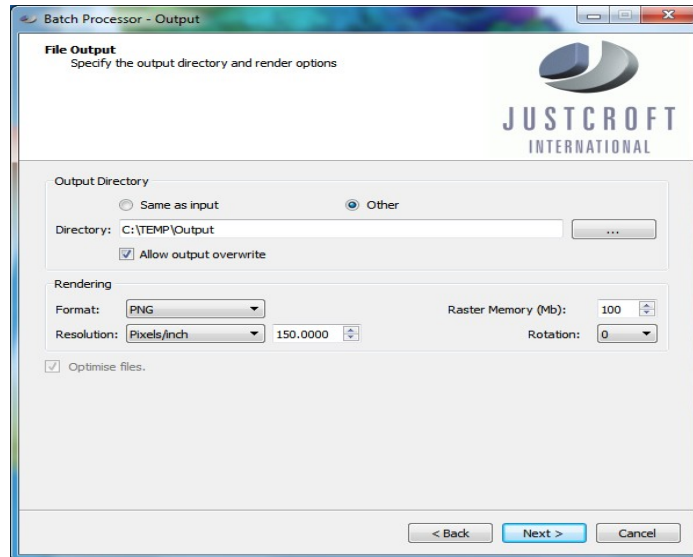
Important: Processing is not immediately aborted. The Batch Processor will always finish the current processing job first.

### ***Process for Graphics Applications***

Select “Process for graphics applications” in the Welcome screen of the Batch Processor and click on `Next >`.

Select the input files using the normal file selection mode or the hot directory mode and click on `Next >` to continue.

Enter in the “File Output” screen the output destination. The default is to create output files in the same directory as the input file. By selecting the “Other” option, a directory for the output file(s) can be selected.



*Illustration 52: he File Output screen of the Batch Processor.*

The “Allow output overwrite” option can be turned off if you want to prevent file overwrite during the conversion. Click on `Next >` to continue.

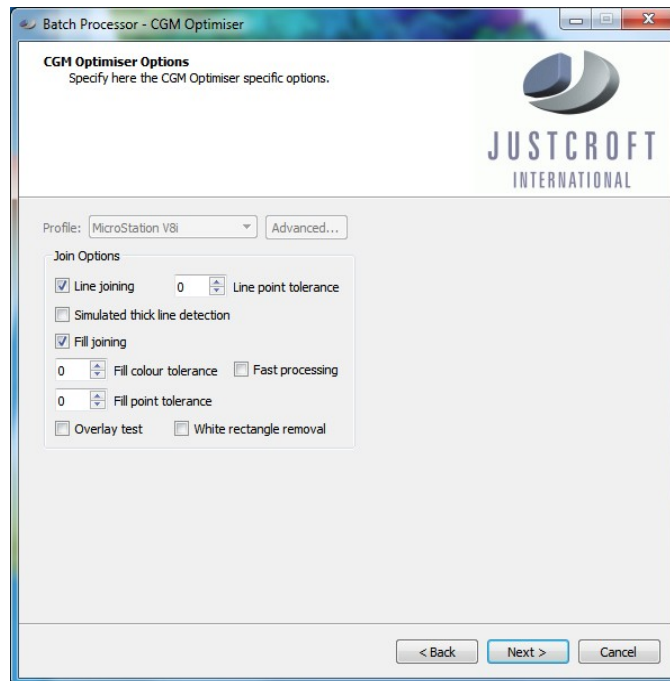
Select from the “Format” combo box the format of possible bitmap output for CGM Cell Arrays and/or Seismic sections within the original CGM. The conversion can be BMP, GIF, JPEG, PNG or TIFF.

Select the Resolution of the (raster) output file to be generated. Higher resolution gives better graphics details, however this will cost more memory and the conversion will take longer.

The “Raster memory” setting controls the maximum amount of cache memory to use for rendering seismic sections. You can raise this value if you have large amounts of physical memory in your computer and you want to have better performance.

With the “Rotation” option the output images can be rotated 0, 90, 180 or 270 degrees.

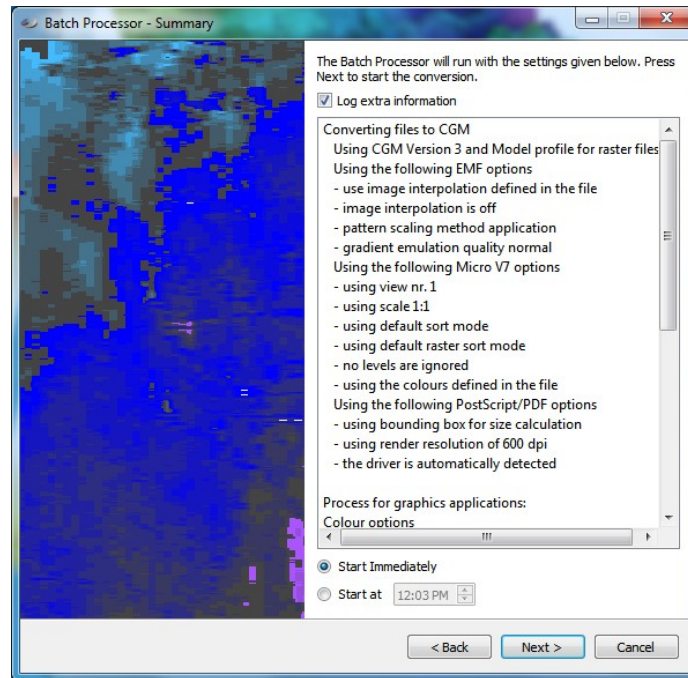
You will get the converter options screen first if you had selected one or more non-CGM files. You can set if necessary conversion options, but in general you can leave this alone. Click on `Next >` to continue.



*Illustration 53: The CGM Optimiser options screen of the Batch Processor.*

Select under “Profile” the application into which you want to load the CGM image. In general, you can leave the options in the CGM Optimiser Options screen at their default values. See the “CGM Optimiser” chapter in the Reference Manual for details on what these options can do. Click on `Next >` to continue.

You will first get a summary of the processing options you had specified in the previous screens. If needed you can log extra information.



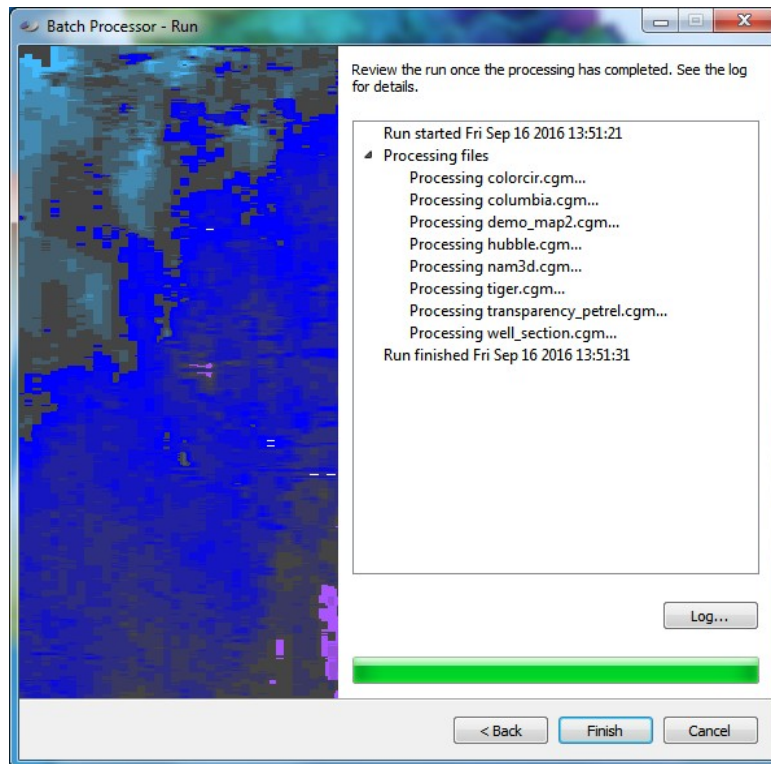
*Illustration 54: Process for graphics applications summary screen of the Batch Processor.*

Processing can be started immediately or at the specified time. The time should be specified in hours and minutes.

Press the `Next >` button to start the actual optimization process. Press the `< Back` button if you want to make changes to the options you had selected.

## Batch Processor

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*Illustration 55: Processing run screen of the Batch Processor.*

The Run window shows you the progress of the batch process. The progress bar gives you an indication of how many files are optimized so far. Information is shown about the current file that is being processed.

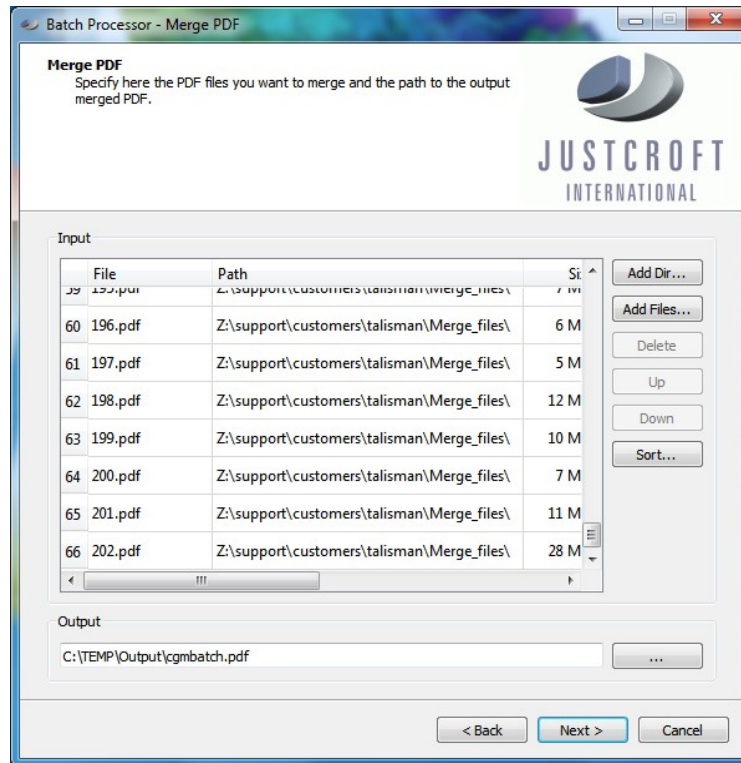
The log summary keeps track of the batch process. You can find here information about the success or failure of a specific job. You can view this log after the Batch Processor has finished by pressing the Log... button.

Press Cancel if you want to abort the batch optimization run. You will be prompted whether you are sure you want to abort the process.

Important: Processing is not immediately aborted. The Batch Processor will always finish the current processing job first.

## **Merging PDFs**

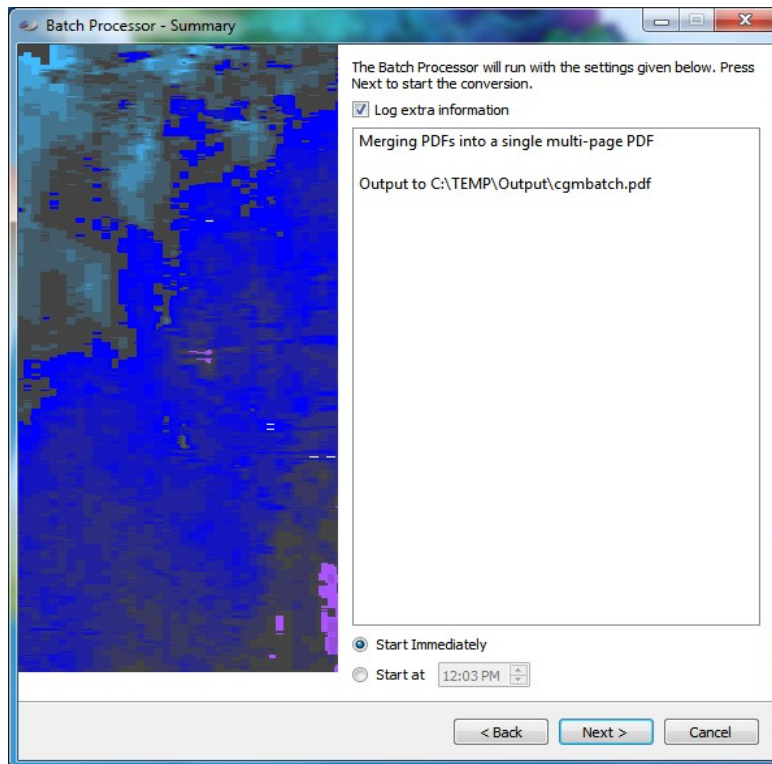
Select "Merge PDFs" in the Welcome screen of the Batch Processor and click on Next >.



*Illustration 56: Merge PDF input screen of the Batch Processor.*

If not already set, then the merge output file is assumed to be the same directory with the file name `cgmbatch.pdf`. Alter the output file name and path if needed.

Use the `Up` and `Down` buttons to change the order in which the files are merged. Note that the order is from top to bottom. You can also sort the PDFs by clicking the `Sort...` button.



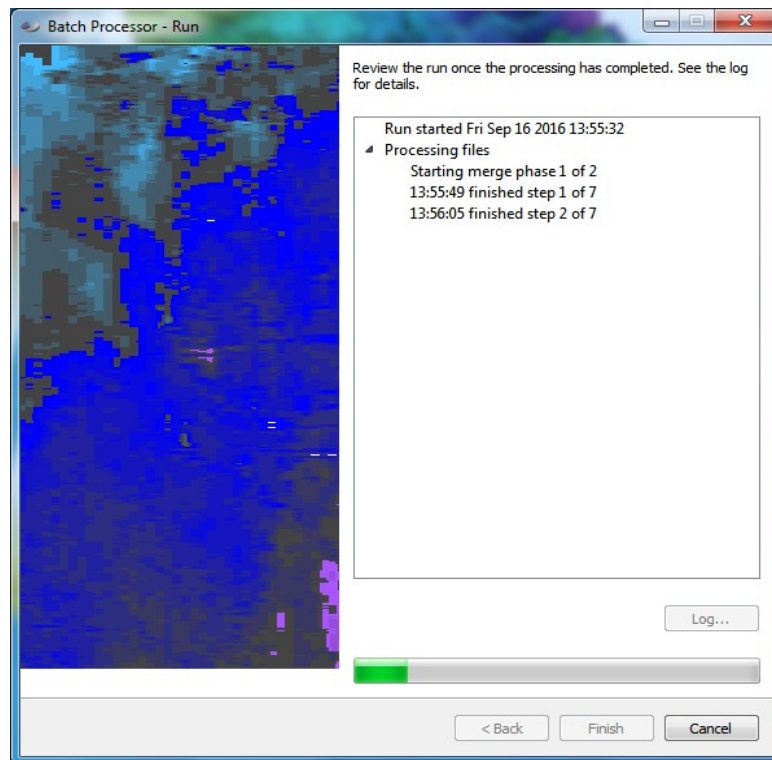
*Illustration 57: Merging PDFs summary screen of the Batch Processor.*

You will first get a summary of the processing options you had specified in the previous screens. If needed you can log extra information.

Processing can be started immediately or at the specified time. The time should be specified in hours and minutes.

Press the `Next >` button to start the actual merging process. Press the `< Back` button if you want to make changes to the options you had selected.





*Illustration 58: Merging process run screen of the Batch Processor.*

The Run window shows you the progress of the merge process. Merging happens in one or more phases. The progress bar gives you an indication of how long it will take.

The log summary keeps track of the merging process. You can find here information about the success or failure of a specific job. You can view this log after the Batch Processor has finished by pressing the Log... button.

Press Cancel if you want to abort the merging process. You will be prompted whether you are sure you want to abort the process.

Important: Processing is not immediately aborted. The Batch Processor will always finish the current merge phase first.

## **Printing Files**

Select "Print files" in the Welcome screen of the Batch Processor and click on Next >.

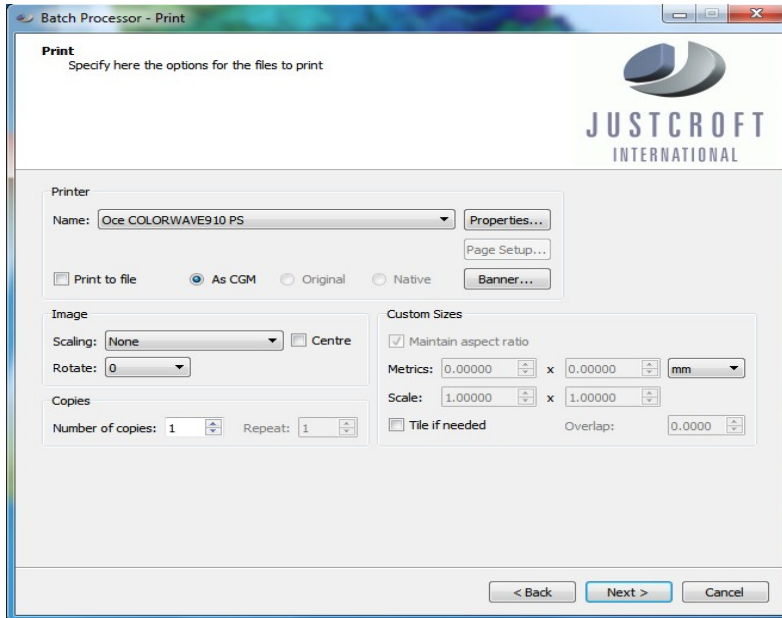
Select the input files using the normal file selection mode or the hot directory mode and click on Next > to continue.

You will get the converter options screen first if you had selected one or more non-CGM files.

## Batch Processor

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You can set, if necessary, conversion options, but in general you can leave this alone. Click on Next > to continue.



*Illustration 59: The Print options screen of the Batch Processor.*

Select the printer you want to print to. Advanced users may want to adjust certain printer specific settings by selecting the “Properties...” button. Use “Page Setup...” for setting the printer (hardware) margins and page orientation.

You can select “Print to file” if you want to print to a file. You will be prompted for the output directory in a later screen (File Output). Each printer file will have the same name as the input file with the file extension .prn.

A printer queue can be configured to print the file through Justcroft's JustPLOT system. There are some differences in how printing works. You cannot select “Print to file”. Instead if you have loaded a non-CGM you can choose from three different options. The “As CGM” is in general the best option. Advanced users may want to select the other two options. “Original” means that the non-CGM is passed to the JustPLOT system. It causes the JustPLOT system to reconvert the file into a CGM before printing. “Native” causes the file to be directly passed to the printer without any processing. This might give better results in some cases if the non-CGM is a HP-GL/2, PDF or PostScript file.

JustIMAGE 5.4, by default, keeps metric CGMs metric scaled 1:1. You can see the metric size of the CGM under the sizes section of the print dialog box. You can toggle between millimeters, centimeters or inches. The sizes shown are for the width and the height of the picture.

Typical Oil & Gas CGMs are too big to be printed on small sheet printers for Letter/A4. You can scale the picture to fit the printable area with one of the image scaling options. This may change the metric size, so it may not always be suitable to your situation. You can scale in the following ways:

- None. The image is not scaled.
- Fit to printable area. The image is scaled up or scaled down to fit the printable area of the printer.
- Shrink to printable area. The image is only scaled down if it doesn't fit the printable area of the printer. This option is not available for abstract images.
- Fit to roll width. This option is only available on roll plotters and causes an anisotropic scale. It is intended for Well Log plots for which the width of the image is not as critical as the length. Use the “rotate” option to orientate the image correctly on the roll plotter.
- Custom. Specify a metric size for the image under “Custom Sizes”. You can enter values either as absolute sizes or as scale factors if the image is metric. Abstract images can only be specified with an absolute size. Deselect the “Maintain aspect ratio” toggle if you want to size the width and height independently.

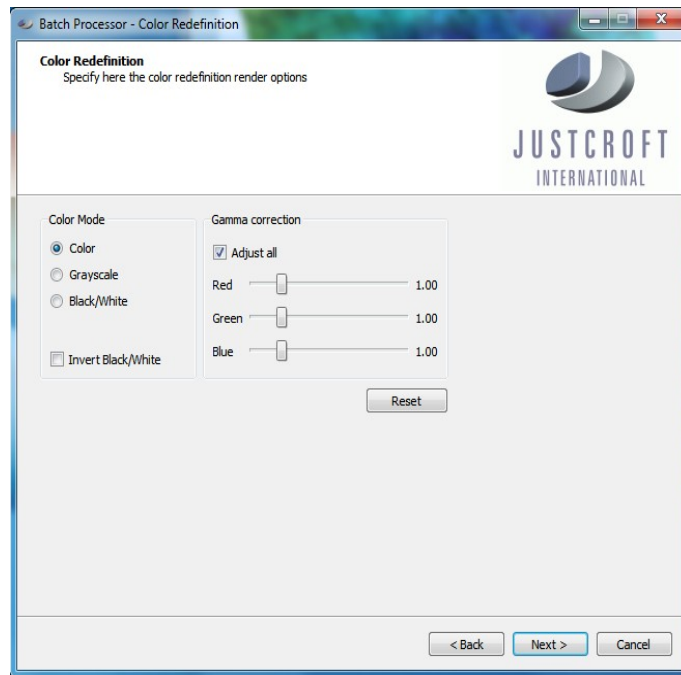
Use the “Rotate” option to change the orientation of the picture on paper. Select “Best fit” for the rotation to let Batch Processor decide which orientation requires the least amount of paper.

Select the “Tile if needed option” if you want to keep the picture at the exact scale, but tiled over multiple sheets of paper. This is also known as paneling. By default, no overlap is used for each tile but you can specify an overlap for each tile if you wish.

The number of tiles in X (horizontal) and tiles in Y (vertical) are shown in the preview area. Rotating the image may further reduce the number of sheets that have to be printed. However, you may decide that a roll plotter, if available, is a better option for this type of print job.

You can specify if you want to have multiple copies. You can use the “Repeat” option as an alternative to copies. This option is only available if you have selected a raster roll plotter. If the repeat value is greater than 1, the software will try to put the image a multiple number of times on the paper in the width direction of the roll.

You will get the converter options screen first if you had selected one or more non-CGM files. You can set, if necessary, conversion options but in general you can leave this alone. Click on `Next >` to continue.



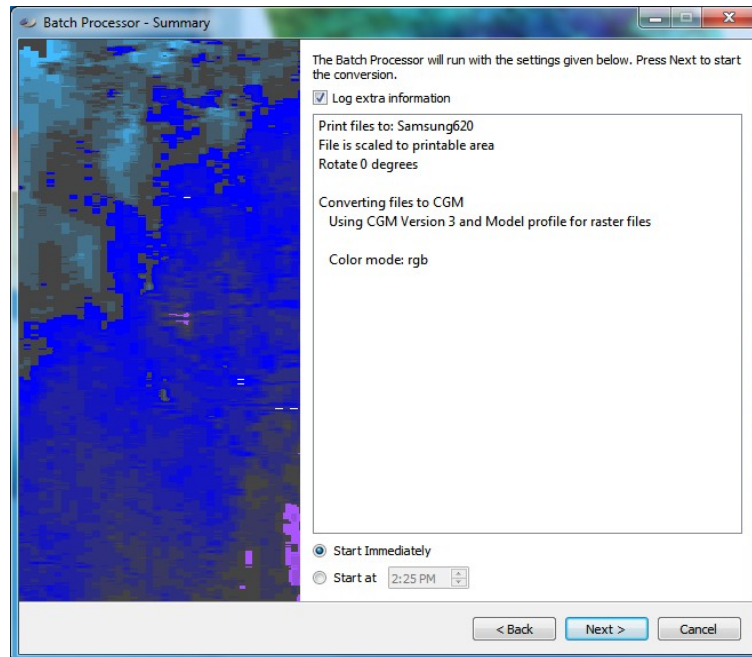
*Illustration 60: The Color Redefinition screen of the Batch Processor.*

Adjust, if necessary, the color redefinition. You can revert to the default color redefinition settings by pressing the `Reset` button. You can select the following options:

- **Color mode.** Select the color mode of the picture. The default mode is color and in this mode all colors stay unmodified. If gray scale is selected all colors are converted to a gray value. The Black/White option converts all colors not equal to white to black.
- **Invert Black/White.** Invert Black and White in the original image. This is useful if an image is created with a Black background and White as the foreground color.
- **Gamma correction.** Adjust the Red, Green and Blue gamma values to compensate for the non-linear reaction of your eyes to colors. The default is 1.00, which means no adjustment. Specify higher values to increase the intensity of the color component. Specify lower values to decrease the intensity. Disabling the “Adjust all” option allows you to adjust the individual gamma values.

