

Bitmap Viewer 24.03

User Guide

04 - 2024

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2. About the Bitmap Viewer

What is the Bitmap Viewer?

The Bitmap Viewer is a powerful quality control tool that will help you verify the content and printability of your screened files before you make plates from them.

Supported Operating Systems

The Bitmap Viewer is available both for Windows and Mac operating systems. Please consult the [Bitmap Viewer system requirements](#) for more details.

Licensing Requirements

The Bitmap Viewer is protected by a license.



Note:

- If you have a **DotSpy** license, you can run the Bitmap Viewer on Mac using this license.
- You need to have either the **Esko Network License Manager** or the **Esko Local License Manager** installed on your computer **before** you can install and run the Bitmap Viewer on it. Your License Manager application must have the same version number as the Bitmap Viewer version you want to install.

Installing the Bitmap Viewer

- On a **Windows** operating system, you typically install the Bitmap Viewer with the **Imaging Engine installation DVD** (as part of your Imaging Engine installation). Please see [the Imaging Engine documentation](#) for more details.

The Bitmap Viewer is also available as a standalone download from MySoftware.esko.com. Make sure you first download and install the **Network License Manager** (of the same version as the Bitmap Viewer you want to install).

- On a **Mac** operating system, you can also use the **Imaging Engine installation DVD** but you have to install it manually:
 1. Go to the `BitmapViewer_XX_Installer` folder under the DVD root folder (where `XX` is the major version number, for example `21`).
 2. Install the **License Manager** (`Esko Network License Manager XX.XX.dmg` - where `XX.XX` is the full version number, for example `21.11`).
 3. Go to your `Applications` folder and open `Esko Network License Manager/ReadMe.rtf`.
 4. Follow the instructions in the `ReadMe` file to start the **Esko License Server** and activate the **Bitmap Viewer license**.
 5. Install the **Bitmap Viewer** (`Esko Bitmap Viewer.dmg`).

Alternatively, you can download the Bitmap Viewer from MySoftware.esko.com:

1. Download and install the **Network License Manager** (of the same version as the Bitmap Viewer you want to install).
2. Go to your `Applications` folder and open `Esko Network License Manager/ReadMe.rtf`.

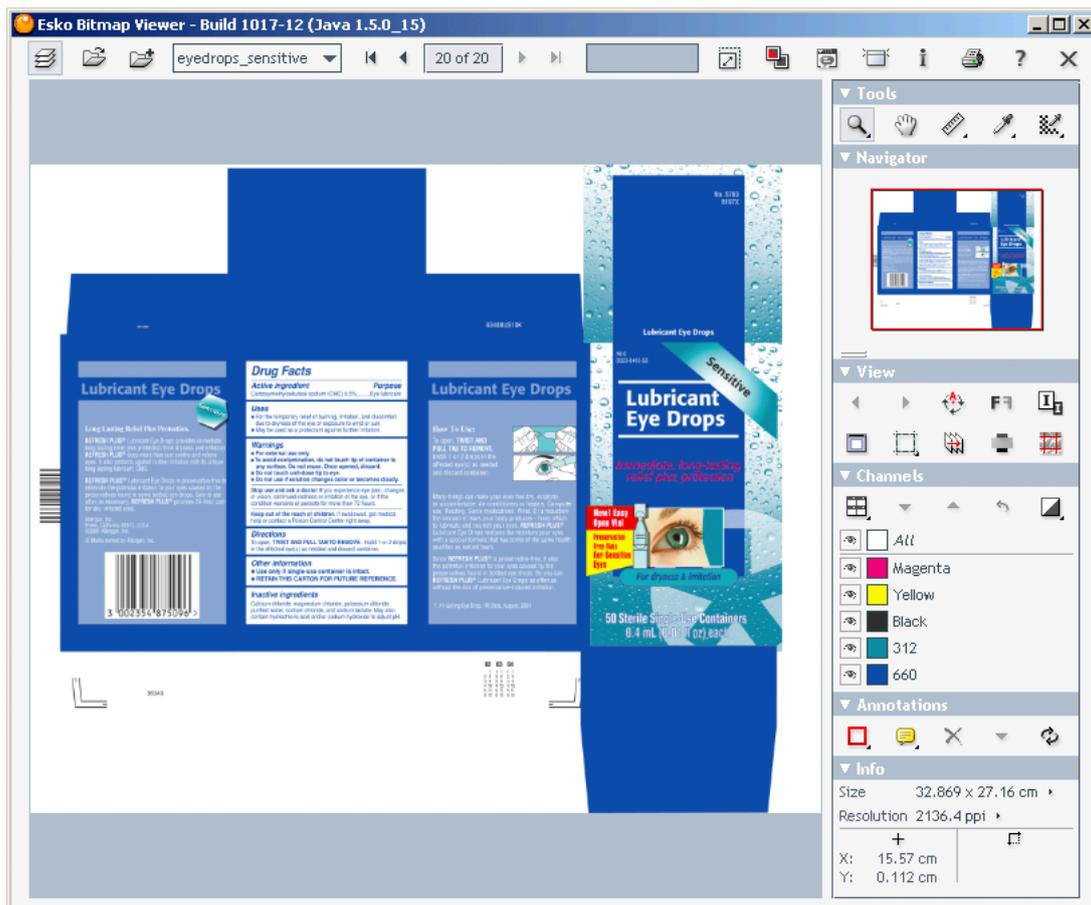
3. Follow the instructions in the `ReadMe` file to start the **Esko License Server** and activate the **Bitmap Viewer license**.
4. Download and install the **Bitmap Viewer**.