Set the Color Redefinition options you want to use and click on `Next >` to continue.

You will first get a summary of the processing options you had specified in the previous screens. If needed you can log extra information.



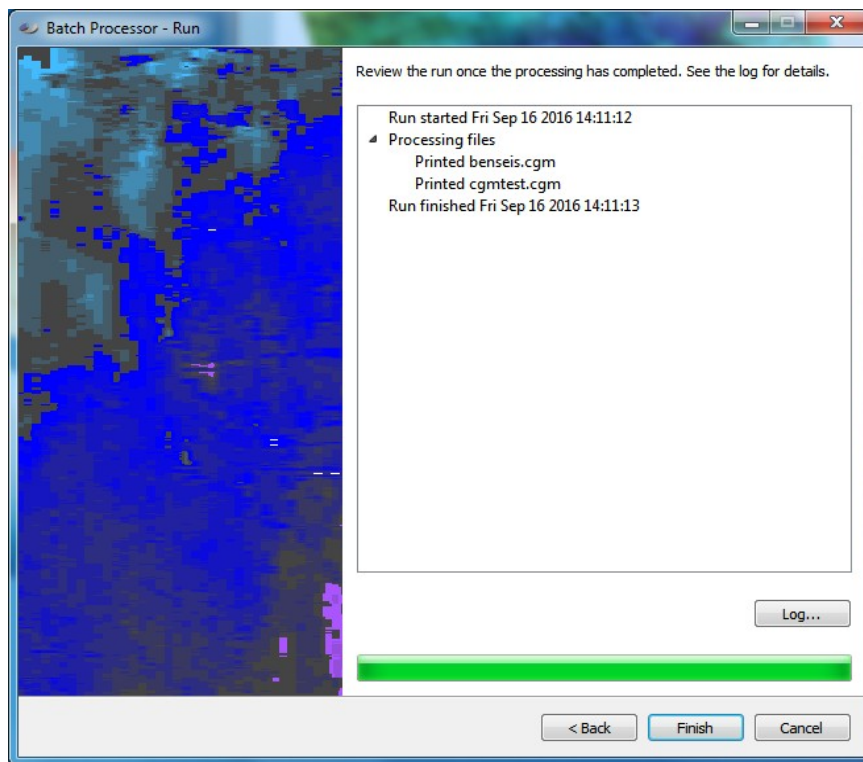
*Illustration 61: The Print summary screen of the Batch Processor.*

Printing can be done immediately or at the specified time. The time should be specified in hours and minutes.

Press the `Next >` button to start the actual print process. Press the `< Back` button if you want to make changes to the options you had selected.

## Batch Processor

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The Run window shows you the progress of the batch print process. The progress bar gives you an indication of how many files have been printed so far. Information is shown about the current file that is being processed.

The log summary keeps track of the batch print process. You can find here information about the success or failure of a specific job. You can view this log after the Batch Processor has finished by pressing the Log... button.

Press **Cancel** if you want to abort the batch print process run. You will be prompted whether you are sure you want to abort the process.

**Important:** Printing is not immediately aborted. The Batch Processor will always finish the current print job first.

# JustMONTAGE

You can start the JustIMAGE 5.4 montage tool in the JustIMAGE 5.4 User Interface by selecting the “JustMONTAGE...” command from the **T**ools menu.

## Introduction to the JustMONTAGE User Interface

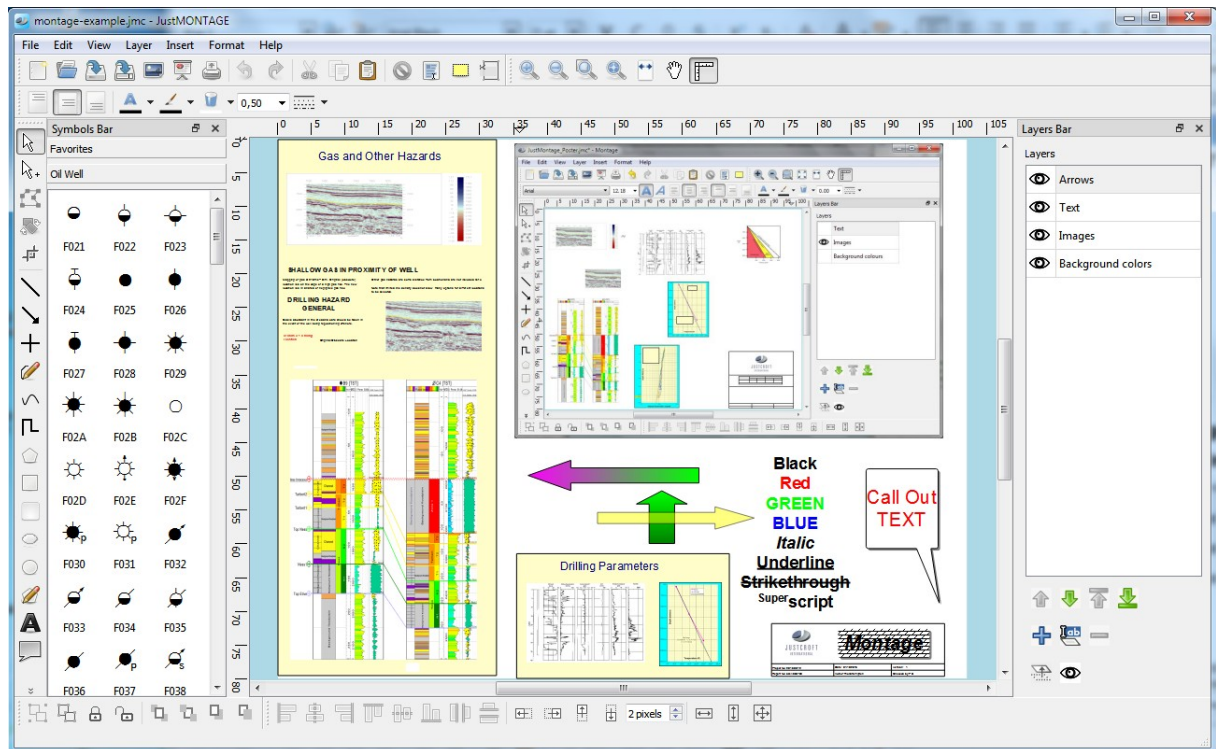



Illustration 62: The JustMONTAGE main interface.

The main window of the JustMONTAGE User Interface has a menu bar that gives you access to all the commands of the JustMONTAGE Graphical User Interface. Most common commands can be quickly accessed through the Toolbar, Zoom bar, Draw bar, Format bar, etc. You can show or hide the individual bars and toolboxes.

 The JustMONTAGE User Interface will appear differently depending on the OS and Window manager used. User preferences of JustMONTAGE can be controlled by selecting the **Edit** ⇒ **Preferences...** command from the menu bar.

## Layout

### **Composition**

The white area within JustMONTAGE is called the canvas. The canvas has a metric size and consists of objects you place on the canvas. The layout of these objects on the canvas is called the composition.

Compositions are saved as an XML file. You can generate from the composition a single CGM which is the composition CGM. You can then print or export this composition CGM to another graphics format.

### **Layers**

A layer is a transparent level object on which shapes are placed. On a canvas you might have one or more layers. Layers can help you work efficiently. You can use layers to organize similar shapes together.

### **Shapes**


A shape is an object that is placed on a layer. Lines, ellipses and rectangles are examples of shapes. Shapes have a position and occupy a rectangular area on the canvas. Shapes can be assigned properties such as fill color, line color, etc.


An image is a special kind of shape that represents a graphics file, such as a CGM. JustMONTAGE will show a bitmap representation of the graphics file as a reference for you to work with. You cannot edit individual elements of the image, however you can change the size, crop and rotate the image.

The image you see on the canvas is only a representation. The CGM is merged with the composition CGM.


Control handles are small boxes that appear on a shape when you select it. For shapes such as lines or poly-lines, the control handles are placed on each vertex of the shape. This allows the user to move these vertices to change the layout of the shape.


## Shape Selection


 By default, JustMONTAGE starts in selection mode. If you are not in selection mode, you can switch to it by deselecting the “Pan Mode” from the `View` menu or deselect the pan tool button.

 To select a single shape click on it whilst selection mode is activated. To select multiple shapes, hold the `Ctrl` key and then click each of the shapes you want to include in the selection.



 An alternative for holding the `Ctrl` key is to use the `Format ⇒ Select Multiple Shapes` mode.

 Another way to make a selection is to use the fence mode. Select `Edit ⇒ Fence Mode` from the menu bar. Now drag the rectangle fence over the canvas. Next use the `Edit ⇒ Select All` command to select all the editable objects within the fence.

 Use the `Edit ⇒ Select All` command to select all the editable shapes on the canvas.

## Moving Shapes

When JustMONTAGE is in selection mode, selected shapes can be moved by clicking them and dragging the mouse.

When you place the pointer over a shape that you can move, the mouse pointer changes to a “can move” pointer. If the “Snap To Grid” option is enabled, the top left corner of the shape's bounding box aligns with the grid.

## Nudging

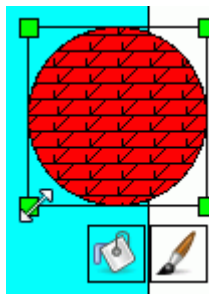
You can do slight moves of shapes with the nudge operations. Select the shapes you want to nudge. Either use one of the nudge directions or use the cursor keys.

Note: The nudge amount is, by default, 2 pixels, but this can be changed from the `Align` toolbar and under `Edit ⇒ Preferences... ⇒ Grid`.

## Aligning Shapes

You can line up shapes using the alignment operations. First select the shapes you want to align. The last selected element automatically becomes the control element. If needed, use the `Ctrl` key to select which is the control element. Next select one of the alignment actions. The alignment is handled based on the control element.


## Sizing Shapes




If a shape can be resized, the pointer turns into a directional arrow when you place the pointer over one of the control handles on the shape. Depending on which selection handle you select, you can either scale the object horizontally, vertically, or both.


JustMONTAGE allows you to resize the height, the width or both the height and width of a group of selected shapes. When you select a resize button, the selected shapes automatically grow or shrink to match the dimensions of the anchor shape, which is the last shape you selected. The thick border distinguishes this shape from the rest of the selected shapes.


## Grouping Shapes

 You can group shapes together to form composites. Select the shapes you want to group together and then click the Group button. Note that the selected shapes must be on the same layer. Grouped shapes act like a single graphical shape. Any changes you make to a group shape affects each of its contained shapes.

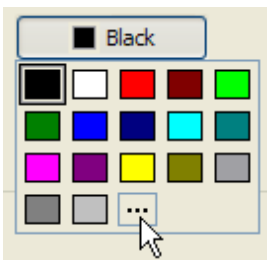
 To ungroup, select the composite you want to ungroup and then click the Ungroup button.

## Locking Shapes

 You can lock shapes to prevent them from being accidentally moved or sized. Select the shapes you want to lock and then click the Lock button.

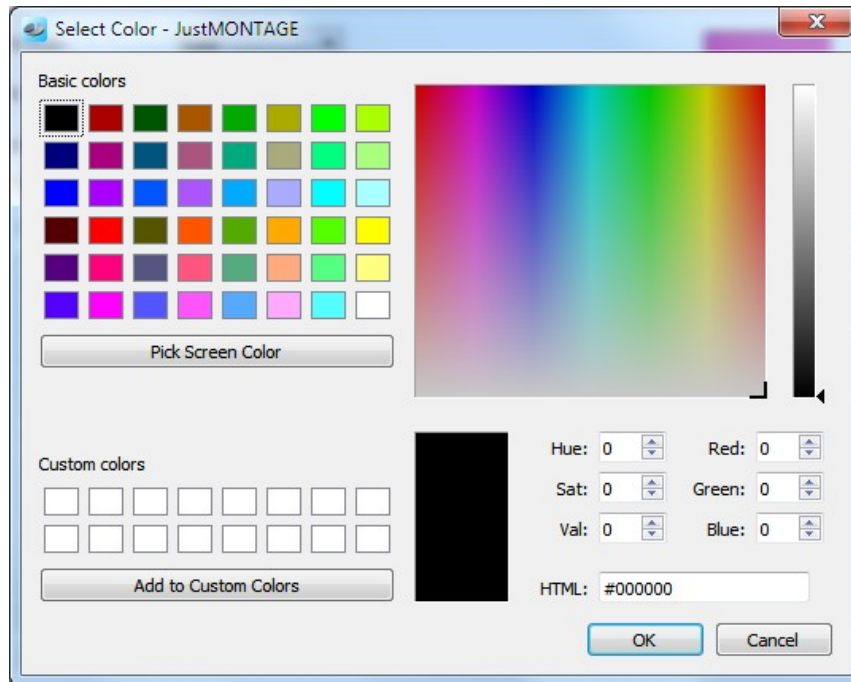
 To unlock, select the shape or shapes you want to unlock and then click the Unlock button.

## Color Selection



The color selection combo box allows colors to be selected from a predefined list of colors. Note that the predefined list of colors is controlled by setting the color bar from the Colors tab under the preference settings of JustMONTAGE. See also the “JustIMAGE 5.4 Reference Manual, Configuration, Custom Colors” section.

Selecting the “...” entry will bring up the Select color dialog box. The Select color dialog box allows a color to be selected in a number of ways.



*Illustration 63: The Select Color dialog box.*

Either select one of the “Basic colors” or select a custom color using the mouse from the palette. An alternative is to enter the values as Hue, Saturation and Value (HSV) or as Red, Green, Blue (RGB) value. Click the “Add to Custom Colors” button to use the same custom color another time.


Another method for selecting a color is to select a screen color. Select the pick screen color button. The mouse will change into cross. You can now select a color by going over your screen to sample a color. Press the mouse button to make a selection.


Make the selection and press OK to set the color. Press Cancel to abort the color change.

## Zooming

There are several ways to zoom in on the canvas. Zooming works the same as in the JustIMAGE 5.4 Viewer.

### **Scaled Zoom**

 You can zoom in steps of 25%. Either select the “Scale +25%” command from the View ⇒ Zoom menu or click on the zoom in button on the toolbar.

 You can zoom out in steps of 25%. Either select the “Scale -25%” command from the View ⇒ Zoom menu or click on the zoom out button on the toolbar.


You can also zoom in and zoom out by using the mouse wheel while holding the Ctrl key

pressed down.


There are also three fixed scale zoom possibilities:

- Zoom to 50%. Scale the canvas to half its metric size.
- Zoom to 100%. Scale the canvas to its metric size.
- Zoom to 200%. Scale the canvas to double its size.

### **Rectangle Zoom**

 The rectangle zoom allows you to zoom in on a part of the canvas by dragging a rectangle with the mouse. Either select the “Zoom Rectangle...” command from the View ⇒ Zoom menu or click on the rectangle zoom button on the toolbar. The cursor will change into the Zoom cursor. Go with the mouse to the part of the picture you want to zoom in on, and click and hold the left mouse button. Drag the mouse to the desired size of the rectangle and let go of the mouse button.


### **Page Zoom**

 To fit the canvas to the main window, select the “Whole Page” command from the View ⇒ Zoom menu. Alternatively, click on the “Whole Page” zoom button on the toolbar.


The page width zoom allows you to match the width of the canvas to the width of the main window. Select the “Page Width” command from the View ⇒ Zoom menu.

The page height zoom allows you to match the height of the canvas to the height of the main window. Select the “Page Height” command from the View ⇒ Zoom menu.

### **Shortest Side**

 Use this command to fit the shortest side of the canvas to the size of the main window. This is useful when viewing long images such as Well Logs. Select the “Shortest Side” command from the View ⇒ Zoom menu.

### **Full Screen**

 Use the View ⇒ Full Screen command to expand the main window to the entire screen. This will also hide the menu bar and the status bar. Use the shortcut key to switch back to the normal mode.

## Full Pointer Cursor

Use the `View ⇒ Full Pointer Cursor` command to have horizontal and vertical guide lines that cross each other where the cursor is. You may want to use this together with the rulers to have a more precise control over where an element is positioned.

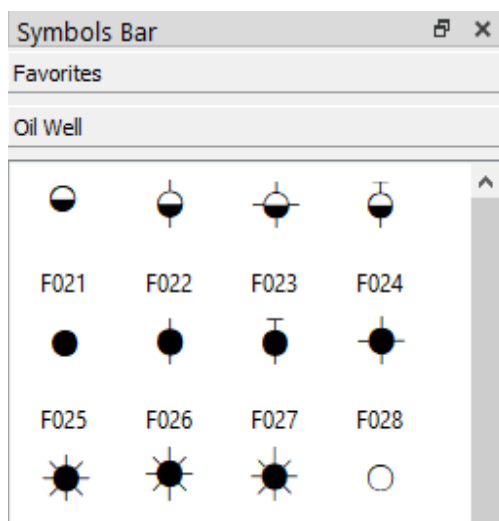
## Panning

You can pan on the canvas when you are zoomed in. Use the scroll bars around the main window to pan. You can also use you mouse scroll wheel to pan vertically.



You can also switch to the mouse pan mode. Enable the mouse pan mode by either selecting “Pan Mode” command from the `View` menu or click on the pan hand icon on the toolbar. You can now pan by clicking and holding the mouse button pressed on the canvas. Move the mouse to pan.

## Symbols



*Illustration 64: The Symbols toolbox bar of JustMONTAGE.*

The symbols toolbox can be used to put TrueType font symbols on your canvas. The symbols toolbox can have one or more groups as in Microsoft Outlook®.

The `View ⇒ Symbols` sub-menu gives access to the symbols toolbox. Use the “Symbols Bar” command to display and hide the symbols toolbox. A check mark appears next to the menu item when the symbols toolbox is displayed.

Initially the symbols toolbox contains a set of Well symbols (Oil Well). To setup a symbol list, select the “Add symbol font...” command or right-click on the symbols toolbox and select the “Add symbol font...” command. In the Add Symbol Font dialog box select the symbol font file and set an appropriate title.

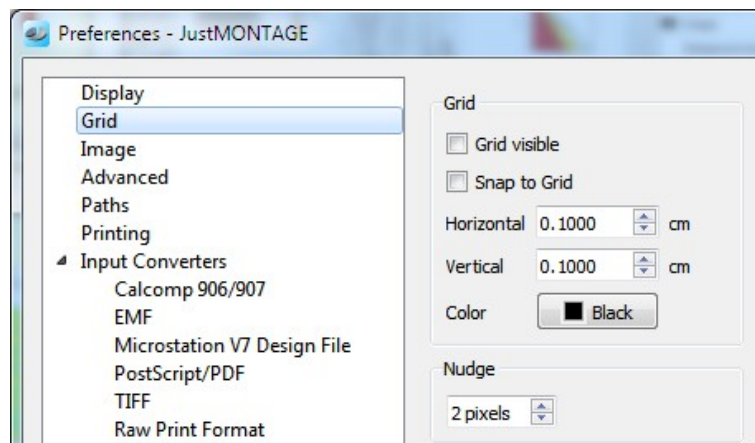
To add more then one group, repeat the previous step. To remove a group, right-click a group and select the “Remove symbol font” command.

You can drag the symbol you want to use on to the canvas. A symbol behaves like a text element. Alter the font size to make the symbol bigger or smaller. The font color determines the color of the symbol.

You can set a symbol as one of your favorites by right-click on the symbol and select the “Add to favorites” command. The symbol will now be added to the Favorites group.

### The Grid

The canvas can have a grid to help you with the layout of shapes. Select `Edit` ⇒ `Preferences...` ⇒ `Grid` to bring up the default grid settings.




*Illustration 65: The JustMONTAGE grid settings.*

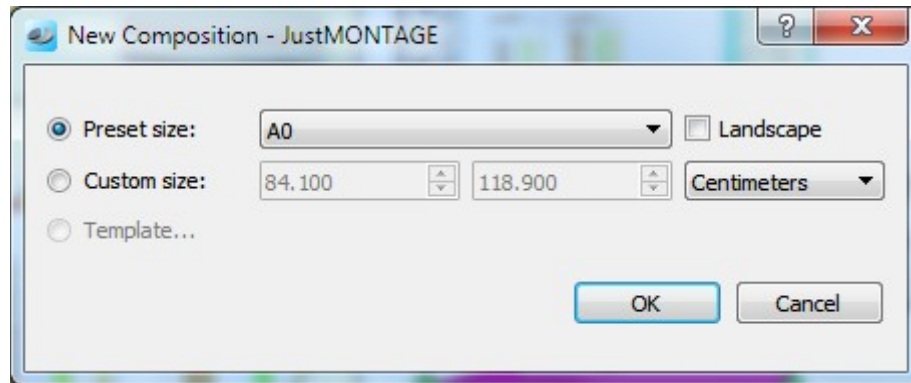
You can make the grid visible or invisible. You can make shapes on the canvas snap to the grid lines. The horizontal and vertical space between grid lines can be specified. Finally, you can specify the color of the grid marks.

The grid visibility and snap to grid can also be toggled directly via the View menu.

### Composition

#### Creating a New Composition

 To create a new composition select the “New...” command from the `File` menu. You can also click the New tool button on the toolbar. Set-up the new composition you want to create in the New Composition dialog box.



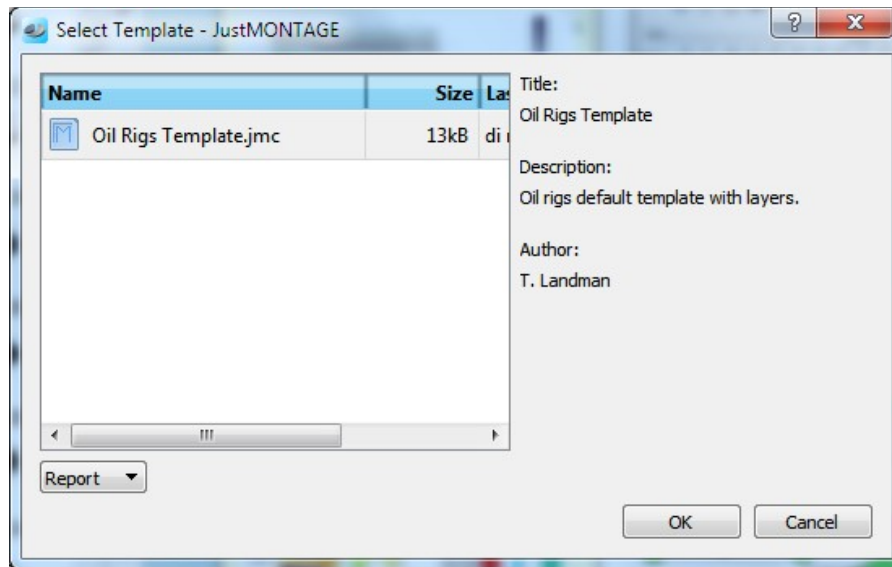
*Illustration 66: The New Composition dialog box of JustMONTAGE.*

You can select how you want to set-up your composition.

- Preset size. Select a preset canvas size from the combo box. The most common paper sizes are available. Toggle the Landscape option to have the canvas landscape orientated.
- Custom size. Select this option if you want to specify a specific width and height for the canvas. You can specify sizes in either millimeters, centimeters or inches.
- Template. Create a new canvas based on a template canvas.

Make your selection and press **OK** to create the new canvas. JustMONTAGE prompts you to save a composition with unsaved changes before the new composition is created. Press **Cancel** to abort creating a new composition. Note: You will be able to adjust the canvas size with the "Page Setup..." command from the **File** menu.

If you had selected the "Template..." option then the Select Template dialog box will appear. Select the template which you want to use to create a new composition. Templates are either created by you or by a colleague.




*Illustration 67: The Select Template dialog box of JustMONTAGE.*

The template author might have also provided a description of the template and his or her name.

Either double-click the template you want to use or highlight the template and then press the **OK** button. JustMONTAGE prompts you to save a composition with unsaved changes, before the template is loaded. Press **Cancel** to abort the creation of a new composition.

### Opening a Composition

 Use the “Open...” command from the **File** menu to open an existing JustMONTAGE composition. You will be prompted for the composition file you want to open.

Click on the **Open** button to continue. JustMONTAGE prompts you to save a composition with unsaved changes before the selected file is opened.


You can also access the last eight used compositions directly from the **File** menu.

You can also load a (CGM) image for annotation.

### Appending Shapes


Opening a composition clears the current canvas. Use the **File** ⇨ **Open Append...** command to add shapes to the current active layer without clearing the canvas.