Note: Every time you reboot your Mac, make sure you restart the Esko License Server before launching the Bitmap Viewer.

3. The User Interface

3.1. The Bitmap Viewer User Interface

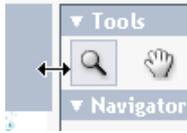


The viewer user interface consists of the following parts:

- In the top is the File Selection bar. See [The File Selection Bar](#) on page 8 .
- To the left there is the main image display window
- To the right there is the Tool Panel. See [The Tool Panels](#) on page 13

Change the position of the divider between the image display and the tools panel

The position of the divider between these two part can be dragged to give one or the other part more space.



The preferred divider position (the width of the tools panel) will be remembered and restored for each user.

3.2. The File Selection Bar



The file selection bar allows you to select files and display file related information.

Automatically merge files upon open

Some images are contained in more than one file. Each file contains one channel of the image. If you only select one of these files, then this button will determine if the rest of the file set will be opened or not.

If this button is selected, then the whole file set will be opened. If it is not selected then only the selected file/files will be opened.



Note: When opening sets of FlexRip LEN or TIFF files by selecting a single file, you may experience that not all files are automatically recognized as belonging to the set. The on-recognized files are likely to contain user defined ("Designer") channels. The viewer can assist you in adding these channels to the build in channel color palette so that merging will be done correctly for these files also. This is described below.

Open file

This button will open a dialog enabling you to select the file that you want to open.

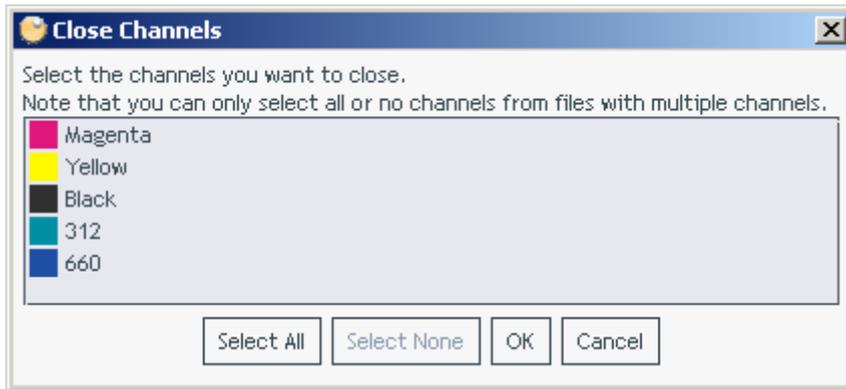
Shortcut: You can use Ctrl-O as shortcut for this button.

Alternatively you can drag a file from Windows Explorer to the image area or the file name list to open the file.

Add/remove channels to/from image

If you press this button, you will be able of adding more channels to the image. This could be the case, if you did not use the automatic merge function, or if the channel files were named in an unusual manner, so that the automatic merge function did not recognize the channel files. It might also be used if you want to replace one channel in an image with a different image file.

If you hold down the Ctrl-key when this button is pressed, you will get the a dialog where you can select one ore more of the already open channels to be close before opening new channels.



Shortcut: You can use Ctrl-Shift-0 as shortcut for this button.

You can drag one or more image files from Windows Explorer to this button to add them to the current image. With the Ctrl key held down, dropped images will still be added, but first after selecting which existing channels to close.

Current image and list of recently used images

This shows the names of the files containing the current image. If you press on the arrow at the end, you will see a list of recently used images, which you can easily open.

You can an image files from Windows Explorer to this button to open it. If you drag more than one image file, then the other image files will be added to the list of recently used images, making it easy to navigate through them.

Navigate through the list of recently used images

You can use these buttons to navigate through the list of recently used images. The first arrow will open the oldest image in the list. The next arrow will open the previous image. The third arrow will open the next image and the last arrow will open the last image.

In addition you can enter the number of the image that you want to open.

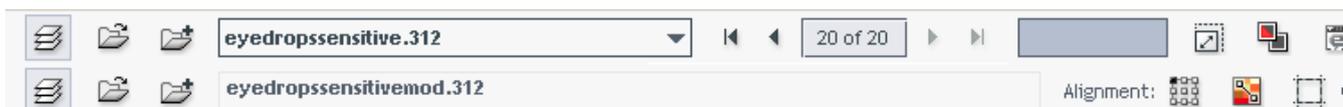
File open progress indicator

This indicator allows you to see, if the image has been completely opened or if the viewer still guesses how parts of the image does look. It behaves much like a progress indicator, but it is more a quality

indicator. If the box is almost full like:  , then at least one line of the image has been opened for each line visible. If the box is less full, then some of the lines have been interpolated from the other lines. When the whole image has been loaded the box will be full.

File difference view

This button allows you to examine the differences between two images; typically between the current and a reference version of the same project. See [Compare Documents](#) on page 64. It will add another line to the file selection panel, so that it will look like:



The second line will have some buttons that are similar to the first line (automatic merge, open file, add channels), but work on the reference version of the image. In addition there are buttons for controlling the alignment of the two versions.



Note: The version currently displayed will have the text of its file name field shown in bold. When comparing the two opened versions, both file name fields are shown in bold.

Show Annotation list

This button toggles the display of the **Annotation list panel** on or off. See [Annotate](#) on page 24

Show Top Tools panel

This button toggles the display of the **Top tools panel** on or off. See [The Top Tools Panel](#) on page 16

Basic alignment

This button will allow you to select the alignment of the two versions of the image: Any combination of top, left, right, button, and center.



In addition you can also use the ruler tool to align the images.

- Set the start point of the ruler tool on a point of the reference version of the image.
- Set the end point on the corresponding point of the current version of the image
- Select "Align from Ruler" in the align list

This will automatically calculate the needed offset for aligning the two versions of the image correctly.

Automatic alignment

The remaining two options will use image details in the two compared images to try and increase the precision of the alignment:

- Auto Align from Ruler is used the same way as the Align from Ruler tool. If the details of the alignment points match, the viewer will be able to increase the precision.

- Auto Align does not use the ruler, but rather the currently visible view of the two compared images to attempt an automatic alignment. Using this tool repeatedly with one or more zoom-ins can be a very convenient and quick way to align two images.