### Saving your Changes

 Use the “Save” command from the **File** menu to save the composition to its current



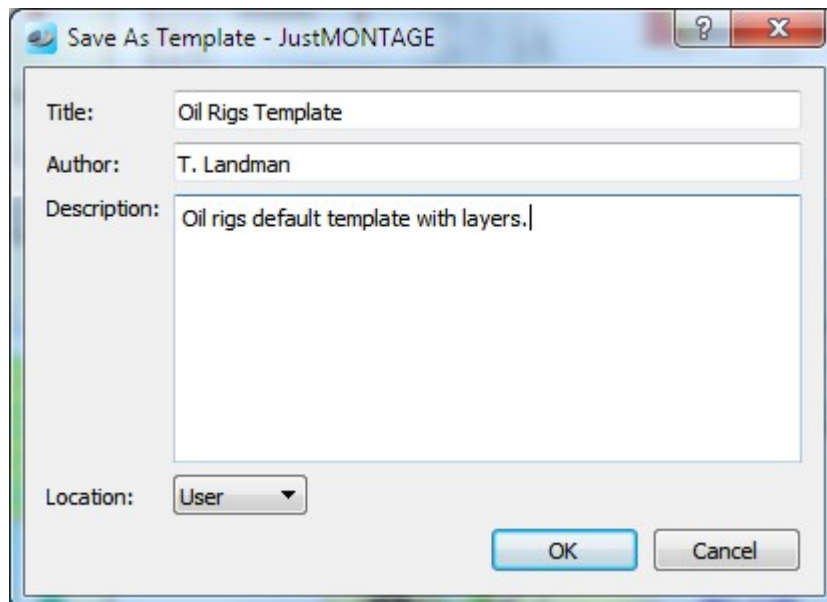
name and directory.

 Use the “Save As...” command from the File menu to save the composition under a different name or in a different directory. JustMONTAGE will display the Save As dialog box so the montage file can be named.

You can also save a selection of shapes on your canvas. Select the shapes you want to save and then use the “Save Selected...” command from the File menu. JustMONTAGE will display the Save Selected dialog box so that the montage file with the selection can be named.

## Templates

Templates can be used by you or other users to create new compositions. Use the “Save As Template...” command from the File menu to save the composition as a template for new compositions. The Save As Template dialog box will appear.



*Illustration 68: The Save As Template dialog box of JustMONTAGE.*

Specify information about the template you want to save in this dialog box. You must specify a title for the template. If needed, you can also specify a description and the name of the author of the template.

You can specify if the template is only for yourself or for other JustMONTAGE users on your PC. Note: Your system administrator might have locked down your PC, in which case you can only save a template for yourself.

## JustMONTAGE

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Press the `OK` button to save the composition as a template. Press `Cancel` to abort creating a template.

Any referenced images (such as a company logo) will also be copied to the template location.

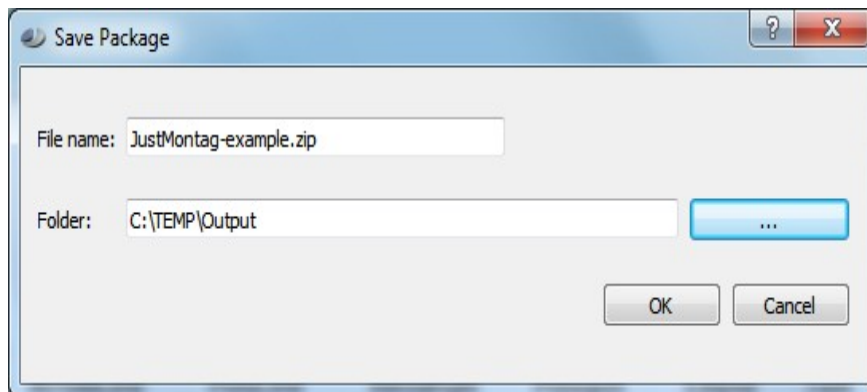
### Packages

A package is a single container file that contains the composition and all the files that are referenced in the composition. Packages are useful when exchanging compositions between different computers and / or users. They can also be used for archive purposes.

Important: JustMONTAGE currently uses the zip archive format for packaging purposes. It is recommended to use only files generated by JustMONTAGE, although zip files generated by other applications may also work.

### Creating a Package

Use the “Save Package...” command from the `File` menu to save the active composition and all its related reference files to a single package file. JustMONTAGE displays the Save Package dialog box.



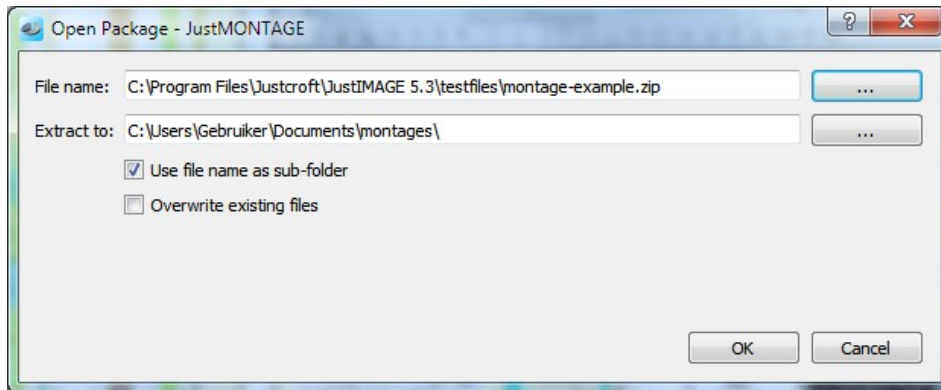
*Illustration 69: The Save Package dialog box of JustMONTAGE.*

By default, the “File name” is the same as the current composition and we recommend not to change it. Select the folder where you want the package file to be generated.

Press the `OK` button to generate the package file. Press `Cancel` to dismiss the dialog box.

### Loading a Package

Use the “Open Package...” command from the `File` menu to unpack a package file and open the composition within the package. The Open Package dialog box will appear.



*Illustration 70: The Open Package dialog box of JustMONTAGE.*

Select the “File Name” of the package. Select “Extract to” to specify the folder where the package should be extracted.

The “Use file name as sub-folder” option is by default enabled. This ensures that all the files are in a private sub-folder. It could be that you have already created a sub-folder specifically for this package. In this case disable the option.


Any existing files that are already in the target folder are by default ignored during extraction. You can force an update by selecting the “Overwrite existing files” option.

Press the **OK** button to extract the package file. The composition file is then opened. Press **Cancel** to dismiss the dialog box.

Once you have unpacked a package file, you don’t need to unpack it again as long as you did not remove the unpack folder. Just select the composition file next time. The composition file is also added to the file history.

The `testfiles` directory of JustIMAGE 5.4 contains an example package `montage-example.zip`.

## Export


 A composition can be exported to a BMP, GIF, JPEG, PBM, PGM, PPM, PNG, TIFF, PDF or SVG file. Select the “Export...” command from the **File** menu. The Export dialog box will appear. Note that layers that have their visibility turned off will not appear in the exported file. Layers that are visible will appear as layers in an exported PDF.

Use the fence mode if you want to export only a part of the composition.

You can also export a composition to a CGM using the “Export as CGM...” command from the **File** menu. You will be prompted for a CGM file name.

Note: It is not possible to export an empty composition. (The canvas contains no shapes.)


## Export to PowerPoint

 A composition can be exported to a PowerPoint 2007 compatible file on Windows. Select the “Export to PowerPoint...” command from the File menu. The Export to PowerPoint dialog box will appear. You can either create a PowerPoint file or add a PowerPoint slide to an existing PowerPoint file. Note that layers that have their visibility turned off will not appear in the PowerPoint file.

Use the fence mode if you want to export only a part of the composition.

Note: It is not possible to export an empty composition. (The canvas contains no shapes.)

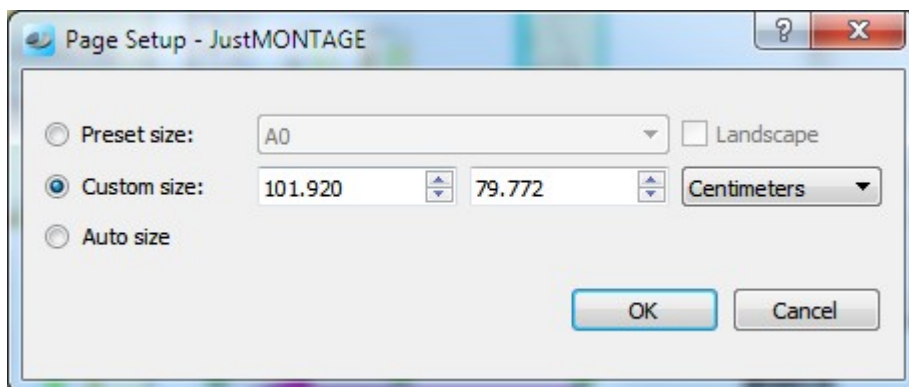
## Printing

 A composition can be printed by selecting the “Print...” command from the File menu. The Print dialog box will appear.

Use the fence mode if you want to print only a part of the composition.

## Altering the Canvas Size

Use the File ⇒ Page Setup... command to change the canvas size. The Page Setup dialog box will appear.



*Illustration 71: The Page Setup dialog box of JustMONTAGE.*

You can specify the following sizes:

- Preset size. Select a preset canvas size from the combo box. The most common page sizes are available. Toggle the “Landscape” option to have the canvas landscape orientated.
- Custom size. Select this option if you want to specify a specific width and height for the canvas. You can specify sizes in either millimeters, centimeters or inches.

- Auto size. Select this option if you want to have the canvas size adjusted to the bounding box of all the shapes that are currently on the canvas. Note: The “Auto size” option has no effect if there are no shapes on the canvas.


Make your selection and press **OK** to change the canvas size. Press **Cancel** to abort the canvas size change.

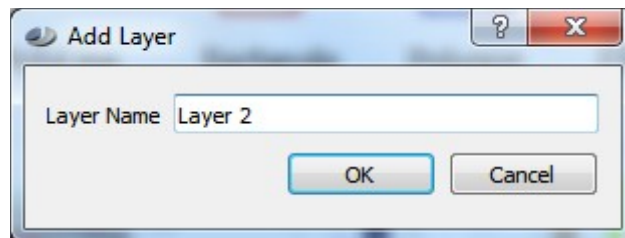
## Working With Layers

A layer is a transparent level object on which shapes are placed. On a canvas you might have one or more layers. Layers can help you work efficiently. You can use layers to organize similar shapes together. For example, you might use one layer for text and another layer for images. By default, when you place a shape on the canvas, it is placed on the active layer.

A new composition has one layer (Layer 1) which is also the active layer. You can then add more layers. You can control the visibility of the layer so that you can make separate CGMs, prints or exports with or without the shapes of a specific layer.

## Adding a New Layer


 Select “Add Layer...” from the **Layer** menu or click on the icon in the layer toolbar. You will be prompted for the layer name.



*Illustration 72: The Add Layer dialog box.*

Note: The layer name has to be unique within the composition.

Make the layer current by highlighting the layer from the layer toolbox. Any shapes you now insert will be added to the current (highlighted) layer.


 You can move shapes between layers by selecting them, set the current layer and then use the “Move selection to current layer” command from the **Layer** menu to move them. Alternatively, use copy & paste to move shapes between layers.

## Changing the Layer


 You can rename a layer with the “Rename Layer...” command from the **Layer** menu. You

will be prompted for the new layer name.

Layers are drawn from bottom to top in the layer stack. You can move layers up and down using the arrows in the layer toolbox or alternatively use the “Raise Layer” and “Lower Layer” commands from the `Layer` menu.


 Use the “eye” icon in the layer toolbox to toggle the visibility of a layer. Invisible layers will not be visible when generating a CGM, exported or printed.

### Removing a Layer

 Make sure that you have first moved any shapes on the layer to another layer. You can then remove the layer with the “Delete Layer” command from the `Layer` menu.


## Basic Edit Commands

### Undo

 Use the `Edit` ⇨ `Undo` command to reverse the last editing action, if it's possible. The name of the command changes depending on what the last action was. The Undo command is disabled if there are no actions that can be undone.


You can redo the last undone action with the Redo command.

### Redo

 Use the `Edit` ⇨ `Redo` command to redo the last undone action. The Redo command is disabled if there are no actions that can be redone.


An action can be reverted with the Undo command.

### Cut

 Use the `Edit` ⇨ `Cut` command to remove the currently selected shapes from the canvas and put them on the clipboard. This command is unavailable if there are no shapes currently selected.

Putting shapes on the clipboard replaces the contents previously stored there.

### Copy

 Use the `Edit` ⇨ `Copy` command to copy the currently selected shapes from the canvas onto the clipboard. This command is unavailable if there are no shapes currently selected.

Copying shapes to the clipboard replaces the contents previously stored there.

## Paste



Use the `Edit ⇨ Paste` command to insert a copy of the clipboard contents at the insertion point. This command is unavailable if the clipboard is empty.

Use the `Edit ⇨ Paste Special` command to insert a copy of the clipboard contents in the format you specify at the insertion point. This command is unavailable if the clipboard is empty.

Use the `Edit ⇨ Paste in Place` command to insert a copy of the clipboard contents at exactly the same position as the clipboard contents. This command is only available if the clipboard contains shapes.

## Delete



Use the `Edit ⇨ Delete` command to remove the currently selected shapes from the canvas. This command is unavailable if there are no shapes selected.

## Ordering Shapes

The individual shapes are drawn in a stacking order, also known as a Z-order. The first shape in the stack is drawn first, then the second shape in the stack is drawn, etc. Shapes drawn later overlap the shapes already drawn. The Z-order is determined by the order in which the shapes are added to a layer and the order of the layers. The last shape added to a layer is on top of all the other shapes.

The user can change the Z-order using a set of `Format ⇨ Order` commands. The “Bring Forward” command moves a shape one place up in the Z-order (towards the top of the draw stack). The “Send Backward” command moves a shape one place down in the Z-order (toward the bottom of the draw stack). A shape can be moved directly to either the top or bottom of the draw stack using the “Bring to Front” command and the “Send to Back” command respectively.

Use the “Reverse Order” command to exchange the drawing order of two shapes.

## Edit Points




Select the `Format ⇨ Edit Points` command to move an individual vertex of a line or polygon. A red control handle will be placed at each vertex. Position the mouse pointer over a control handle. Click the control handle and then drag it to a new position. Release the mouse button to place the vertex at its new coordinates. Press the shift key to move multiple points at the same time. First select the first point and then select the last point. The selected points will become blue and now you can move multiple points by dragging one of the blue points.

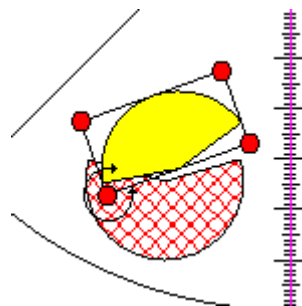
To insert a vertex move the mouse pointer between two control points and hold down the `Ctrl` key. Click the mouse button to place the vertex on the segment.

To remove a single vertex move the mouse pointer over a vertex and press the `Ctrl` key. Click the mouse button to delete the vertex from the shape. Press the `shift` key to delete multiple points at the same time. First select the first point and then select the last point. The selected points will become blue and now you can delete multiple points by pressing the `Delete` key or the `D` key.

Either select again the `Edit Points` command or press the `Esc` key or switch to selection mode to exit the “Edit Points” mode.

## Rotating Objects

 Select the `Format ⇒ Rotate Object` command to rotate an individual object around its center point. A red round control handle will be placed at the bounding box corners of the object. Position the mouse pointer over a control handle. Click the control handle and then drag it to rotate the object. Release the mouse button to stop the rotation.




*Illustration 73:  
Rotating an object.*

Alternatively, you can input a relative angle with the spin box that appears at the top left corner of the canvas.



Either select again the `Format ⇒ Rotate Object` command or press the `Esc` key or click outside the object to exit the “Rotate Object” mode.

All elements can be rotated except the reference images which can only be rotated in steps of 90 degrees.


## Inserting Lines


 Lines are inserted with the line color and thickness that are currently set in the `Format Bar`. You can alter this with the `Format ⇒ Line...` command or click on the line attribute icon.



-  To insert a single straight line use the `Insert ⇒ Line...` command. Left-click and hold the mouse button on the canvas until the line is the appropriate length.
-  To insert a single straight line with an arrow tip use the `Insert ⇒ Arrow line...` command. Left-click and hold the mouse button on the canvas until the arrow line is the appropriate length.


Note: A block arrow is a possible alternative for the arrow line. See "Inserting Block Arrows" below.


-  The `Insert ⇒ Cross line...` command allows you to insert straight horizontal or vertical lines. Left-click and hold the mouse button on the canvas until the line is the appropriate length.

-  A line with multiple vertices can be added using the `Insert ⇒ Poly Line...` command. Left-click on the canvas. Click again to place a vertex. Repeat left-clicking for additional vertices.


To lock a vertex horizontally press the `H` key. Press the `H` key again to unlock. To lock a vertex vertically press the `V` key. Press the `V` key again to unlock. You can switch between horizontal and vertical locking by pressing the `H` key and the `V` key.


Double-click to finish drawing or right-click to cancel the insertion.

-  The `Insert ⇒ Free Line...` command allows a poly line to be drawn without having to place individual vertices. Left-click and hold the mouse button on the canvas to start drawing the poly line. Release the mouse button to finish drawing.

-  The `Insert ⇒ Bezier line...` command allows a two point bezier line to be drawn. Left-click to set the start point. Left-click again to set the first control point. The third left-click inserts the second control point. The fourth and last left-click inserts the end point.


## Inserting Filled Elements

-  Filled shapes are inserted with the fill properties and edge properties that are currently set in the Format Bar. You can alter the fill with the `Format ⇒ Fill...` command or click on the fill attribute icon.


-  The `Insert ⇒ Polygon...` command allows you to insert a polygon. Left-click on the canvas. Click again to place a vertex. Repeat left-click for additional vertices.

To lock a vertex horizontally press the `H` key. Press the `H` key again to unlock. To lock a vertex vertically press the `V` key. Press the `V` key again to unlock. You can switch between horizontal and vertical locking by pressing the `H` key and the `V` key.


Double-click to finish drawing or right-click to cancel the insertion.


-  The `Insert ⇒ Rectangle...` command allows you to insert a rectangle. Left-click and

hold the mouse button on the canvas until the rectangle has the appropriate size and shape.

 The `Insert ⇒ Rounded Rectangle...` command allows you to insert a rectangle with rounded corners. Left-click and hold the mouse button on the canvas until the rectangle has the appropriate size and shape. Use the “Text...” command under the `Format` menu to add text if needed.


 The `Insert ⇒ Ellipse...` command allows you to insert an ellipse. Left-click and hold the mouse button on the canvas until the ellipse has the appropriate size and shape.

 The `Insert ⇒ Circle...` command allows you to insert a circle. Left-click and hold the mouse button on the canvas until the circle has the appropriate size.

 The `Insert ⇒ Free Polygon...` command allows a polygon to be drawn without having to place individual vertices. Left-click and hold the mouse button on the canvas to start drawing the polygon. Release the mouse button to finish drawing.

The `Insert ⇒ Closed Bezier...` command allows a Bezier to be drawn that is filled.


### Inserting Block Arrows

 The `Insert ⇒ Block Arrows` sub-menu allows you to insert block arrows. Select the block arrow type from the sub-menu. Left-click and hold the mouse button on the canvas to start drawing the block arrow. Release the mouse button to finish drawing.

You can alter the arrow shape when in “Edit Points” mode. Use the “Text...” command under the `Format` menu to set an optional text string and text properties such as color and font height.

### Inserting Text

**A** Use the `Insert ⇒ Text...` command to insert text on the canvas. Left-click on the canvas where you want the text to appear. Use the “Text Attributes...” command under the `Format` menu to change the text string and text properties such as color and font height.

 Use the `Insert ⇒ Call Out...` command to insert a text call-out shape. You can alter the call-out shape when in “Edit Points” mode. Use the “Text...” command under the `Format` menu to change the text string and text properties such as color and font height.

## Images


### Inserting an Image

An image can be a CGM or one of the other supported image formats. Use one of the following procedures to insert an image.

Important: Since the composition only contains a reference to the image file, you should not delete or move the image file. An exception to this rule is if you save the composition as a template. Any referenced images are stored together with the template. Use the package facility of JustMONTAGE if you wish to move the composition between computers.


### ***Insert Metric***

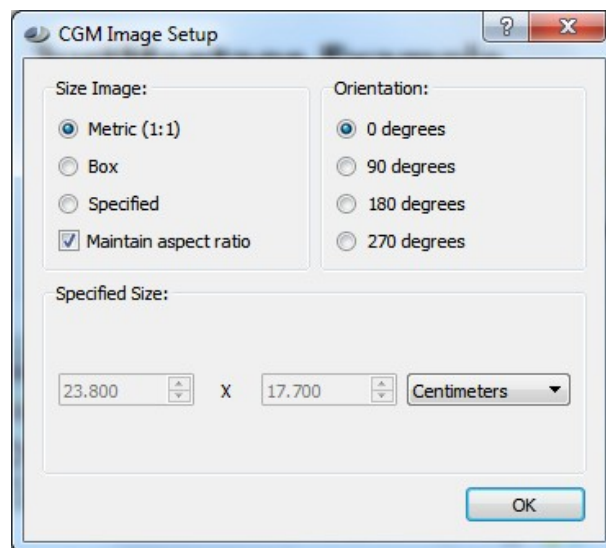
This allows you to retain the metric size of the (CGM) image:

1.  Select the "Image..." command from the `Insert` menu.
2. Select the image file from the file dialog box.
3. Click the mouse button on the canvas where you want the bottom left corner of the image to appear.
4. Wait for the Image Setup dialog box to appear.
5. Adjust if needed the image size and press the `OK` button and wait for the image to appear.

### ***Insert an Image Interactively***

Set the size of the image using the mouse:

1.  Select the "Image..." command from the `Insert` menu.
2. Select the image file from the file dialog box.
3. Click and hold the mouse button on the canvas until the image rectangle has the appropriate width and height.
4. Release the mouse button and wait for the image to appear.




*Illustration 74: The CGM Image Setup dialog box of JustMONTAGE.*

Within the CGM Image Setup dialog box you can specify the image size in the following ways:


- Metric (1:1). Insert the image to its metric size. This option is only available if the image is metric.
- Box. Insert the image to the box size. This is the default if the image is abstract. The box size is 25% of the shortest side of the canvas.
- Specified. Insert the image to the size you specify. You can set the width and height individually if the Maintain aspect ratio option is disabled.
- Maintain aspect ratio. The aspect ratio of the image is maintained when enabled. You may want to disable this option if you want to have exact control over the width and height of the image. For example, if you are working with Well logs.

You can also set the image orientation. Rotations are in a counter-clockwise direction around the bottom-left corner of the image.

### ***Placing a Border around an Image***

 You can enable a border around the image by clicking on the Line/Edge properties. Select the line type, color and width if you want a border around the image. By default there is no border around the image.

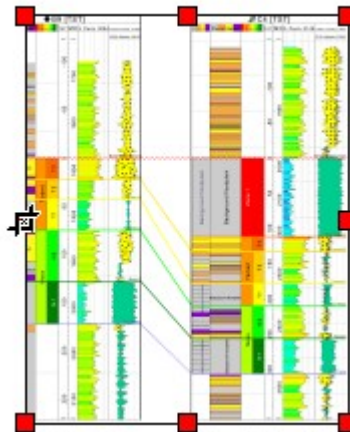
## Inserting a Screen Capture

 You can make a screen capture and insert this on the canvas by using the “Screen capture...” command from the `Insert` menu. The Screen Capture dialog box will appear. Set the capture options and press the `Capture` button to start the capture process. The rest of the procedure is the same as inserting an image.

Use the crop facility to have only a part of the capture screen in your montage.

## Cropping

You can make an image smaller by trimming the sides of the image. This is known as cropping. Select first the `Format` ⇒ `Crop` command, and then position the mouse pointer over a control handle. The cursor changes to signal that you can crop that side of the image. Click the control handle and then drag it to a new position. Release the mouse button to crop to the new coordinates.