For convenience, a separate tool button  is available to perform Auto Align operation without having to open the Alignment popup menu.

Clicking this button will perform an Auto Align from Ruler if a ruler selection is active, otherwise a Auto Align (from view) operation.

Alignment reference

With this toggle button selected, alignment will be relative to the trim-boxes of the compared images, otherwise alignment will be relative to the image boundaries. If no trim-box information is included in the image XMP, the image boundary is used in place of the trim-box.



Note: The current FlexRip version does not include the trim-box in the Digital Film XMP data, but this addition is planned for a future release of the Esko software.

Alignment offset

This allows you to enter any alignment offset which is added to the basic alignment.

File information

This button opens the **file information window**. See [The File Information Window](#) on page 16

Print

This button opens the **print dialog**. See [Print from the Viewer](#) on page 37.

Help

This button opens these help pages.

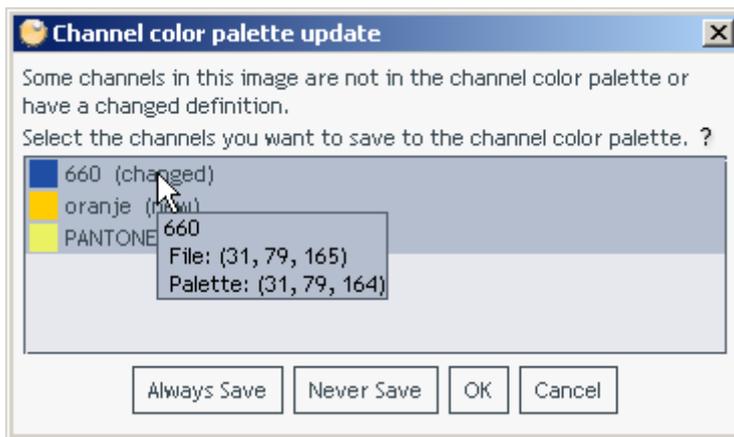
Close file

This button will close the current image. This will free memory allocated for the image and it will stop loading of the image, if that has not yet completed.

Updating the channel color palette

The channel color palette is used to link channel names and channel display color information. In addition to being selectable from the display color drop-down list in the **Channel colors dialog**, this information is used when recognizing ink information encoded in file names during opening and automatic merging of TIFF and LEN files. See

There are two situations where the channel color palette can be updated. The first is when opening files that have a channel color declaration that is either not in the channel color palette or where the display color definition is changed compare to what is already in the palette. The channel color declaration could be either in form of a XMP section in an Esko TIFF or LEN file or in a DCS master file plate definition section. When this situation occurs, you will be prompted to update the channels color palette immediately after opening the files.

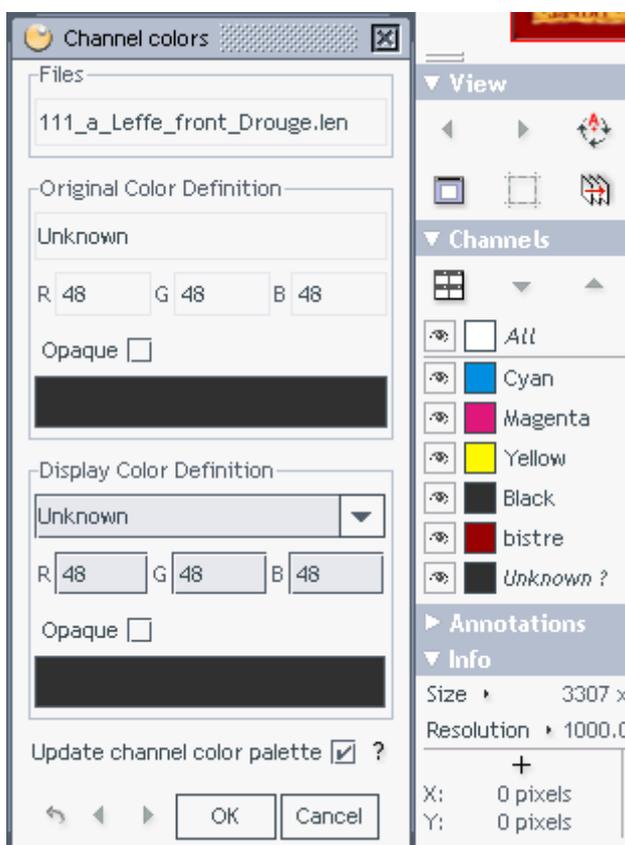


In the Channel color palette update dialog, a text in parentheses after a channel name indicates whether the channel was in the palette already: (changed) or not: (new). Tool tip texts can be used to quickly inspect the details of a change.

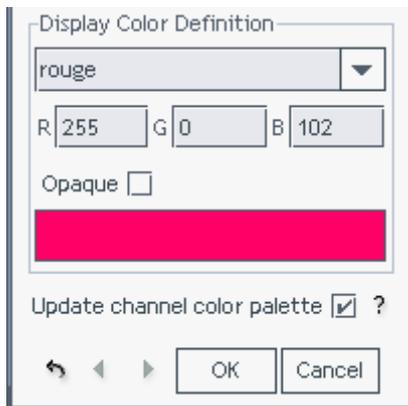


Note: To prevent this dialog from showing for all channel changes, you can press the Always Save or the Never Save button to select a default behavior that lasts until the application is restarted.

If one or more of the opened files do not contain any useful color definitions, the viewer will mark the channel color as *Unknown* with a black display color and automatically open the **Channel colors dialog** for the undefined channel colors. See [The Channel colors dialog](#)



Here you can define the Unknown colors one by one by typing in the correct color name (here "rouge" - the "D" (for "Designer") can be left out), and enter or select a RGB equivalent.



If you leave the "Update channel color palette" check-box checked when pressing OK, you will again see the "Channel color palette update" dialog where you can select to save the defined colors for later use in file merging.



Keyboard shortcuts

You can use the **Page Up** and **Page Down** keys to go to next or previous document (or page) and the **Home** and **End** keys to go to first and last document (or page). Only enabled if multiple documents (or pages) are opened in the viewer at the same time.

Press the **Ctrl-S** key to toggle between current and reference version of the document. Only active if more than one version with view data exist.

3.3. The Tool Panels

The tool panels consist of six panels that can be individually opened or collapsed.

To open a collapsed panel, click the arrow symbol to the left of the panel header.



The hidden controls will now become visible and the arrow symbol will point downwards to indicate that the panel is open.



Tools



Tools contains a button for each tool mode. See also:

1. [Zoom](#) on page 20
2. [Scroll](#) on page 21
3. [Measure distances and angles](#) on page 22
4. [Measure Ink Coverage or Count Pixels](#) on page 49
5. [Measure Screen Ruling and Angle](#) on page 47

Navigator

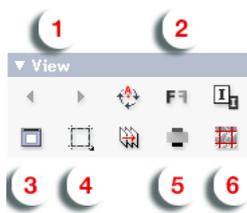


Navigator is a thumbnail display of the image that gives overview of the current view position as well as help to navigate the image quickly. See also [Scroll](#) on page 21

The navigator image size is limited by the width of the tool panel and the height of the navigation panel. The image width is limited in such a way that rotating the image will not require the panel to be extended. The height of the navigator panel can be changed by dragging the horizontal double line symbol below the navigator image.



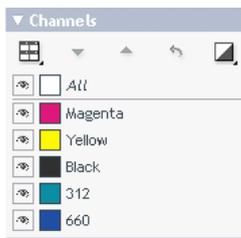
View



View contains the majority of tools for navigation and view manipulation. See also:

1. [Navigate Views](#) on page 19
2. [Rotate, mirror and invert](#) on page 19
3. [Change Background color](#) on page 35
4. [Show Margin Lines](#) on page 36
5. [Check Trapping and Overprint](#) on page 51
6. [Check for Seamless Printing](#) on page 52

Channels



Channels contains a list of all channels in the image as well as controls to **manipulate channel definition** and order. It also holds controls for controlling **comparison** with a previous version of the image.