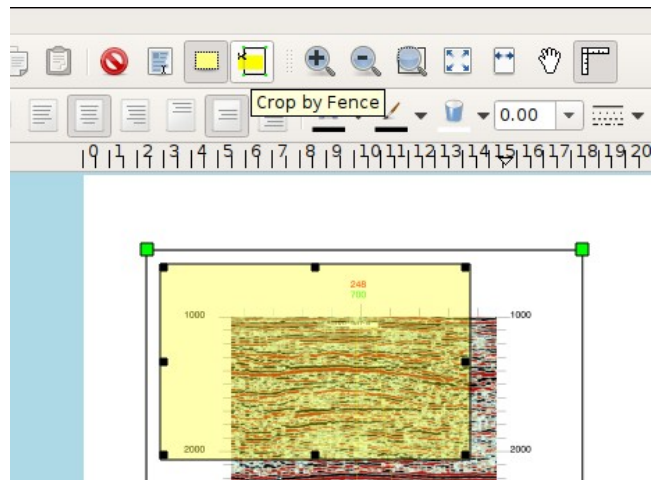
*Illustration 75: Cropping an image.*

Depending on the control handle selected, you can crop horizontally, vertically or both.

Use the `Format` ⇒ `Uncrop` command to revert an image to its original uncropped view.

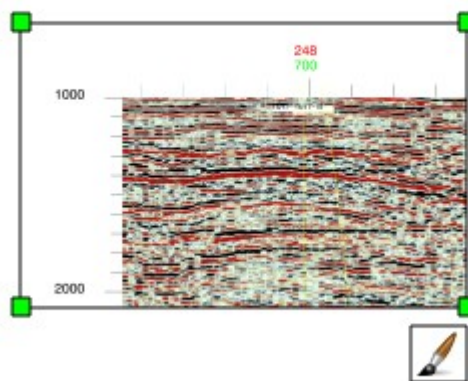
## Crop By Fence

Crop by fence can be used to crop images or groups. First you have to select the group or the image you want to crop. After selecting a group or an image draw a fence to select the area you want to keep.



*Illustration 76: Crop by Fence on an image*

Click on the “Crop by Fence” icon in the tool bar or use the `Format ⇨ Crop by Fence` from the menu bar. After executing the Crop by Fence command the group or image will be updated and only the selected part will be visible.



*Illustration 77: Result of the crop by fence*

Use the `Format ⇨ Uncrop` to revert the image or the group to its original uncropped view.

## **Image Reference List**

The Image References dialog box shows you a list of all the references on the canvas. Use the “Image References...” command from the `View` menu to get the Image References dialog box.

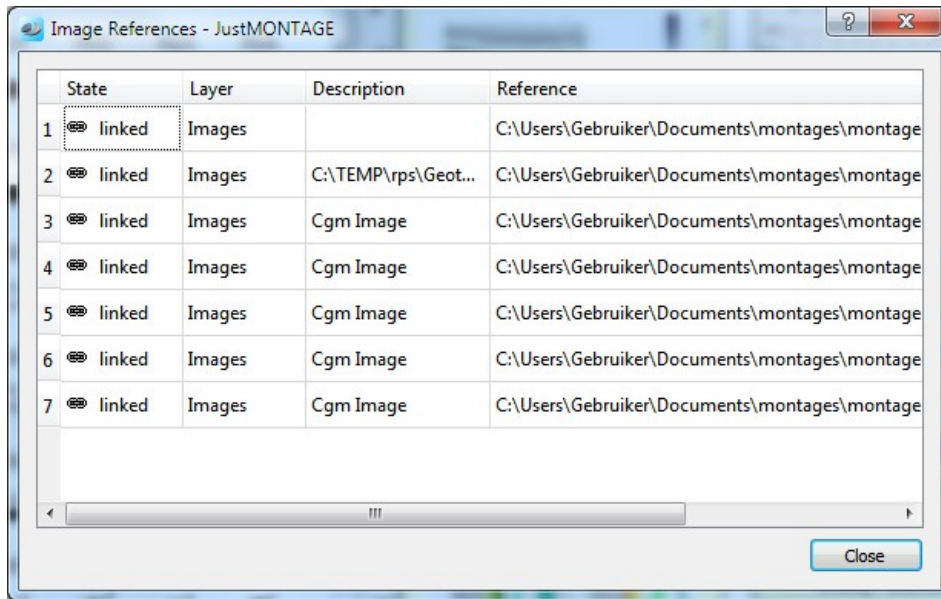


Illustration 78: The Image References dialog box of JustMONTAGE.

In the list view you can see the State (broken or linked) of the reference. If a file path is incorrect then the broken link icon is shown. You can also see the “Description” and the file path “Reference”.

Double-click an entry to bring up the CGM Image Reference dialog box.

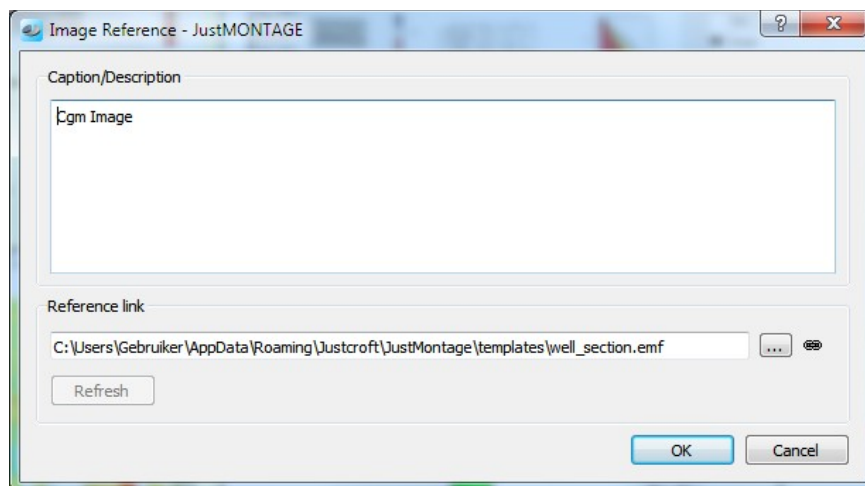


Illustration 79: The Image Reference (details) dialog box of JustMONTAGE.

The Image Reference dialog box shows you information about the selected image file. Each image can have a Caption/Description. This is to help you with keeping track of images. We

recommend to keep this a short, single line of text.

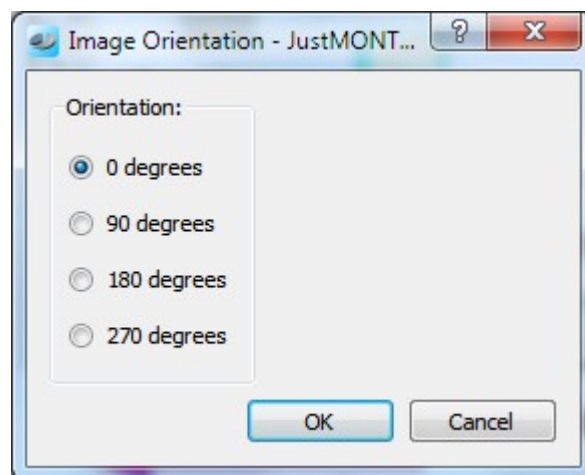
The “Reference link” shows you the path and file name of the reference image file. An incorrect file path is indicated by the broken link icon. Use the file browse dialog box to repair the file path. Note: An incorrect file path is indicated on the canvas by a Fuchsia colored rectangle.

You can force an image update of the file by pressing the Refresh button.

Press the OK button to set the image reference properties. Press Cancel to dismiss the dialog box.

### Rotating an Image

Use the `Format ⇒ Image ⇒ Orientation...` command to rotate the image. This command is only enabled if a single image shape is selected on the canvas.



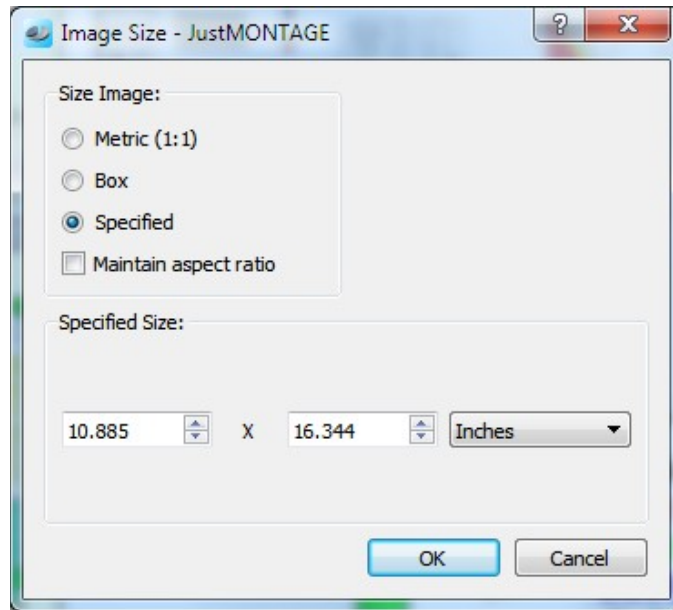
*Illustration 80: The Image Orientation dialog box of JustMONTAGE.*

The Image Orientation dialog box allows you to change the (CGM) image orientation. Rotations are in a counter-clockwise direction around the middle of the image. Make your selection and press OK to change the image orientation.

### Resizing an Image

Use the `Format ⇒ Image ⇒ Size...` command to (re)set the size of the image. This command is only enabled if a single image shape is selected on the canvas.





*Illustration 81: The Image Size dialog box of JustMONTAGE.*

The Image Size dialog box allows you to change the size of the (CGM) image. You can specify the image size in the following ways:

- `Metric (1:1)`. Reset the image to its metric size. This option is only available if the image is metric.
- `Box`. Set the image to the box size. This is the default if the image is abstract. The box size is 25% of the shortest side of the canvas.
- `Specified`. Set the image to the size you specify. You can set the width and height individually if the `Maintain aspect ratio` option is disabled.
- `Maintain aspect ratio`. The aspect ratio of the image is maintained when enabled. You may want to disable this option if you want to have exact control over the width and height of the image. For example, if you are working with Well logs.

Make your selection and press `OK` to set the image size.

### Editing an Image

Use the `Format ⇒ Image ⇒ Edit . . .` to edit an image presuming that you have a JustEDIT license. JustMONTAGE will start JustEDIT with the image. Note that no changes will appear in JustMONTAGE as long as JustEDIT is running.

### Properties

#### The Format Bar

The Format bar gives you quick access to the most common text, line/edge and fill properties.




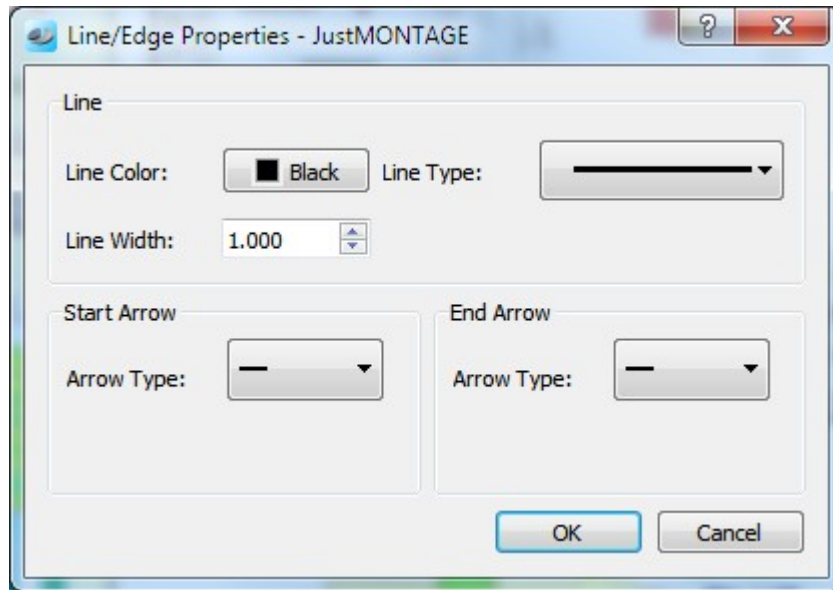
*Illustration 82: The Format bar of JustMONTAGE.*

You can use the Format bar in two different ways.

- To have the properties set for the element you are inserting. For example a text shape will use the selected font, point size, etc.
- To modify the properties of one or more shapes you have selected on the canvas.

#### Line and Edge Properties

 Use the `Format ⇒ Line . . .` command to set the line or edge properties. The Line/Edge Properties dialog box will appear.




*Illustration 83: The Line/Edge Properties dialog box of JustMONTAGE.*

Line / Edge Properties	
Line Color	Select the line/edge color from the combo box.
Line Type	Set the line/edge from the combo box. Select No Line/Edge to disable the drawing of an edge.
Line Width	Select the line/edge width from the combo box.
Start/End Arrow	For lines you can also select a start arrow and/or end arrow. Select the arrow from the list.

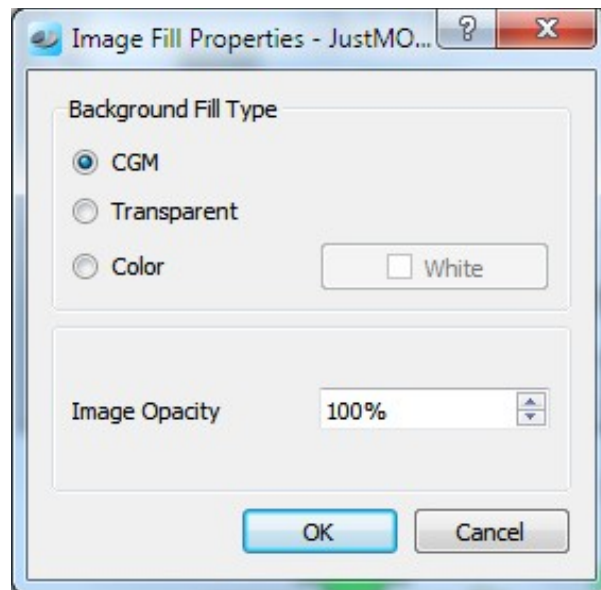
Make your selection and press **OK** to change the line/edge properties. Press **Cancel** to abort the line/edge properties changes.

### **Fill Properties**

 Use the **Format ⇒ Fill...** command to set the fill properties. Depending on what shape(s) you have selected you will see either:

- The Image Fill dialog box if you have selected a single (CGM) image on the canvas.
- The Fill Properties dialog box in all other cases.

## The Image Fill dialog box



*Illustration 84: The Image Fill dialog box of JustMONTAGE.*

The “Background Fill Type” determines how the background of the image is treated. Select one of the following:

- **CGM** to fill the background of the image with the background color of the CGM. (Usually white.)
- **Transparent** to disable the background of the CGM. This causes any shapes below the image to show through the blank image areas.
- **Color** allows you to set the background of the image to a specific color. Select the background color from the combo box.

The “Image Opacity” allows you to partially show through what’s beneath the image. Note that 0% opacity means completely transparent and the image will be invisible.

## The Fill Properties Dialog Box

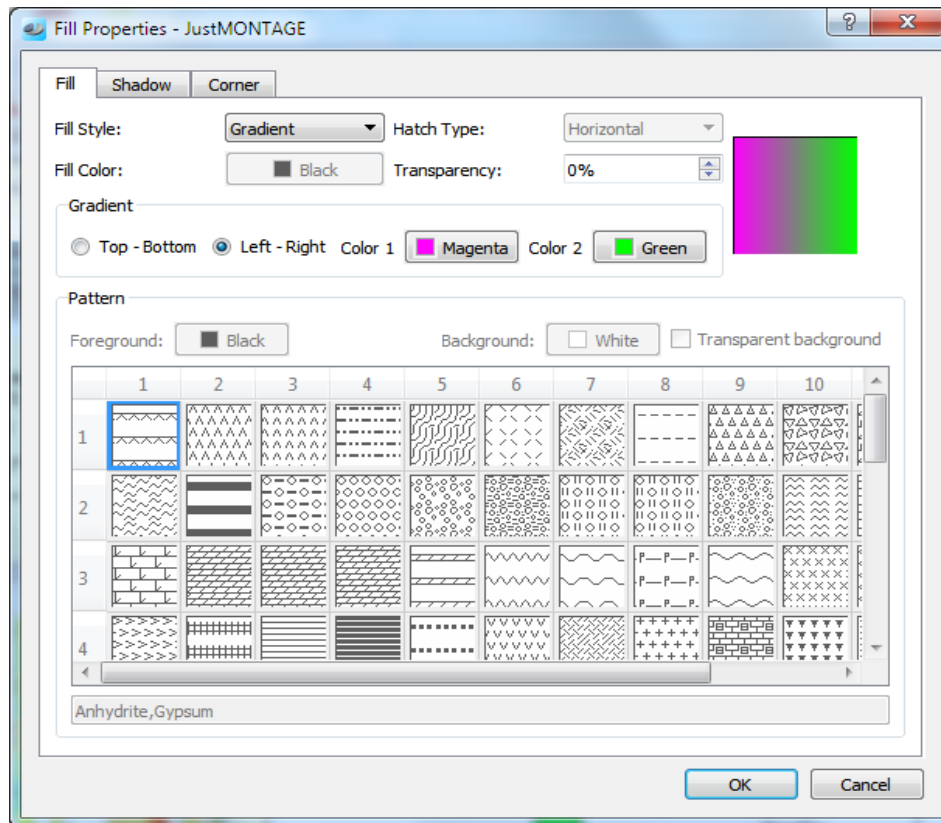


Illustration 85: The Fill Properties dialog box of JustMONTAGE.

The Fill Properties dialog box allows you to set the style with which the shape is to be filled.

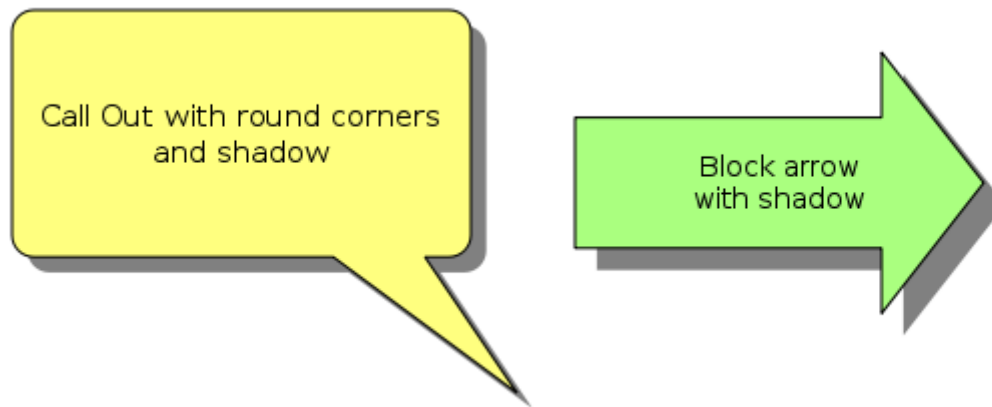
The style can be Empty if you do not want the shape to be filled. You can select a Solid background in which case you can set the fill color from the Background combo box. The “Transparency” option controls how transparent the solid fill color will be.

Selecting Hatch as style allows you to set one of the hatch types with a specific hatch color.

Selecting Pattern as style allows you to select one of the fill patterns. The Background and Pattern control the colors of the pattern. You can make a pattern semi transparent by enabling “Transparent background” and select the “Background” color that should be treated as transparent.

Selecting Gradient as style allows you to select a gradient fill. The gradient fill can be either horizontal from top to bottom or vertically from left to right.

Rich text boxes, call outs and block arrows can have a shadow and/or round corners. The contents of the Shadow and Corner tab will be enabled if the selected element support these options.



*Illustration 86: Example of shadow and round corners.*

Make your selection and press **OK** to change the fill properties. Press **Cancel** to abort the fill properties changes.

### **Text Properties**

**A** Use the **Format ⇒ Text...** command to set the text properties. The Text Properties dialog box will appear.

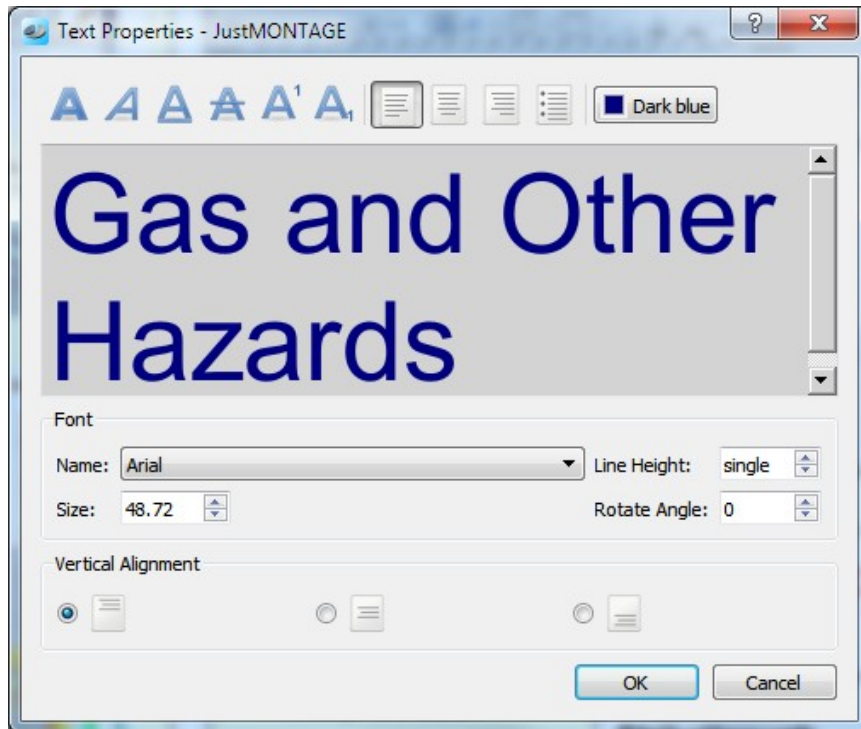


Illustration 87: The Text Properties dialog box of JustMONTAGE.

Text Properties	
Text	Enter the text you want to have in the text box. You can have multiple lines of text by pressing the Enter key.
Font name	Select the font name from the combo box.
Font Size	Select a point size from the combo box or enter a point size directly.
Font Color	Select the text color from the combo box. You can also change the color of a partially selected text.
Style	<p>Select <b>Bold</b> to use the bold variant of the font. Select <i>Italic</i> (oblique) to use the italic variant of the font.</p> <p>Select <u>Underscore</u> to underscore the text. Select <del>Strike-through</del> to have a strike-through text.</p> <p>Select <sup>Superscript</sup> to have superscript characters. Select <sub>subscript</sub> to have subscript characters.</p>

<b>Text Properties</b>	
Bullets	You can switch between lists text with or without bullets.
Horizontal Alignment	Horizontally align text either left, center or right within the text box.
Vertical Alignment	Vertically align text either top, middle or bottom within the text box.

It's possible to use different font sizes in one text element. The behavior of changing the font size is changed: first select that part of the text in which you want to change the font size and then change it.

Make your selection and press **OK** to change the text properties. Press **Cancel** to abort the text properties changes.



## JustEDIT

JustEDIT is a CGM vector editing tool. However, you can also edit other file types as CGMs if you have the appropriate Input File Converter. CalComp 906, CalComp 907, CalComp 925, MicroStation DGN V7<sup>4</sup>, EMF, HP-GL, HP-GL/2 or PDF file types are vector editable. Bitmap based file types are only limited editable.

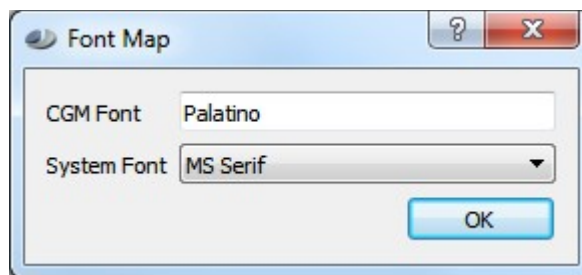
You can start JustEDIT in the JustIMAGE 5.4 User Interface by selecting the “JustEDIT...” command from the **Tools** menu or by selecting the JustEDIT icon from your Windows Desktop.

You can use the “Open...” command from the **File** menu within JustEDIT to open a file. You will be prompted for the file name. Select the file you want to edit and click **Open**. You can also open a file by dragging the file to JustEDIT icon on the Windows Desktop or by dragging it to the JustEDITmain interface.

JustEDIT uses file locks to prevent multiple instances of the JustEDIT application to edit the same file at the same time. This does not prevent other applications from editing the file.

If the CGM Optimiser is enabled and a license has been purchased for this module then JustEDIT will, by default, first optimize the CGM for editing.

JustEDIT will try to match the font names used in the CGM with the available scalable fonts. If a font was not recognized you will be prompted for a font substitute.



*Illustration 88: Matching a CGM font for JustEDIT.*

Select from the font combo box the appropriate font. Later changes to the mapping can be made through the Font List dialog box.