See also:

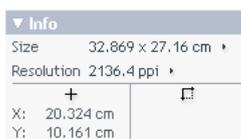
- [Work with Channels](#) on page 41
- [Compare Documents](#) on page 64

Annotate



Annotations holds the controls used to create, delete or navigate annotations. See [Annotate](#) on page 24

The Info Panel



Info displays sizes and resolutions and allows you to switch resolution unit.

See [The Info Panel](#) on page 17

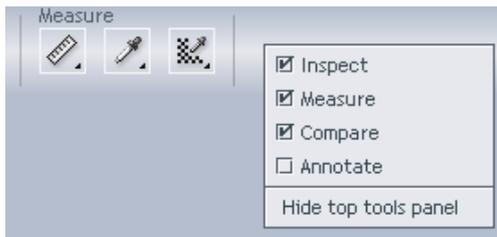
3.4. The Top Tools Panel

The Top Tools panel offers an alternative way of organizing some of the main viewer tools in an easy accessible position in the top center of the application window.



The Show/Hide Top Tools panel button  at the right side of the viewer top bar is used to show or hide the panel.

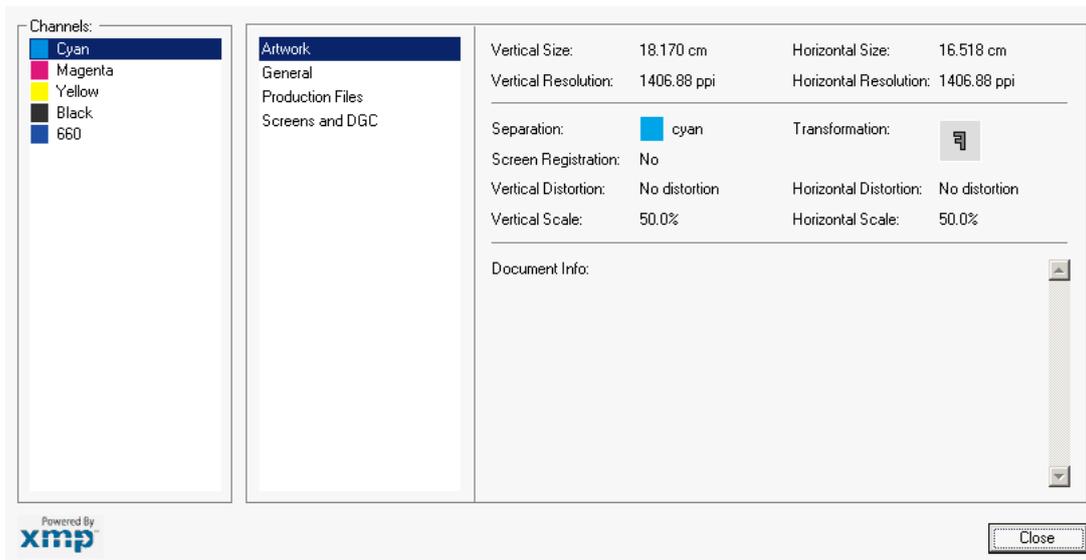
To configure what tools are shown in the top tools panel, right-click the background of the toolbar itself.



The tools you deselect here go back to the tools panel on the right.

To further simplify the viewer tools display, the button on the far right of the top tools panel  can be used to hide the main right side tools panel.

3.5. The File Information Window



This window displays various information about the image files.

The window is divided into three columns. The first allows you to select the channel. The second allows you to select various groups of information. The groups shown depend upon which information is contained in the image files. If the image files contain XMP information, then there will be more information groups, otherwise there will only be the "Artwork" and "General" groups.

3.6. The Info Panel



The info panel displays information about the opened image, the mouse position, and readouts from marquee or ruler selection.

- The image **size** is displayed.
- The image **resolution** is displayed. When the horizontal (X) and vertical (Y) resolutions differ, both will be displayed with a comma between. When images with different resolutions are compared, both images resolutions are shown with a slash (/) between the two parts
- **Mouse position** is displayed. This is the distance from the top-left corner of the image to the position below the cursor.



Note: Tool-tips on the size and resolution readouts helps in the interpretation of the readout.

| ▼ Info | |
|------------|-------------------------------|
| Size | 28.498 x 43.0 cm ▶ |
| Resolution | (1270.0, 35.0 / 1270.0) ppi ▶ |
| + | |
| X: | 28.498 cm |
| Y: | 5.712 cm |

(Resolution X, Resolution Current / Previous Y) ppi

The **tool readout section** will show either:

- marquee selection top-left corner **X, Y** and dimensions **W, H**

| ☐ | |
|----|-----------|
| X: | 177.17 mm |
| Y: | 108.09 mm |
| W: | 11.7 mm |
| H: | 12.1 mm |

- ruler tool distance **D** and angle **A** as well dimensions **W, H** of the spanned rectangle

| ☐ | |
|----|-----------|
| D: | 135.49 mm |
| A: | -24.87° |
| W: | 122.92 mm |
| H: | 56.98 mm |

To change the current units

Click on one of the small triangles to change the units. A small pop-up window will show up allowing you to select the desired unit.

You can select units independently for sizes and resolutions.

| ▼ Info | |
|------------|---------------------|
| Size | 32.869 x 27.16 cm ▶ |
| Resolution | 2136.4 pp ▶ |
| + | |
| X: | 23.67 cm |
| Y: | 7.911 cm |

| |
|------|
| ppmm |
| ppcm |
| ppi |

| | |
|----|----------|
| X: | 0.288 cm |
| Y: | 0.301 cm |

Keyboard shortcuts

Use **Ctrl-U** to quickly toggle between the different size units

Use **Ctrl-Shift-U** to quickly toggle between the different resolution units.

4. How to:

4.1. Navigate Views

If you click on the **Back** button , you will immediately switch back to the previous view. This means that the last operation (zoom, scroll, rotate, mirror, invert, color change etc) will be undone.

You will then be able of redoing the operation by clicking on the **Forward** button .

You can use the **F2** key to undo the last operation and **Shift-F2** to redo the operation again.

4.2. Rotate, mirror and invert

Some images are rotated, mirrored or inverted. You can easily change the view, so that the image is shown correctly:

Rotate image



Press the rotate button  and the image will rotate 90 degrees clockwise for each click. Hold down the Shift key to reverse the rotate direction.

Mirror image



Press the mirror button  and the image will be mirrored.

View from back



An alternative to mirroring is view from back: Press the view from back button  and the image will be mirrored *and* the sequence of the channels will be reversed.

This is very useful when viewing images that are printed on the back of transparent materials.

Invert image



Press the invert button  and the image will be inverted.

Keyboard shortcuts

Ctrl-Shift-+ (plus key) will rotate the image 90 degrees clockwise.

Ctrl-Shift-- (minus key) will rotate the image 90 degrees counter clockwise.

Ctrl-M mirrors the current view horizontally.

You can use the **F2** key to undo the last operation and **Shift-F2** to redo the operation again.

4.3. Zoom

Use the right mouse button:

You can always use the right mouse button to zoom into the image. This works no matter which tool you have selected.

If you do a simple click, you will zoom in by a factor of two at the location where you clicked.

If you hold down the right button and drag the mouse, you will zoom in on the area, that you select. By "drag-zooming" you can zoom in by more than a factor of 2 in one operation.

If you hold down the Ctrl button and click with the right mouse button, you will zoom out by a factor of 2.