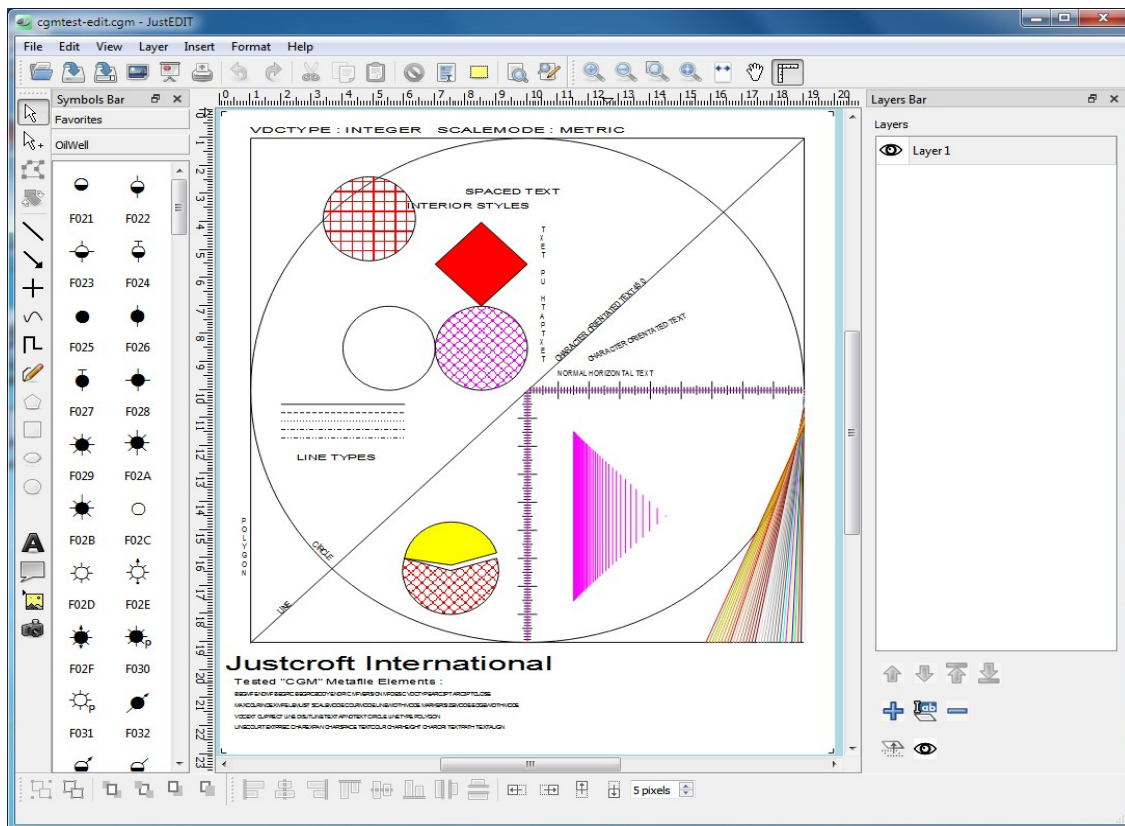
### **Introduction to the JustEDIT User Interface**

Within the main window of the JustEDIT User Interface is a menu bar which provides you quick access to all the commands of the JustEDIT Graphical User Interface. However, most

4 DGN V7 support requires a special separately licensed module.

## JustEDIT

common commands can still be quickly accessed through the various tool bars such as File bar, Edit bar, etc.




*Illustration 89: The JustEDIT main user interface.*

To show or hide the individual tool bars go to either the `View` menu or right-click on the toolbar area and toggle the individual tool bars on or off as required.


The drawing area is the window area of JustEDIT on which the various objects can be placed. The white area within the drawing area is called the canvas. Note that objects can be positioned outside the canvas. These elements will be invisible when saving the CGM.


Control handles are small boxes that appear on an object when you select it. For objects such as lines or poly lines, the control handles are placed on each vertex of the object.


Not all objects of a CGM file can be edited. Currently supported objects are straight lines, poly lines, rectangles, circles, ellipses, polygons, arcs, Cell Arrays/Tiles and text. Any CGM element that cannot be edited is drawn as a bitmap on the canvas.


 The JustEDIT User Interface will appear differently depending on the OS and Window manager used. User preferences of JustEDIT can be controlled by selecting the `Edit` ⇒ `Preferences . . .` command from the menu bar.


## Object Selection

 By default, JustEDIT starts in selection mode. If you are not in selection mode, you can switch to it by deselecting the “Pan Mode” from the View menu or deselect the pan tool button.

 To select a single CGM element click on it whilst selection mode is activated. To select multiple objects, hold the `Ctrl` key and then click each of the objects you want to include in the selection.

 An alternative for holding the `Ctrl` key is to use the `Format ⇒ Select Multiple Shapes` mode.

 Another way to make a selection is to use the fence mode. Select `Edit ⇒ Fence Mode` from the menu bar. Now drag the rectangle fence over the canvas. Next use the `Edit ⇒ Select All` command to select all the editable objects within the fence.

 Use the `Edit ⇒ Select All` command when a fence has not been set, to select all the editable objects on the canvas.

An advanced form of selection is possible using the “Find” command. See the text below for more information about this kind of selection.

## Moving Objects

When JustEDIT is in selection mode, selected objects can be moved by clicking them and dragging the mouse.

### ***Nudging***

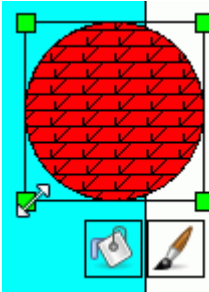
You can do slight moves of objects with the nudge operations. Select the objects you want to nudge. Either use one of the nudge directions or uses the cursor keys.

Note: The nudge amount is, by default, 2 pixels, but this can be changed from the Align toolbar and under `Edit ⇒ Preferences . . . ⇒ Advanced`.

### ***Aligning Elements***

You can line up objects using the alignment operations. First select the objects you want to align. The last selected element becomes automatically the control element. If needed use the `Ctrl` key to select which is the control element. Next select one of the alignment actions. The alignment is handled based on the control element.

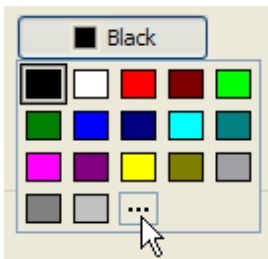
## Sizing Objects



If an object can be resized, the pointer turns into a directional arrow when you place the pointer over one of the control handles on the object. Depending on the object you select, you can either scale the object horizontally, vertically, or both.

JustEDIT allows you to resize both the height and width of a group of selected objects.

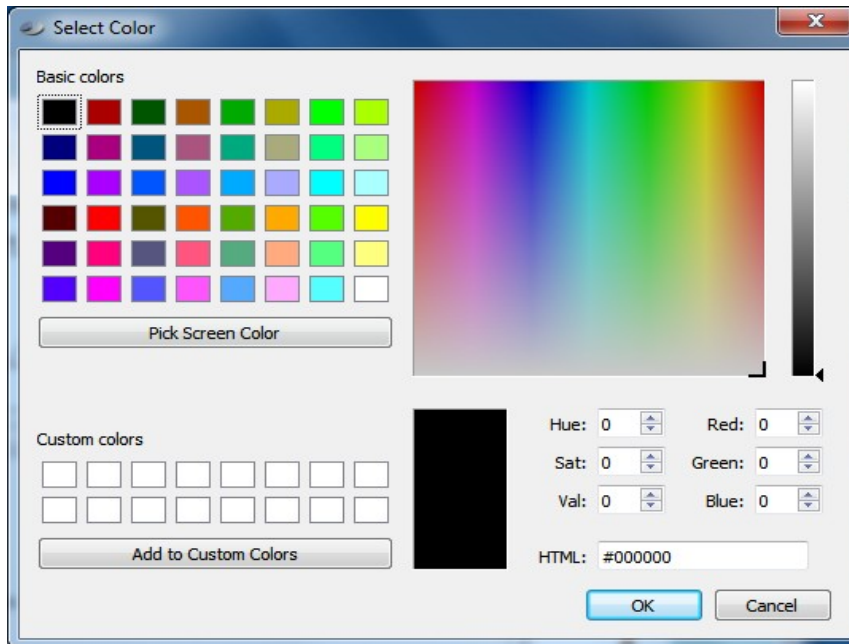
## Color Selection



The color selection combo box allows colors to be selected from a predefined list of colors. Note that the predefined list of colors is controlled by setting the color bar from the Colors tab under the preference settings of JustEDIT. See also the “JustIMAGE 5.4 Reference Manual, Configuration, Custom Colors” section.

Selecting the “...” entry will bring up the Select color dialog box. The Select color dialog box allows a color to be selected in a number of ways.

Either select one of the “Basic colors” or select a custom color using the mouse from the palette. An alternative is to enter the values as Hue, Saturation and Value (HSV) or as Red, Green, Blue (RGB) value. Click the “Add to Custom Colors” button to use the same custom color another time.



*Illustration 90: The Select Color dialog box.*

Another method is to pick a screen color. Select the pick screen color button. The mouse will change into a cross. You can now select a color by going over your screen to sample a color. Press the mouse button to make a selection.

Make the selection and press **OK** to set the color. Press **Cancel** to abort the color change.

## Zooming

There are several ways to zoom in on the canvas. Zooming works the same as in the JustIMAGE 5.4 Viewer.

### **Scaled Zoom**

- 🔍 You can zoom in steps of 25%. Either select the “Scale +25%” command from the View ⇒ Zoom menu or click on the zoom in button on the toolbar.
- 🔍 You can zoom out in steps of 25%. Either select the “Scale -25%” command from the View ⇒ Zoom menu or click on the zoom out button on the toolbar.


You can also zoom in and zoom out by using the mouse wheel while holding the **Ctrl** key pressed down.

There are also three fixed scale zoom possibilities:


- Zoom to 50%. Scale the canvas to half its metric size.

- Zoom to 100%. Scale the canvas to its metric size.
- Zoom to 200%. Scale the canvas to double its size.

### **Rectangle Zoom**

 The rectangle zoom allows you to zoom in on a part of the canvas by dragging a rectangle with the mouse. Either select the “Zoom Rectangle...” command from the View ⇒ Zoom menu or click on the rectangle zoom button on the toolbar. The cursor will change into the Zoom cursor. Go with the mouse to the part of the picture you want to zoom in on, and click and hold the left mouse button. Drag the mouse to the desired size of the rectangle and let go of the mouse button.


### **Page Zoom**

 To fit the canvas to the main window, select the “Whole Page” command from the View ⇒ Zoom menu. Alternatively, click on the “Whole Page” zoom button on the toolbar.


The page width zoom allows you to match the width of the canvas to the width of the main window. Select the “Page Width” command from the View ⇒ Zoom menu.

The page height zoom allows you to match the height of the canvas to the height of the main window. Select the “Page Height” command from the View ⇒ Zoom menu.

### **Shortest Side**

 Use this command to fit the shortest side of the canvas to the size of the main window. This is useful when viewing long images such as Well Logs. Select the “Shortest Side” command from the View ⇒ Zoom menu.

### **Full Screen**


 Use the View ⇒ Full Screen command to expand the main window to the entire screen. This will also hide the menu bar and the status bar. Use the shortcut key to switch back to the normal mode.

### **Full Pointer Cursor**

Use the View ⇒ Full Pointer Cursor command to have horizontal and vertical guide lines that cross each other where the cursor is. You may want to use this together with the rulers to have a more precise control over where an element is positioned.

## Panning

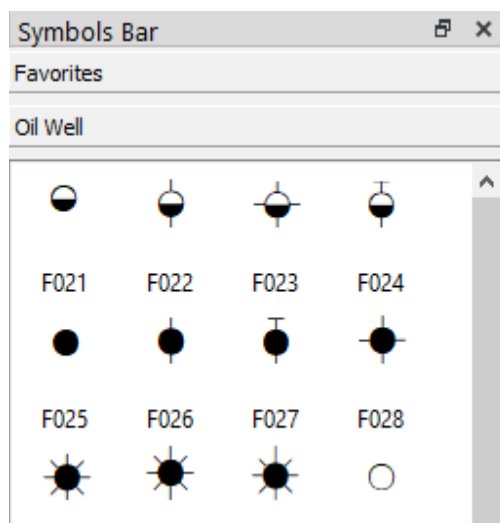
You can pan on the canvas when you are zoomed in. Use the scroll bars around the main window to pan. You can also use your mouse scroll wheel to pan vertically.

 You can also switch to the mouse pan mode. Enable the mouse pan mode by either selecting “Pan Mode” command from the View menu or click on the pan hand icon on the toolbar. You can now pan by clicking and holding the mouse button pressed on the canvas. Move the mouse to pan.

## Background Image

Use the View ⇨ Background Image command to toggle the background which depicts objects that cannot be altered. To make the editor more responsive, disable the background. This is especially noticeable on X server systems or remote desktops. A check mark appears next to the menu item when the background image is enabled.

## Symbols



*Illustration 91: The Symbols toolbox bar of JustEDIT.*

The symbols toolbox can be used to put TrueType font symbols on your canvas. The symbols toolbox can have one or more groups as in Microsoft Outlook®.

The View ⇨ Symbols sub-menu gives access to the symbols toolbox. Use the “Symbols Bar” command to display and hide the symbols toolbox. A check mark appears next to the menu item when the symbols toolbox is displayed.

Initially the symbols toolbox contains a set of Well symbols (Oil Well). To setup a symbol list, select the “Add symbol font...” command or right-click on the symbols toolbox and select the “Add symbol font...” command. In the Add Symbol Font dialog box select the symbol font file and set an appropriate title.


To add more than one group, repeat the previous step. To remove a group, right-click a group and select the “Remove symbol font” command.


If you have loaded a CGM, you can drag the symbol you want to use on to the canvas. A symbol behaves like a text element. Alter the font size to make the symbol bigger or smaller. The font color determines the color of the symbol.

You can set a symbol as one of your favorites by right-click on the symbol and select the


“Add to favorites” command. The symbol will now be added to the Favorites group.


### Grouping Objects

 You can temporarily group objects together to form composites. Select the objects you want to group together and then click the Group button. Grouped objects act like a single graphical object. Note that you will lose the grouping once you have closed the file.

 To ungroup, select the composite objects you want to ungroup and then click the Ungroup button.


### Saving your Changes

 Use the “Save” command from the File menu to save the CGM to its current name and directory.

 Use the “Save As...” command from the File menu to save the CGM under a different name or in a different directory. JustEDIT will display the Save As dialog box so the CGM file can be named.


Important: JustEDIT will, by default, save the CGM with the font name mapping used when opening the file. Use the Font List dialog box settings to prevent this. See the Font List dialog box description below for more information.

### Export

 A CGM can be exported to a BMP, GIF, JPEG, PBM, PGM, PPM, PNG, TIFF, PDF or SVG file. Select the “Export...” command from the File menu. The Export dialog box will appear.


Use the fence mode to if you want to export only a part of the CGM.

### Export to PowerPoint

 A CGM can be exported to a PowerPoint 2007 file on Windows. Select the “Export to PowerPoint...” command from the File menu. The Export to PowerPoint dialog box will appear. You can either create a PowerPoint file or add a PowerPoint slide to an existing PowerPoint file.

Use the fence mode if you want to export only a part of the CGM.

### Printing

 A CGM can be printed by selecting the “Print...” command from the File menu. The Print dialog box will appear.



Use the fence mode if you want to print only a part of the CGM.

## Working With Layers

A layer is a transparent level object on which shapes are placed. The CGM you load into edit might have one or more layers. Layers can help you work efficiently. You can use layers to organize similar shapes together. For example, you might use one layer for text and another layer for images. By default, when you place a shape on the canvas, it is placed on the active layer.

When the CGM does not have layers, all elements are placed on one layer (Layer 1) which is also the active layer. You can then add more layers. You can control the visibility of the layer so that you can make separate prints or exports with or without the shapes of a specific layer.

## Adding a New Layer

+ Select “Add Layer...” from the Layer menu or click on the icon in the layer toolbar. You will be prompted for the layer name.

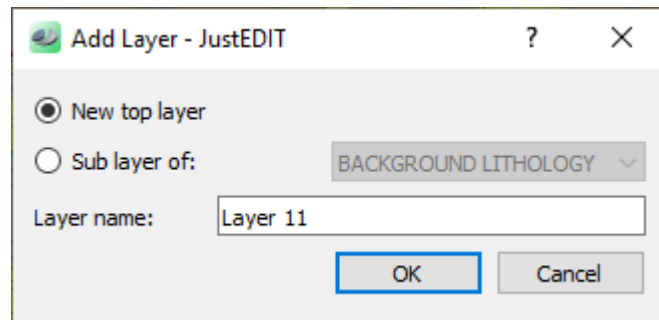


Illustration 92: The Add Layer dialog box.

Select if the layer is a top layer or a sub layer. The layer name has to be unique within the composition.


Make the layer current by highlighting the layer from the layer toolbox. Any shapes you now insert will be added to the current (highlighted) layer.

+ You can move shapes between layers by selecting them, set the current layer and then use the “Move selection to current layer” command from the Layer menu to move them. Alternatively, use copy & paste to move shapes between layers.


## Changing the Layer

tab You can rename a layer with the “Rename Layer...” command from the Layer menu. You will be prompted for the new layer name.

Layers are drawn from bottom to top in the layer stack. You can move layers up and down using the arrows in the layer toolbox or alternatively use the “Raise Layer” and “Lower Layer” commands from the `Layer` menu.


 Use the “eye” icon in the layer toolbox to toggle the visibility of a layer and possible sub layers. Invisible layers will not be visible when exported or printed.

### Removing a Layer

 Make sure that you have first moved any shapes on the layer to another layer. You can then remove the layer with the “Delete Layer” command from the `Layer` menu.


## Basic Edit Commands

### Undo

 Use the `Edit` ⇒ `Undo` command to reverse the last editing action, if it's possible. The name of the command changes depending on what the last action was. The Undo command is disabled if there are no actions that can be undone.


You can redo the last undone action with the Redo command.

### Redo

 Use the `Edit` ⇒ `Redo` command to redo the last undone action. The Redo command is disabled if there are no actions that can be redone.


An action can be reverted with the Undo command.

### Cut

 Use the `Edit` ⇒ `Cut` command to remove the currently selected objects from the canvas and put them on the clipboard. This command is unavailable if there are no objects currently selected.


Putting objects on the clipboard replaces the contents previously stored there. The clipboard is cleared if you close the currently loaded CGM and select another CGM.

### Copy

 Use the `Edit` ⇒ `Copy` command to copy the currently selected objects from the canvas onto the clipboard. This command is unavailable if there are no objects currently selected.

Copying objects to the clipboard replaces the contents previously stored there.


## Paste

 Use the `Edit ⇒ Paste` command to insert a copy of the clipboard contents at the insertion point. This command is unavailable if the clipboard is empty.

Note: This command also allows you to paste bitmap images from the clipboard.

Use the `Edit ⇒ Paste in Place` command to insert a copy of the clipboard contents at exactly the same position as the clipboard contents. This command is only available if the clipboard contains shapes of the current canvas.

## Delete


 Use the `Edit ⇒ Delete` command to remove the currently selected objects from the canvas. This command is unavailable if there are no objects selected.

## Ordering Objects

The individual objects are drawn in a stacking order, also known as a Z-order. The first CGM element in the stack is drawn first, then the second CGM element in the stack is drawn, etc. objects drawn later overlap the objects already drawn. The Z-order is determined by the order in which the objects are added to the canvas. The last element added is on top of all the other elements.

The user can change the Z-order using a set of `Format ⇒ Order` commands. The “Bring Forward” command moves a CGM element one place up in the Z-order (towards the top of the draw stack). The “Send Backward” command moves a CGM element one place down in the Z-order (toward the bottom of the draw stack). A CGM element can be moved directly to either the top or bottom of the draw stack using the “Bring to Front” command and the “Send to Back” command respectively.

## Edit Points

 Select the `Format ⇒ Edit Points` command to move an individual vertex of a line or polygon. A red control handle will be placed at each vertex. Position the mouse pointer over a control handle. Click the control handle and then drag it to a new position. Release the mouse button to place the vertex at its new coordinates. Use the `Shift` key to move multiple points at the same time. First select the first point and then select the last point. The selected points will become blue and now you can move multiple points by dragging one of the blue points.

To insert a vertex move the mouse pointer between two control points and hold down the `Ctrl` key. Click the mouse button to place the vertex on the segment.

To remove a single vertex move the mouse pointer over a vertex and press the `Ctrl` key.

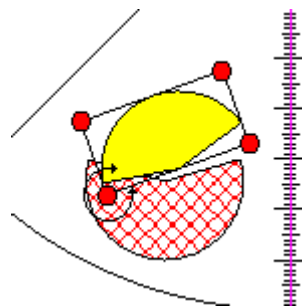
Click the mouse button to delete the vertex from the shape. Press the shift key to delete multiple points at the same time. First select the first point and then select the last point. The selected points will become blue and now you can delete multiple points by pressing the Delete key or the D key.

You can use also this command to change a call-out and change the arrow shape of block arrows.

Either select again the Edit Points command or press the Esc key or switch to selection mode to exit the “Edit Points” mode.

## Rotating Objects

Select the Format ⇨ Rotate Object command to rotate an individual object around its center point. A red round control handle will be placed at the bounding box corners of the object. Position the mouse pointer over a control handle. Click the control handle and then drag it to rotate the object. Release the mouse button to stop the rotation.



*Illustration 93:  
Rotating an object.*

Alternatively, you can input a relative angle with the spin box that appears at the top left corner of the canvas.

Either select again the Format ⇨ Rotate Object command or press the Esc key or click outside the object to exit the “Rotate Object” mode.

## Inserting Lines


Lines are inserted with a default line color and thickness. You can alter this with the Format ⇨ Line Attributes... command.


↙ To insert a single straight line use the Insert ⇨ Line... command. Left-click and hold the mouse button on the canvas until the line is at the appropriate length.

↘ To insert a single straight line with an arrow tip use the Insert ⇨ Arrow line...

command. Left-click and hold the mouse button on the canvas until the arrow line is the appropriate length.


Note: A block arrow is a possible alternative for the arrow line. See “Inserting Block Arrows” below.


 The `Insert ⇒ Cross line...` command allows you to insert straight horizontal or vertical lines. Left-click and hold the mouse button on the canvas until the line is at the appropriate length.

 A line with multiple vertices can be added using the `Insert ⇒ Poly Line...` command. Left-click on the canvas. Click again to place a vertex. Repeat left-clicking for additional vertices.


To lock a vertex horizontally press the `H` key. Press the `H` key again to unlock. To lock a vertex vertically press the `V` key. Press the `V` key again to unlock. You can switch between horizontal and vertical locking by pressing the `H` key and the `V` key.


Double-click to finish drawing or right-click to cancel the insertion.

 The `Insert ⇒ Free Line...` command allows a poly line to be drawn without having to place individual vertices. Left-click and hold the mouse button on the canvas to start drawing the poly line. Release the mouse button to finish drawing.

 The `Insert ⇒ Bezier line...` command allows a two point Bezier line to be drawn. Left-click to set the start point. Left-click again to set the first control point. The third left-click inserts the second control point. The fourth and last left-click inserts the end point.


## Inserting Filled Elements

 Filled objects are inserted with a default color and without an edge. You can alter the fill with the `Format ⇒ Fill Attributes...` command.


 The `Insert ⇒ Polygon...` command allows you to insert a polygon. Left-click on the canvas. Click again to place a vertex. Repeat left-click for additional vertices.


To lock a vertex horizontally press the `H` key. Press the `H` key again to unlock. To lock a vertex vertically press the `V` key. Press the `V` key again to unlock. You can switch between horizontal and vertical locking by pressing the `H` key and the `V` key.

Double-click to finish drawing or right-click to cancel the insertion.


 The `Insert ⇒ Rectangle...` command allows you to insert a rectangle. Left-click and hold the mouse button on the canvas until the rectangle has the appropriate size and shape.

 The `Insert ⇒ Ellipse...` command allows you to insert an ellipse. Left-click and hold the mouse button on the canvas until the ellipse has the appropriate size and shape.

 The `Insert ⇒ Circle...` command allows you to insert a circle. Left-click and hold the mouse button on the canvas until the circle has the appropriate size.

 The `Insert ⇒ Free Polygon...` command allows a polygon to be drawn without having to place individual vertices. Left-click and hold the mouse button on the canvas to start drawing the poly line. Release the mouse button to finish drawing.


### Inserting Block Arrows

 The `Insert ⇒ Block Arrows` sub-menu allows you to insert block arrows. Select the block arrow type from the sub-menu. Left-click and hold the mouse button on the canvas to start drawing the block arrow. Release the mouse button to finish drawing.

You can alter the arrow shape when in “Edit Points” mode. Use the “Text Attributes...” command under the `Format` menu to set an optional text string and text properties such as color and font height.

### Inserting Text


**A** Use the `Insert ⇒ Text...` command to insert a text block. Left-click on the canvas where you want the text to appear. Use the “Text Attributes...” command under the `Format` menu to change the text string and text attributes such as color and font height.

 Use the `Insert ⇒ Call Out...` command to insert a text call-out. You can alter the call-out shape when in “Edit Points” mode. Use the “Text Attributes...” command under the `Format` menu to change the text string and text properties such as color and font height.

### Inserting a Bitmap


You can insert either a BMP, GIF, JPEG, PNG or WebP bitmap image on the canvas.

Insert a bitmap using the mouse:

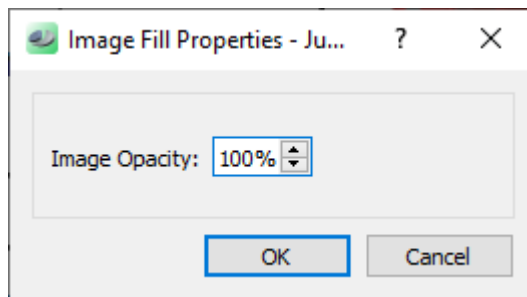
1.  Select the “Image...” command from the `Insert` menu.
2. Select the image file from the file dialog box.
3. Click and hold the mouse button on the canvas until the image rectangle has the appropriate width and height.
4. Release the mouse button and wait for the image to appear.

## Attributes

### Fill Attributes

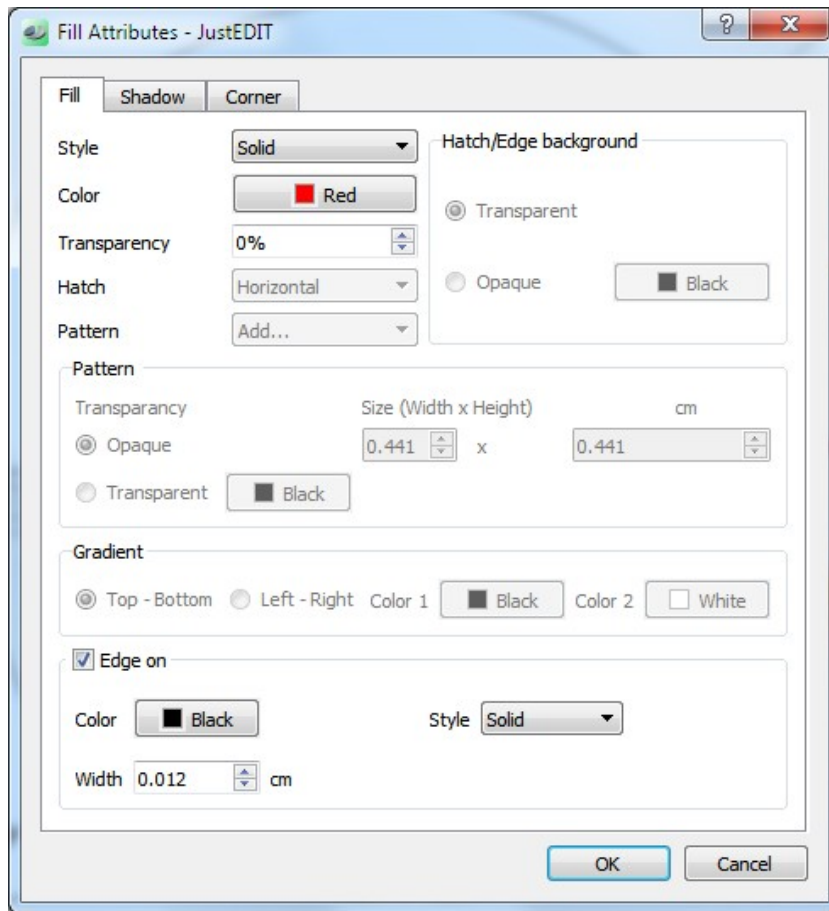
 Use the `Format ⇒ Fill Attributes...` command to change the CGM fill attributes of one or more selected filled objects. Depending on what you have selected you will see either:

- The Image Fill Properties dialog box if you have selected an image on the canvas.
- The Fill Properties dialog box in all other cases.



*Illustration 94: The Image Fill Properties dialog of JustEDIT.*

The “Image Opacity” allows you to partially show through what’s beneath the image. Note that 0% opacity means completely transparent and the image will be invisible.



*Illustration 95: The Fill Attributes dialog of JustEDIT.*

**Solid Fill:** Select the fill color and optionally set the transparency of the color.

**Hollow Fill:** This is a special style which only has an effect if the edge is turned off. Only the outline of the object is drawn with the selected color.

**Empty Fill:** Don't fill the object.

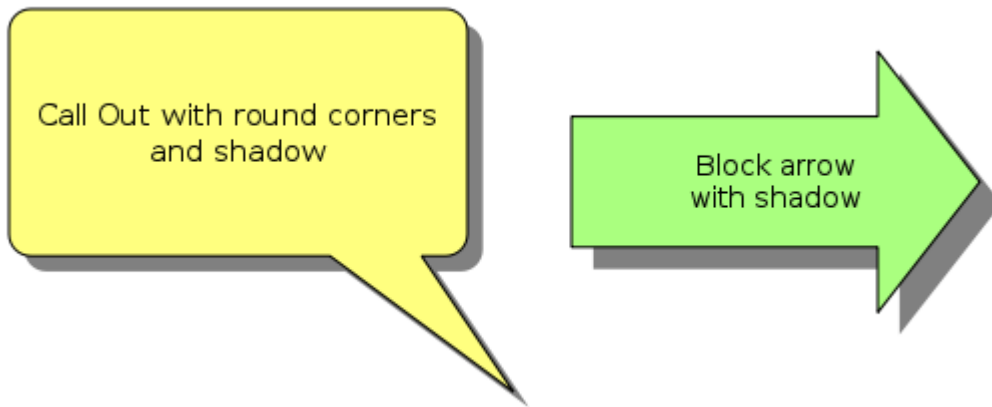
**Hatch Fill:** Select the type of hatch and the color of the hatch. Additionally set the background mode to either "Transparent" or to "Opaque".

**Pattern Fill:** You can either select a pattern or add a new pattern fill. Select from the "Pattern" combo box Add. . . . You can now select a pattern from the pattern selection dialog box. It is also possible to select a custom pattern. The custom pattern file must be a PNG with a maximum size of 64×64 pixels.

**Gradient Fill:** Select the gradient to be either horizontally from top to bottom or vertically from left to right. Note: This is a CGM fill type that is in most cases not supported by other third-party applications.




Rich text boxes, call outs and block arrows can have a shadow and round corners. The contents of the Shadow and Corner tab will be enabled if the selected element supports these attributes.

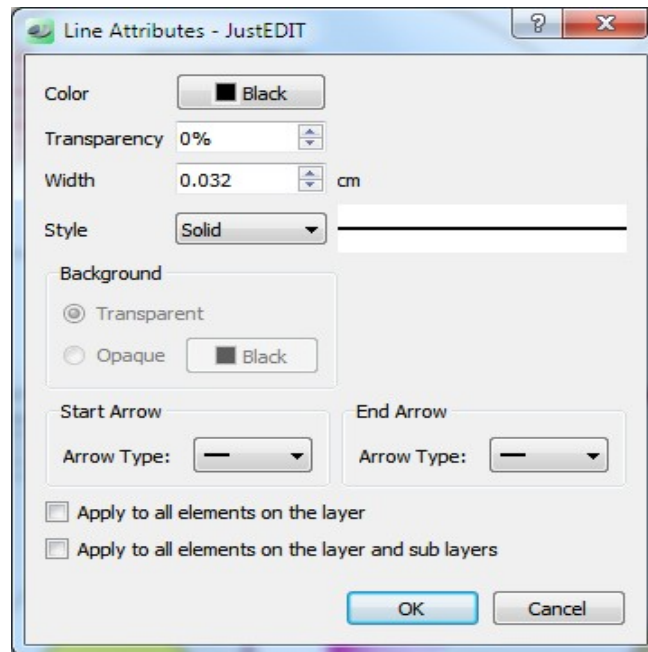


*Illustration 96: Example of shadow and round corner*

### **Line Attributes**

 Use the `Format ⇨ Line Attributes...` command to change the line attributes of one or more selected line elements.

Enable the “Apply to all elements on the layer” if you want to change the line attributes except arrows of all line elements on the layer. The “Apply to all elements on the layer and sub layers” works the same, except that will also change any lines on sub layers as well.



*Illustration 97: The Line Attributes dialog box of JustEDIT.*

### **Text Attributes**

Use the `Format ⇒ Text Attributes...` command to change the CGM text attributes of one or more selected CGM text elements. The actual text string can also be altered here. Use the check boxes to select which attributes should be changed. This can be useful if you have multiple text elements selected.

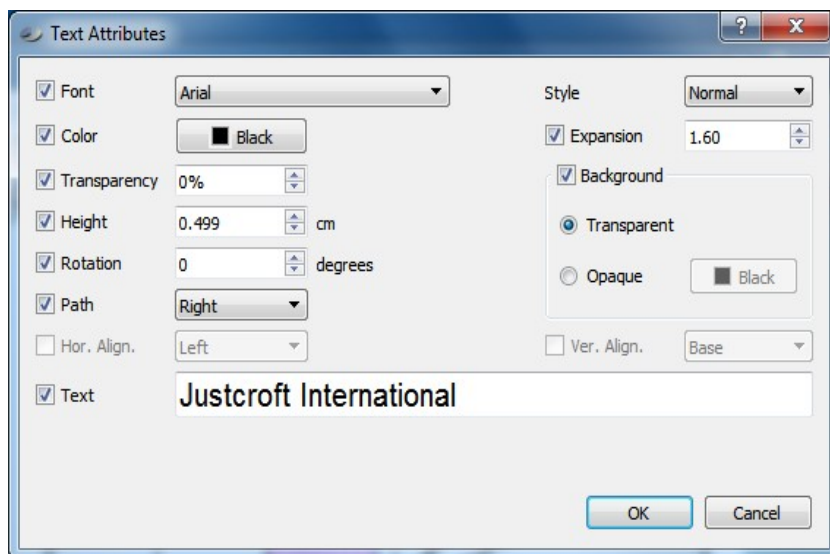


Illustration 98: The Text Attributes dialog box of JustEDIT.

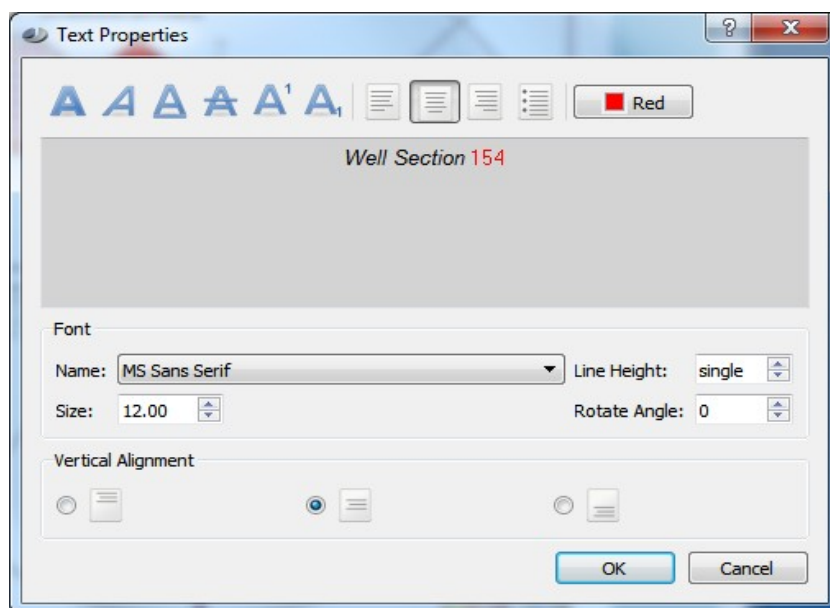



Illustration 99: The Rich Text Attributes dialog box of JustEDIT.

This allows you to enter rich text with various text styles applied to individual parts of the text including different colors. You can also create a bullet list if needed.

## Finding Elements

 Use the `Edit ⇒ Find...` command to make selections based on the attributes of a CGM element. There are three possible categories of objects: Line, Text and Filled. Within each category you can select different attributes you want to search for. Deselect any attributes by deselecting the check box.

You can search by example. Select one of the specific objects to find and then select the `Edit ⇒ Find...` command. The Find dialog box will come up with the attribute values already set. Deselect possible attributes that are not required and click `OK`.

Line Attributes	
Color	The color of the line.
Transparency	The amount of transparency applied to the line. Note that 0% means completely opaque.
Width	The thickness of the line. Units are based on your preference settings.
Style	One of the five possible line styles.
Background	This is only applicable if one of the dashed line styles is selected. Transparent means that the gaps between the dash segments is not filled. Otherwise the gaps are filled with a particular color.
Length	Length of a horizontal or vertical line with 2 points. This can be used to select a number of lines with the same size.


Text Attributes	
Font	The font name and possible style: Normal, <b>Bold</b> , <i>Italic</i> or <b><i>Bold + Italic</i></b> .
Color	The text color.
Transparency	The amount of transparency applied to the text. Note that 0% means completely opaque.
Expansion	The font stretch. Values less than 1.0 means that individual glyphs are more narrow than normal. Values higher than 1.0 means that individual glyphs are wider than normal.
Height	The text height. Note: text heights in CGM are not directly related to the usual point sizes.

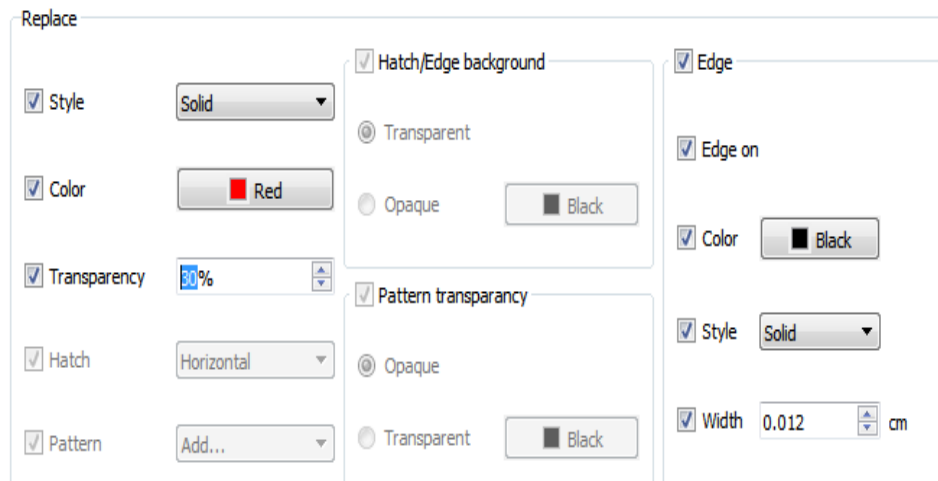
Text Attributes	
Rotation	This describes the base line angle counter-clockwise to the horizontal.
Path	The text path. Right is the common western text direction where characters are oriented from left to right. Left means characters are oriented from right to left. Up means from bottom to top and Down means from top to bottom. All these orientations are based on the text start point which is indicated by a small green dot when a text element is selected.
Background	CGM text has an implicit rectangle around the whole text string. When set to opaque this rectangle is filled with the specified color.
Text	Search case sensitive for a particular string. Note that searching for text is, by default, disabled. The wild-card characters *, ? maybe used for searching. If you want to search for a range of numbers you can use /int [min max]. For example /int [200 2000] to find all number between 200 and 2000.
Text case sensitive	Allow case sensitive or case in-sensitive text search.

Fill Attributes	
Style	The fill style.
Color	The fill color. This is not applicable when the empty style or pattern style is selected.
Transparency	The amount of transparency applied to the fill and edge. Note that 0% means completely opaque or solid fill.
Hatch	Applicable if the fill style is hatch. This is one of the possible hatch styles.
Pattern	Applicable if the fill style is pattern.
Hatch/Edge background	The hatch or dashed edge gaps are either not filled or filled with a specific color.
Pattern transparency	Patterns can be color keyed. That is, a specific color within the pattern is designated as an indicator that the pattern cell should not be filled and whatever is under the pattern cell is shown.

Fill Attributes	
Edge	Filled objects can have an edge. That is, a border around the filled element.
Edge color	The color of the edge if the edge is enabled.
Edge style	The style of the edge if the edge is enabled.
Edge width	The width of the edge if the edge is enabled.

## Replacing Elements

 The `Edit ⇒ Replace...` command allows the attributes of a CGM element to be changed. Which CGM element is replaced works in the same way as the `Find` command. By deselecting the attribute check boxes all possible applicable attributes or a sub-set of attributes can be replaced.



*Illustration 100: Replacing a fill with solid red with 30% transparency.*

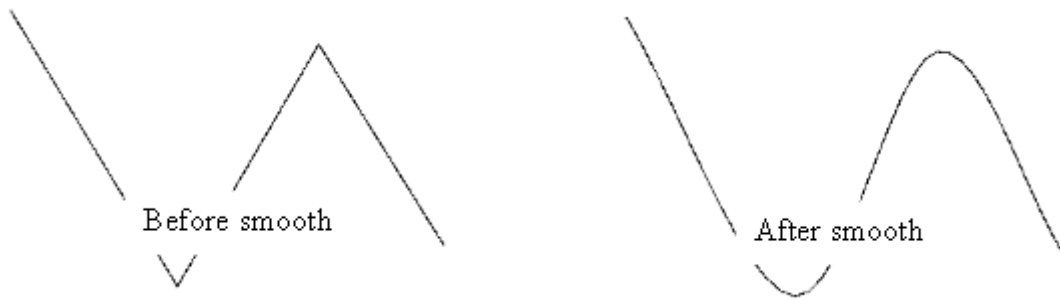
The example above illustrates how to change a fill style to solid red with a 30% transparency.

Tip: To globally change a specific font into a different font then it is much easier and faster to use the “Font List...” command under the `Format` menu.

## Special Editing Commands

### Smooth

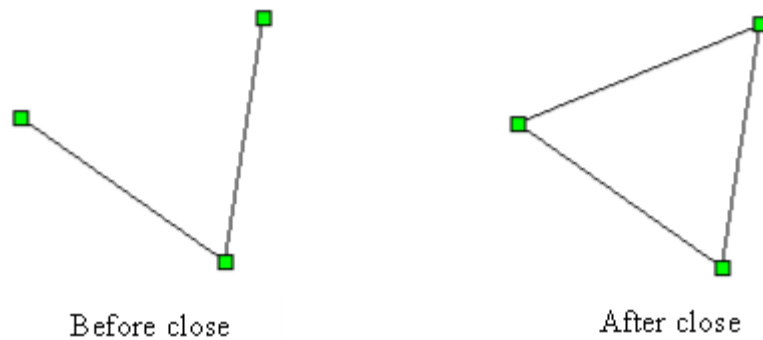
Use the `Insert ⇒ Smooth` command to round angled line segments.



*Illustration 101: The effect of the Smooth command.*

### **Closing a Line**

Select one or more CGM line elements and use the `Insert ⇒ Close Line` command to close up line segments.



*Illustration 102: Closing a line.*

### **Joining Disjoint Lines**

Select two or more CGM line elements and use the `Insert ⇒ Close Gaps` command to join disjoint lines such as fault lines together. This command works best when lines are laid out in either a horizontal or vertical direction.

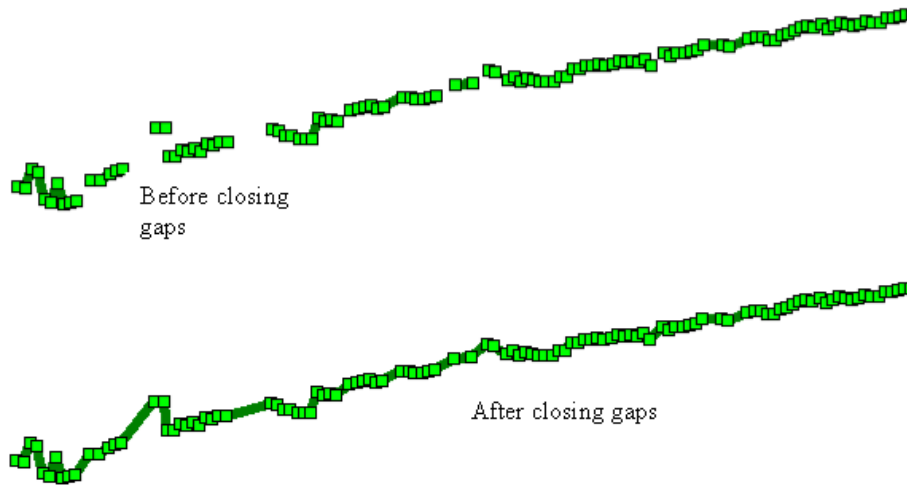


Illustration 103: Joining Disjoint Lines.

### Cutting a Line

The Insert ⇒ Cut Line command allows you to discard part of a line. The cut can be made anywhere on the line, not just on a vertex. First left-click at the point where the cut is to be made, then click the part of the line to be thrown away.

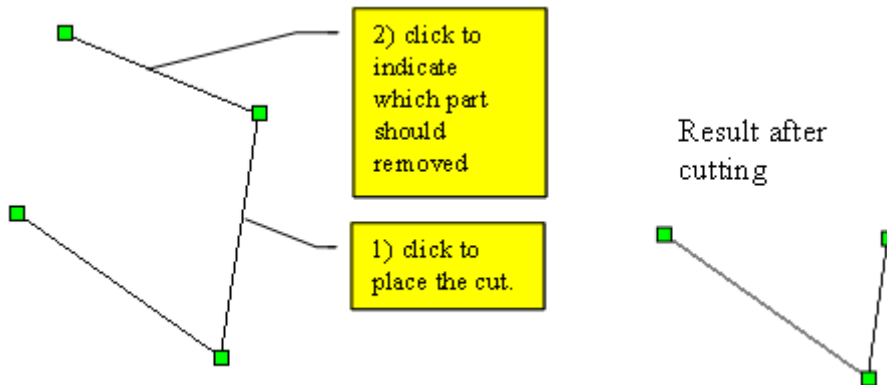


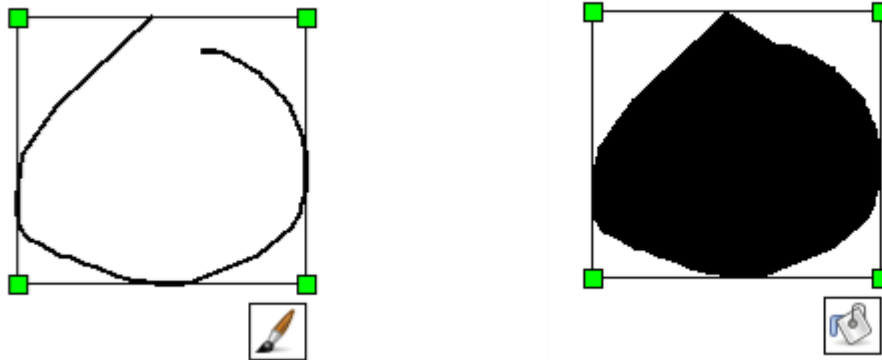
Illustration 104: Cutting a line and discard a line part.

The Insert ⇒ Split Line command is like the “Cut Line” command but without removing the line segment, effectively cutting the line into two separate lines. Left-click the point where the split is to be made.



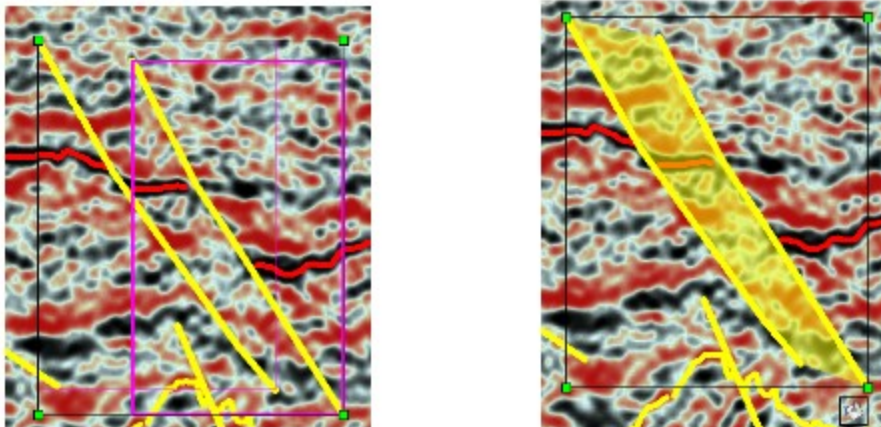
## Fill

The `Insert` ⇨ `Fill` command can be used for two different purposes. You can turn a single selected poly line into a polygon with this command.



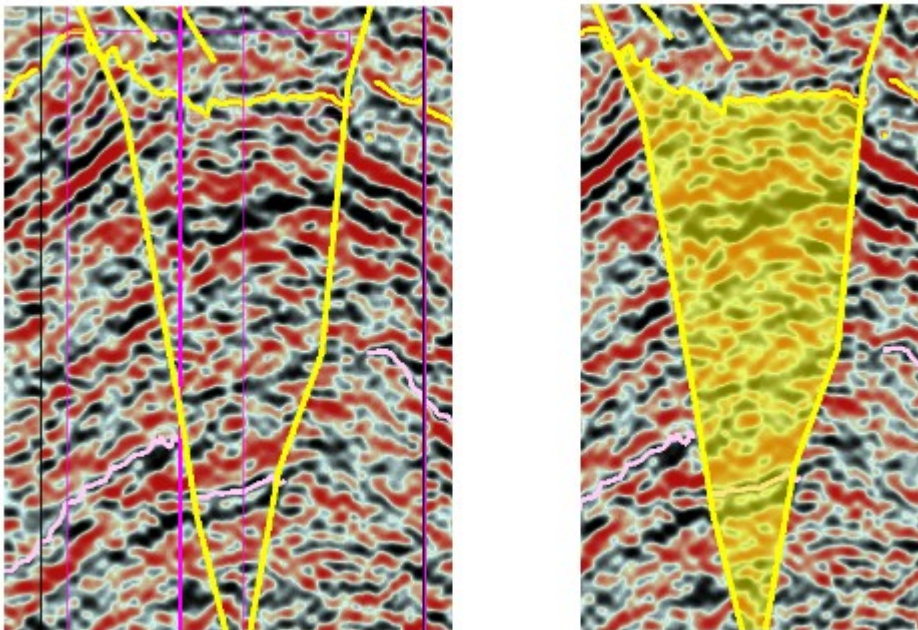
*Illustration 105: Turning a poly line into a polygon using the Fill command.*

Selecting two roughly parallel lines will cause the area between the two lines to be filled with a semi transparent polygon of 50% yellow.



*Illustration 106: Automatic fill between two fault lines using the Fill command.*

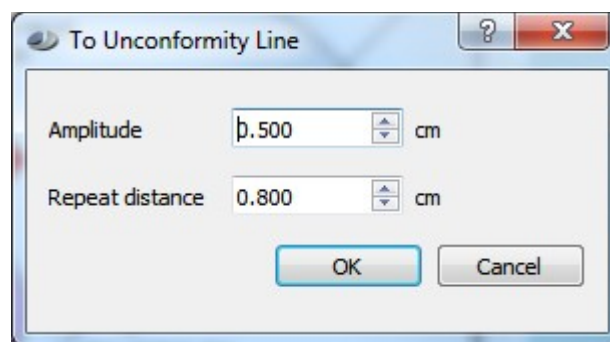
Selecting three or more lines that form an enclosed area will cause this area to be filled with a semi transparent polygon.



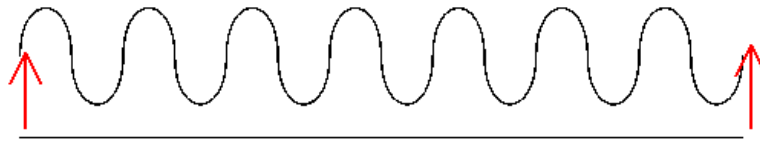
*Illustration 107: Automatic fill between three fault lines using the Fill command.*

## **To Unconformity**

The **Insert** ⇨ **To Unconformity** command converts any line into a sinusoidal wave. The Unconformity dialog box will appear where you can enter the amplitude and repeat distance.



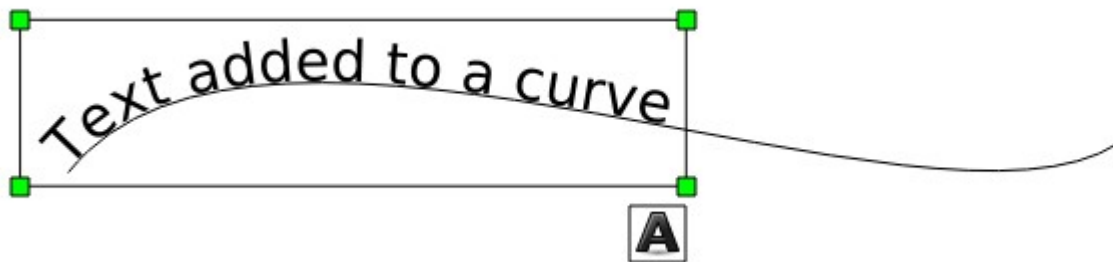
*Illustration 108: The To Unconformity Line dialog box*



*Illustration 109: A line converted to an unconformity line.*

## Add Text to Line

The `Insert ⇒ To Add text to Line` command allows text to be added to the selected line. The CGM text dialog will appear and after pressing OK the text will be added to the line. The text is a separate element if you want to move the line and keep the text along the line you have to group the text and line first.



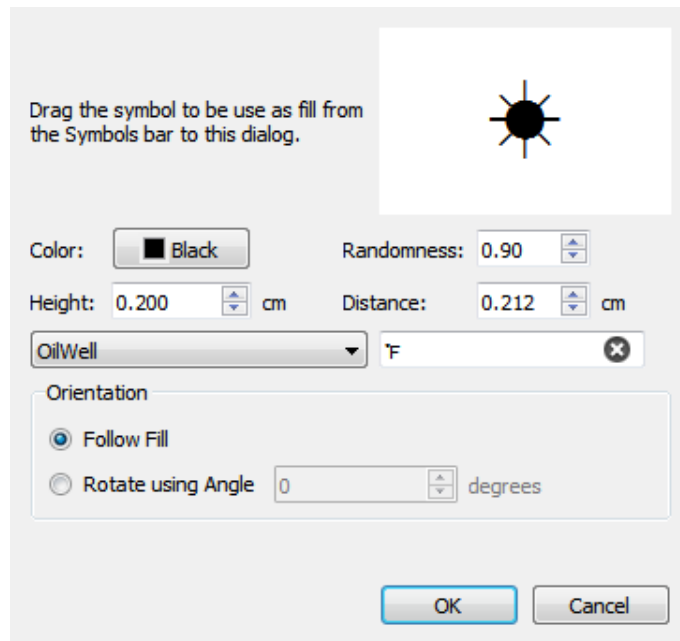
*Illustration 110: Example of text added to a line in JustEDIT.*

## Fill with Symbols

The `Format ⇒ Fill with Symbols...` command will allow you to fill a polygon with one or two symbols.

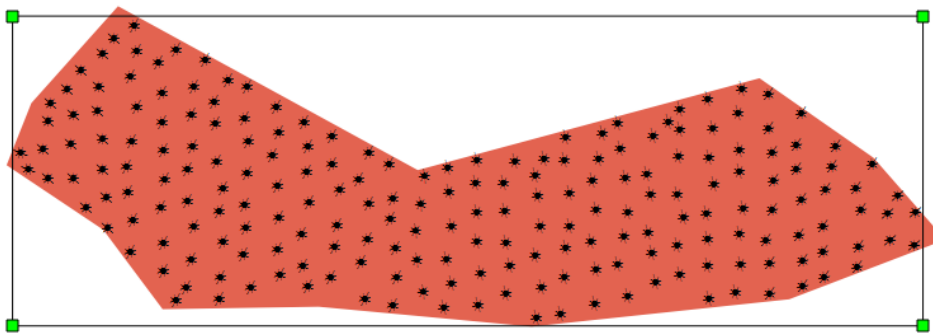
Either drag a symbol to the dialog box or select the appropriate symbol font and enter one or two symbols to be used for filling. You can specify the symbol color, its height and the relative distance between symbols.

The Randomness factor determines how random the symbols will be distributed within the fill. A factor of 0 means that all symbols will be evenly distributed. A factor greater than 1.0 will cause symbols to overlap.



*Illustration 111: The Fill with Symbols dialog box.*

Symbols can be either orientated based on the edges of the polygon or uniformly rotated with a specific angle.

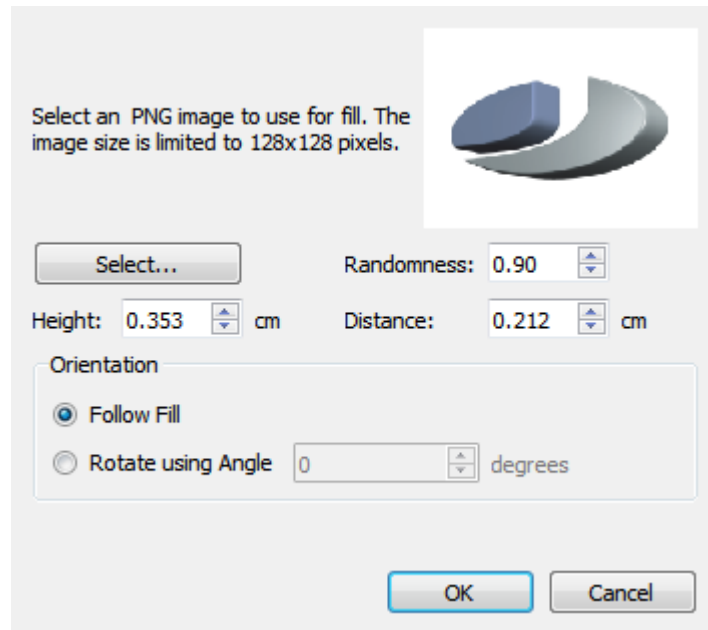


*Illustration 112: A polygon filled with symbols.*

## **Fill with Images**

The `Format ⇒ Fill with Images...` command will allow you to fill a polygon with small PNG image as a symbol.

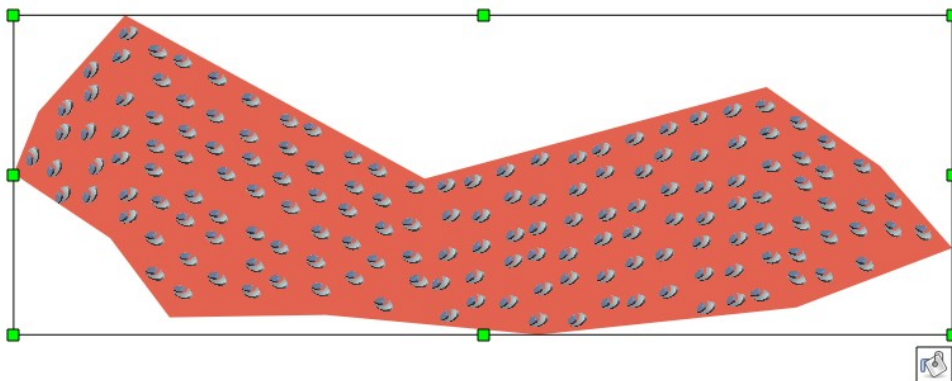
Select the appropriate PNG to be used for filling. Note that the PNG should not be bigger than 128x128 pixels. You can specify the height and the relative distance between symbols.



*Illustration 113: The Fill with Images dialog box.*

The Randomness factor determines how random the symbols will be distributed within the fill. A factor of 0 means that all symbols will be evenly distributed. A factor greater than 1.0 will cause symbols to overlap.

Symbols can be either orientated based on the edges of the polygon or uniformly rotated with a specific angle.



*Illustration 114: A polygon filled with images.*

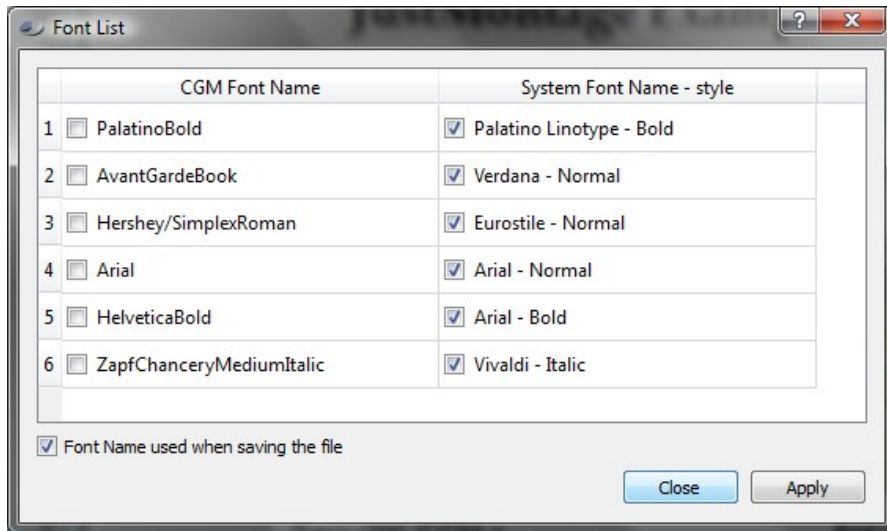
## Editing the CGM Font List

The `Format ⇒ Font List...` command will bring up the Font List dialog box. The CGM

## JustEDIT

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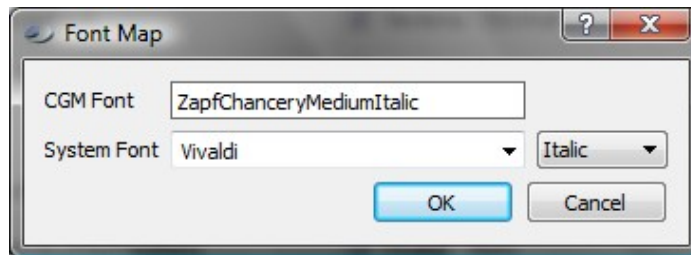
font list of the file can be manipulated in this dialog.



*Illustration 115: The Font List dialog box of JustEDIT.*

The “CGM Font name” is the name of a font as it was in the file when opened in JustEDIT. The “System Font name - style” is the font and style used to show the font in JustEDIT. When saving you can select which font name will be written in the CGM. This is, by default, the name of the font used in JustEDIT. To retain the original name select the check box in front of the CGM font name.

To change the font used by JustEDIT, double-click the Edit font name. The Font Map dialog box will appear.



*Illustration 116: The Font Map dialog box of JustEDIT.*

Here the JustEDIT font and / or the style used can be altered. Click on OK to make the change. Click on Cancel to dismiss the dialog box without making any changes.

## Custom Line Type

The `Format ⇨ Custom Line Type...` command will bring up the Custom Line Type dialog box.

One or more custom line types can be created, by default the menu will add a new custom line type. An existing custom line can be changed by selecting the custom line in the combo-box. The number of pairs and the dash and gap values can be changed. A dash value of 0 represents a dot.

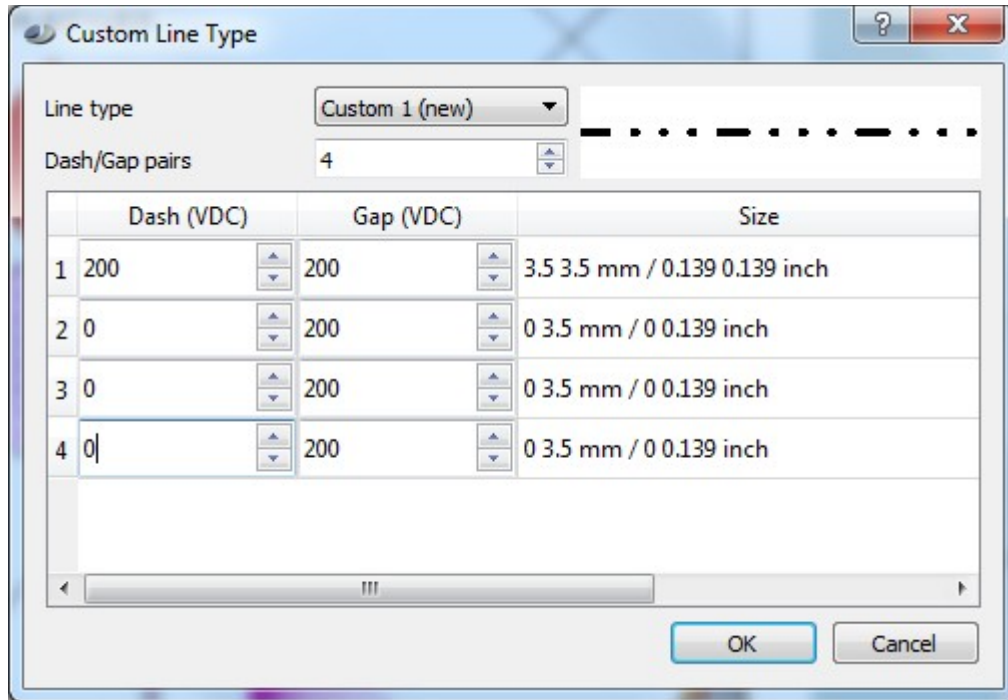
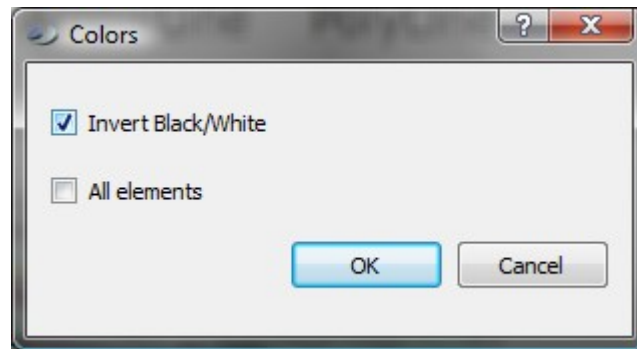


Illustration 117: The Custom Line Type dialog box.

The newly created line type can be selected in the Line Attributes dialog for the line primitive and in the Fill Attributes dialog for the edge of the fill primitive.

## Color Change

The `Format ⇒ Color...` command will bring up the Color dialog box.



*Illustration 118: The Colors dialog box of JustEDIT.*

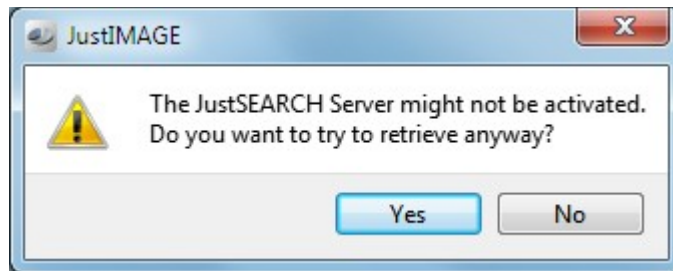
You can invert black and white colors in the selected element. Use “All elements” if you want to globally change black and white.



## How to Retrieve a file

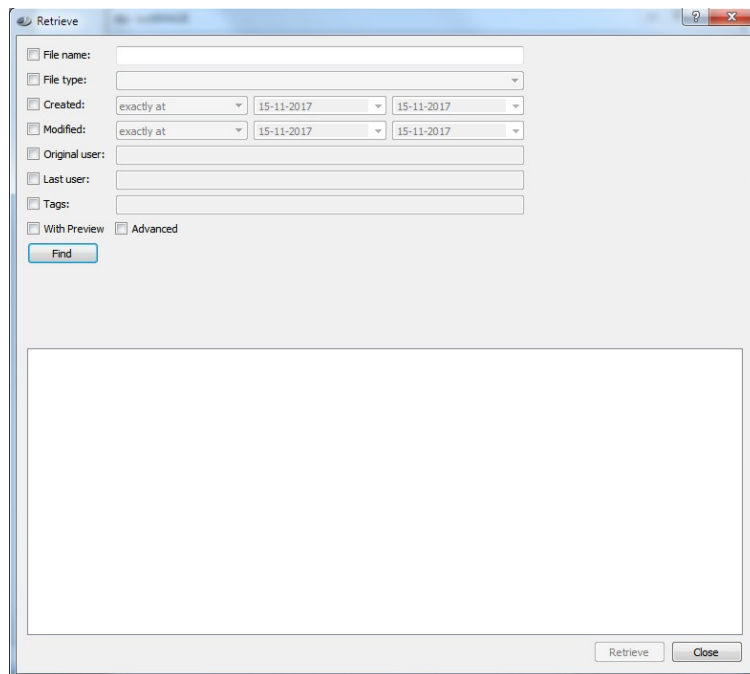
A file can be retrieved using the JustSEARCH module. This requires that the JustSEARCH Server is running and can be accessed from your computer.

It could be that the JustSEARCH Server is temporarily deactivated by a manager. In this case you will not be able to retrieve a file.



*Illustration 119: JustSEARCH Server deactivated warning when retrieving.*

This can happen if the system has been disabled for users because of maintenance. You can try to retrieve if you know that the system will become available very soon. Otherwise you can wait several minutes and try again.



*Illustration 120: The Retrieve dialog box.*

## How to Retrieve a file

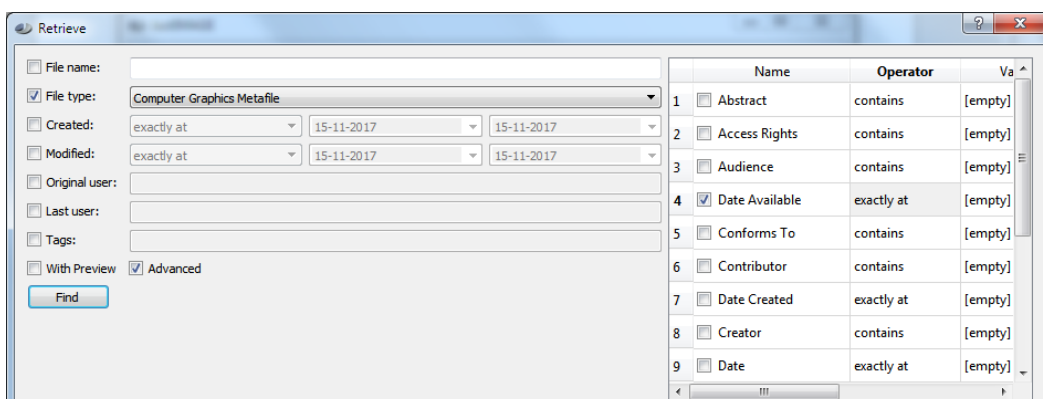
*Viewer:* Montage composition files cannot be retrieved. All the other default File Types can be retrieved.

*JustSEARCH manager:* The Retrieve functionality is for testing purposes only. No actual file will be retrieved. You can always access the Retrieve dialog box regardless whether the JustSEARCH Server is active or not.

*JustEDIT:* JustMONTAGE composition files cannot be retrieved. All the other default File Types can be retrieved. Note that the File Type query filter is by default set to CGM. You must either set it to another File Type or disable the query filter if this is not what you intended.

*JustMONTAGE:* Only JustMONTAGE composition files can be retrieved. Note that the File Type query filter is already set to help you with this.

The Retrieve dialog box is roughly divided into two sections. The top half allows you to set one or more queries while the bottom half shows the result of the query. Note that, by default, only the basic queries are shown. Check the Advanced check box to bring up the advanced table with attributes.



*Illustration 121: The advanced attribute query table.*

Set the check box before the query to select the query. You must set at least one query. Queries are inner joins which means that if you have multiple queries everything must match the individual query.

The query value you can enter depends on the type of query. Any text field must match the complete text string. You can use wildcards. Use '\*' to match zero or more characters while '?' will match a single character. For example if you enter `ben*.cgm`, this will match `benseis.cgm`.

Dates can be entered either as an exact date, any date before the given date, any date after the given date or between two dates. Note that dates are stored in the system as UTC date/times to prevent ambivalence.

Original user and Last user are ids that are stored by the system. You can use wildcards for these as well.

Tags are comma-separated values that were entered when a file was stored.

Advanced attribute queries can be used by selecting the check box before the name. Depending on the attribute type you can set an operator. The query value should be entered in the first Value column by double-clicking the value cell. The second Value column is usually disabled except when a range selection is made for numbers or a date.

Select With Preview if you want a small preview image in the result of the search query. Having a preview does slow down the query. Press Find to start the query. This can take a second to a couple of seconds depending on the complexity of the query and whether you had selected With Preview.

	Original User	Last Modified Time	Last User	Size	Abstract	Access Rights	Au
2199	manager	2-1-2008 9:10	manager	10548560	Precision Visuals, Inc (PVI) V5.10 *** PVI_FORMAT		
2200	manager	20-12-2006 10:26	manager	1322218	Justcroft: Batch Montage (1.021)		
2201	manager	20-12-2006 10:26	manager	2064052	Justcroft: Batch Montage (1.021)		
2202	manager	20-12-2006 10:26	manager	2063942	Justcroft: Batch Montage (1.013)		
2203	manager	20-12-2006 10:26	manager	1322144	Justcroft: Batch Montage (1.021)		
2204	manager	11-2-2010 12:49	manager	3158	"ProfileId:Model","ColourClass:colour","Source:Jus...		
2205	manager	11-2-2010 12:30	manager	40338	"ProfileId:Model","ColourClass:colour","Source:Jus...		
2206	manager	20-12-2006 10:26	manager	1322226	Justcroft: Batch Montage (1.021)		
2207	manager	20-12-2006 10:26	manager	1322114	Justcroft: Batch Montage (1.021)		

*Illustration 122: An example query result when doing a retrieve.*

Select the file you want to load and press Retrieve to load it in the main interface. Note that the dialog box will stay open until you select Close<sup>5</sup>.

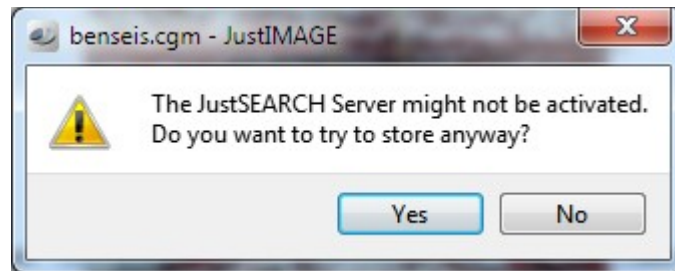
<sup>5</sup> Except in the JustSEARCH manager. The dialog box will close in this interface.



## How to Store a file

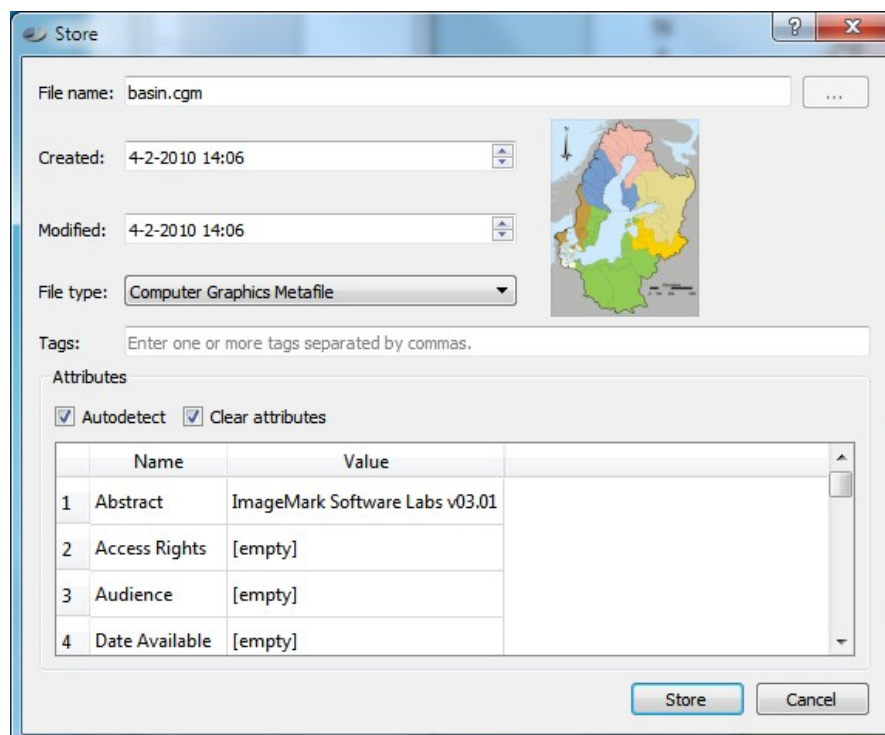
A file can be stored using the JustSEARCH module. This requires that the JustSEARCH Server is running and can be accessed from your computer.

It could be that the JustSEARCH Server is temporarily deactivated by a manager. In this case you will not be able to store a file.



*Illustration 123: JustSEARCH Server deactivated warning when storing.*

This can happen if the system has been disabled for users because of maintenance. You can try to store if you know that the system will become available very soon. Otherwise you can wait several minutes and try again.



*Illustration 124: The Store dialog box.*

## How to Store a file

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*JustSEARCH manager:* You can always store a file regardless if the JustSEARCH Server is active or not. You will also be able to browse for a file and store from within the Store dialog box.

*Viewer/JustEDIT:* The store option only becomes available if you have loaded a file in the interface. Edit will ask first to save the file if necessary.

*JustMONTAGE:* The montage composition will be stored if you use this command. Montage will first ask to save the composition if necessary.

A preview image will be generated and shown if possible. This preview will be stored in the JustSEARCH Server for use when doing a retrieve.

You can enter one or more attribute values. The built-in attribute scanner will try to determine any attribute it can find if the “autodetect” option is enabled.

*JustSEARCH manager:* The “clear attributes” option will clear any attribute values when you browse for another file.

Double-click on the Value field to enter an attribute value. You will be able to enter either text, numbers, date/time or you have to select a fixed value from a combo-box depending on the attribute type. Either press the Enter key or click outside the field to finish entering the value. Use the Escape key to cancel the input. The JustSEARCH manager may have made some fields mandatory. In this case you must enter a value.

Tags are comma-separated values you can associate with the file you are storing.

Once you are finished setting the attribute values you can press Store to start the storing process. Note that you will be asked to enter any mandatory fields for which you may have forgotten to give a value.

## Movie

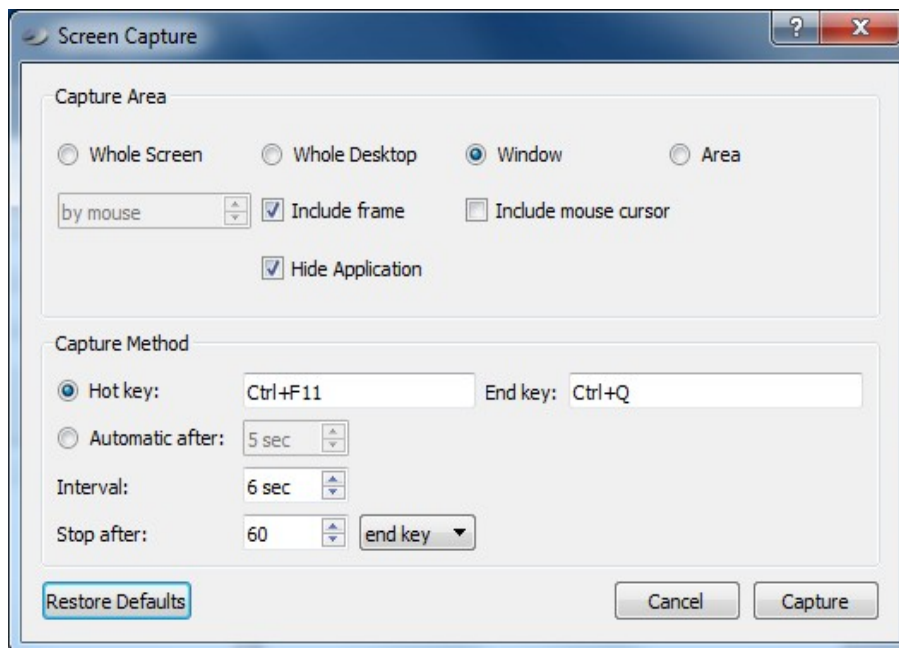
The Movie tool allows you to make time-lap screen captures and turn them into an AVI movie. You can start the Movie tool in the JustIMAGE 5.4 User Interface by selecting the “Movie...” command from the `Tools` menu.

### Creating Screen Captures

There are two ways of making screen captures: built-in and external. The easier way is to use the built-in screen capture facility.

#### Built-in Screen Capture

Select from within the `Edit` menu “Make Screen Captures...”. The Screen Capture dialog box will appear.



*Illustration 125: The Movie Screen Capture Tool.*

You can specify the “Interval” of the captures (1–300 seconds). Using the “Hot key” will initiate the first capture. Subsequent captures will happen automatically.

Taking screen captures will stop depending on the selected stop method:

- end key: Pressing the End key will stop the screen capture process.
- captures: The screen capture process will stop after the given number of screen

## Movie

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captures.

- seconds: The screen capture process will stop after the given number of seconds. This timing will only start after the first capture.
- minutes: The screen capture process will stop after the given number of minutes. This timing will only start after the first capture.

Press the End key if you want to stop the multi capture earlier.

Press `Capture` to start the capture process. Press `Cancel` to close the Screen Capture dialog box without making a capture.

## Using an External Screen Capture

You may already have a tool with which you can make screen captures. Make sure that you set as output format either PNG or JPEG.

You can use the stand-alone screen capture tool `justcapt` that is part of JustIMAGE 5.4.

Select the “Multi Capture” option. You can specify the “Interval” of the captures (1–300 seconds). Using the “Hot key” will initiate the first capture. Subsequent captures will happen automatically.

Taking screen captures will stop depending on the selected stop method:

- end key: Pressing the End key will stop the screen capture process.
- captures: The screen capture process will stop after the given number of screen captures.
- seconds: The screen capture process will stop after the given number of seconds. This timing will only start after the first capture.
- minutes: The screen capture process will stop after the given number of minutes. This timing will only start after the first capture.

Press the End key if you want to stop the multi capture earlier.

Select as format of the generated files “PNG”.

A screen capture will result in a file that is generated in the “Output Directory”. The default is to use your “My Pictures” directory. Use the browse button to change the directory.

You can set a fixed output file name, use some time stamp pattern or a sequence number pattern. The default is: `justcapt_%Y%m%d_%H%M%S`. This will generate a file name with a time stamp, such as `justcapt_20071115_123620`. Pattern syntax: `%d` = day, `%m` = month, `%Y` = year, `%H` = hour, `%M` = minutes, `%S` = seconds, `%%` = %, `#` = sequence number digit. Use



multiple # to specify a sequence number. For example, ### will result in the sequence 001, 002, etc. The file name extension is automatically added depending on the selected output format.

Press **Capture** to start the capture. Press **Close** to abort.

After the captures have been made, select within **Movie Edit** ⇒ **Add Folder** to select a folder containing screen captures. Alternatively you can add one or more files with **Add Files**. The files will appear in the list.

## Creating a Movie

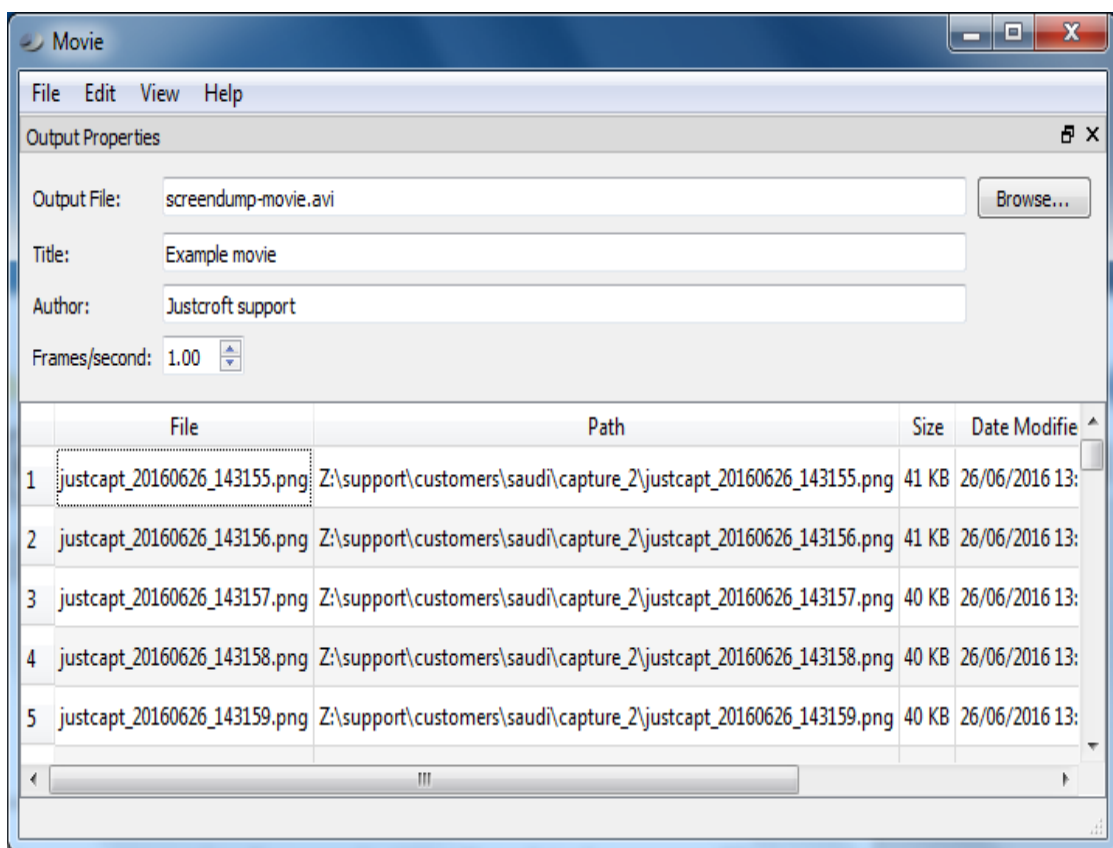


Illustration 126: The Movie GUI.

Selected files can be moved up or moved down the list one step at the time. To delete files either select **Edit** ⇒ **Delete** or press the **Delete** key. It is possible to remove successive input files that are identical with the option **Edit** ⇒ **Remove same files**.

You must specify an "Output File". Currently only AVI containers are allowed and the video codec is MS MPEG4 V2. (msmpeg4v2) The "Title" and "Author" fields are optional. Some

## Movie

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video tools will show this information.

Frames per second (“Frames/second”) controls the speed the movie plays. The default is 1.0 which means that each screen shot is shown for 1 second. More frames/second increases the speed, while lower values slows down the speed.

Select `File` ⇒ `Create Movie` to create the movie.

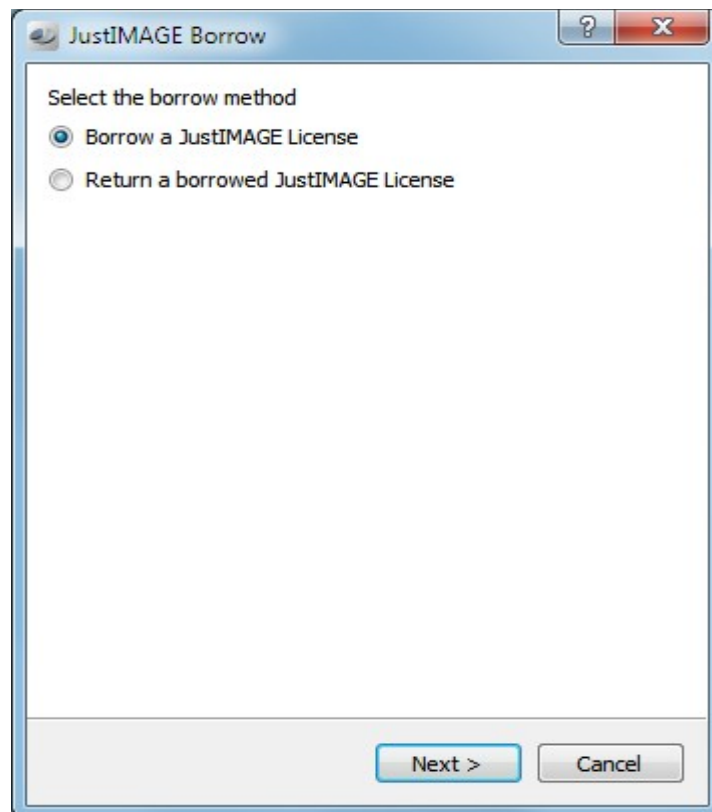
## FlexNet Borrow

The FlexNet borrow tool allows you to borrow a JustIMAGE FlexNet license. The advantage of a license borrow is that you can use the JustIMAGE program without having access to the license server.

Start the FlexNet borrow tool in the JustIMAGE 5.4 User Interface by selecting the “FlexNet borrow...” command from the Help menu.

**Important:** The FlexNet borrow tool is only available in the FlexNet version of JustIMAGE 5.4. Support for borrow must be enabled in the FlexNet license as well.

### ***Borrow a License***



*Illustration 127: FlexNet license borrow wizard*

To borrow a JustIMAGE FlexNet license select “Borrow a JustIMAGE License” and press “Next”.

Select the borrow period. The borrow period ends at the specified time of the selected day.

	ma	di	wo	do	vr	sa	su
18	30	1	2	3	4	5	6
19	7	8	9	10	11	12	13
20	14	15	16	17	18	19	20
21	21	22	23	24	25	26	27
22	28	29	30	31	1	2	3
23	4	5	6	7	8	9	10

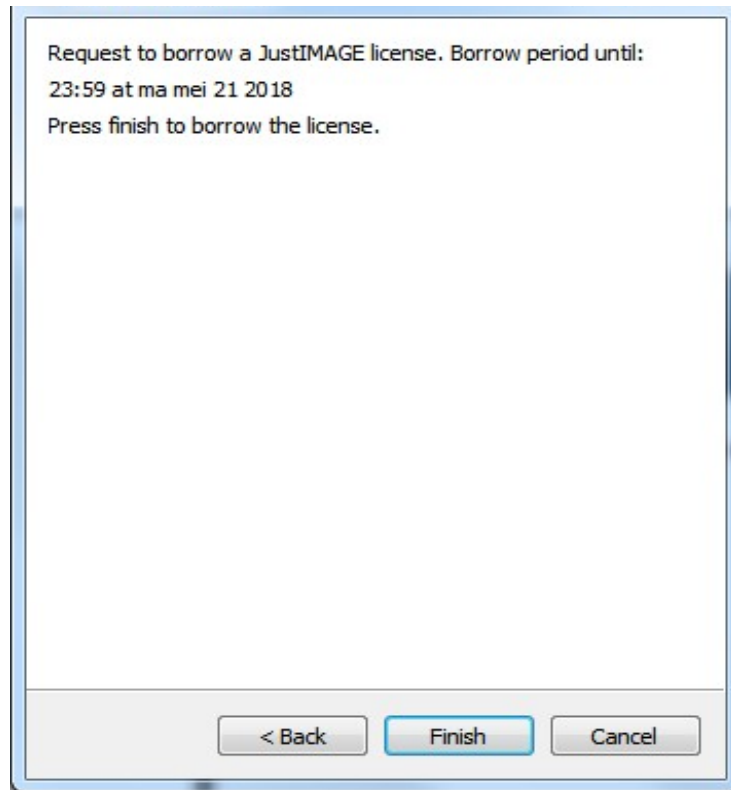
Time 23:59

< Back   Next >   Cancel

*Illustration 128: FlexNet borrow end date selection*

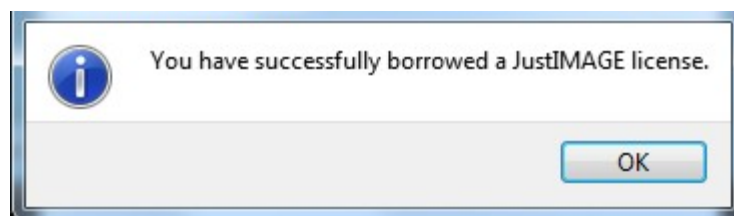
Optionally, you can specify the end time as well but by default the license will be valid until the end of the selected day.

Select the end date of the borrow period and press “Next” to continue.



*Illustration 129: FlexNet borrow summary.*

After selecting the date you have to press "Finish" to borrow a license. When the license is successfully borrowed the following pop-up appears.



*Illustration 130: FlexNet borrow successful.*

When the borrow of a license fails an error will pop up.

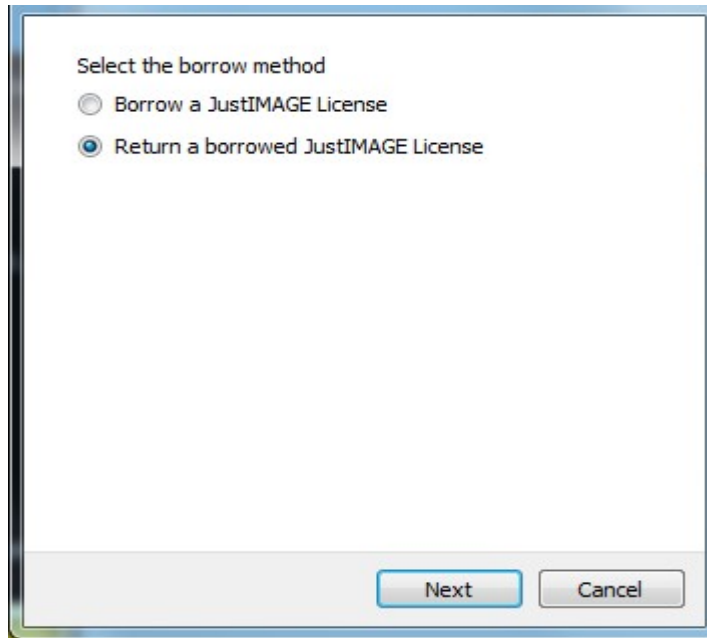
### ***Return a borrowed license***

If you no longer need the borrowed JustIMAGE 5.4 license, and the license period is not over, you can return the license. You need to have a working network connection with the license server in order to return the license.

## FlexNet Borrow

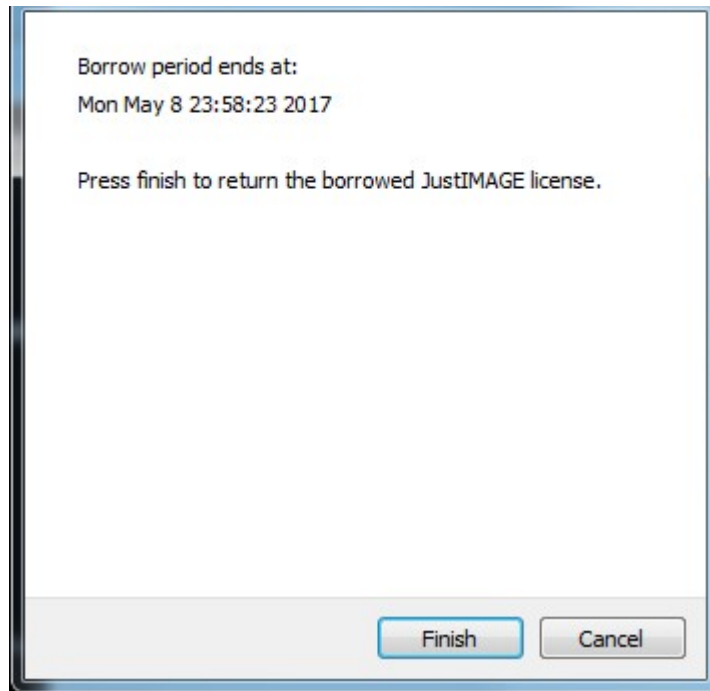
---

Start the FlexNet borrow tool and select “Return a borrowed JustIMAGE license” and press “Next”.



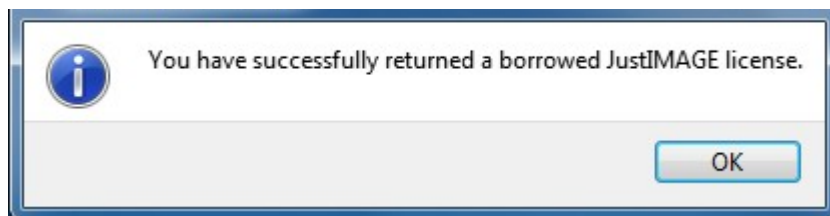
*Illustration 131: FlexNet license borrow: return a license.*

The wizard will show the information about the current borrow period and when you press “Finish” the license will be returned.



*Illustration 132: Return a borrowed license*

When the license could successfully be returned the following pop-up appears.



*Illustration 133: Successful return of a borrowed license.*

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