Use the Zoom tool mode:



In Zoom tool mode, you can do almost the same operations with the left button on the mouse as you can with the right mouse button (see above):

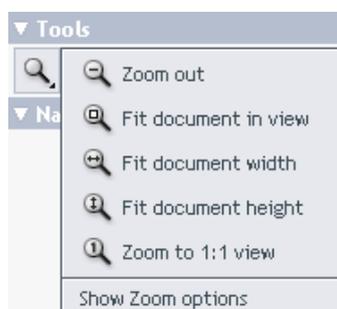
- Simple click: Zoom in by a factor of 2
- Click-drag: Zoom in on the area
- Ctrl-click: Zoom out by a factor of 2

This functionality is almost equivalent to the functionality in PhotoShop.

Double clicking on the zoom tool button itself will zoom the image, or - if a selection has been made - that selection, to the window

Additional Zoom tools

If you right-click the Zoom tool button, you will get a list of additional zoom options.



In addition to some instant zoom functions, you have the ability to toggle the display of the optional Zoom tool panel on or off, by selecting **tShow Zoom options**.

When selected, the tools panel will get 5 extra zoom tools for easy access.



1. Zoom out. Zoom out by a factor of 2.
2. Fit document in view. Adapt zoom factor to show the entire image in the current window.
3. Fit document width. Adapt zoom factor to exactly fit the width of the image in the current window.
4. Fit document height. Adapt zoom factor to exactly fit the height of the image in the current window.
5. Zoom to 1:1 view. For images with a defined resolution, zoom to the the image resolution; otherwise zoom to 72dpi.

Photoshop style keyboard shortcuts:

If you hold down the Ctrl button and press the '+' key, you will zoom into the image.

If you hold down the Ctrl button and press the '-' key, you will zoom out

PackEdge style keyboard shortcuts:

If you press F5 you will zoom into the image.

If you press F6 you will zoom out.

If you press F8 you will temporarily switch to the Zoom tool to allow one drag zoom selection.

If you press F9 you will zoom the image to fit to the window.

4.4. Scroll

Use the Hand tool mode

In Hand tool mode, you can drag the image by holding down the left mouse button and moving the mouse.

You can temporarily switch to the Hand tool mode by holding down the space button.

This functionality is equivalent to the functionality in PhotoShop.

Navigator Window

You can use the Navigator Window to scroll the image:



If you click anywhere in the Navigator window, then the main window will be centered around that position in the image. If you hold down the mouse button, you can move the red selection box in the Navigator Window and the main window will scroll accordingly.

Scroll bars

If you have zoomed into an image, you will see scrollbars along the right and bottom edges of the main window.

You can point the mouse on one of the scroll bar sliders, hold down the left mouse button and move the mouse left or right to scroll the image.

You can click on the arrow keys at the end of each scroll bar to scroll the image by a small displacement.

You can click on the gray background area of the scroll bar to scroll the image by the size of one display.

PackEdge style keyboard shortcuts

If you press F7 you will temporarily switch to the Hand tool to allow one pan operation.

4.5. Measure distances and angles

If you want to measure the distance and angle between two points follow this guide:

- Select the **Ruler** tool: 
- Click on the first point
- Move to the second point. Note that you can use all zoom and scroll functions while you are navigating to the first or second point. See [Zoom](#) on page 20 and [Scroll](#) on page 21
- Click on the second point.

You will then see the result in the info panel:

| ▼ Info | |
|--------------|---|
| Size ▶ | 314.43 x 257.33 mm |
| Resolution ▶ | (84.11, 84.11) ppm |
| | +  |
| X: 245.21 mm | D: 36.8 mm |
| Y: 147.54 mm | A: -33.09° |
| | W: 30.83 mm |
| | H: 20.09 mm |

The D value is the distance between the points

The A value is the angle of the line connecting the two points

The W value is the horizontal distance between the points (width)

The H value is the vertical distance between the points (height)

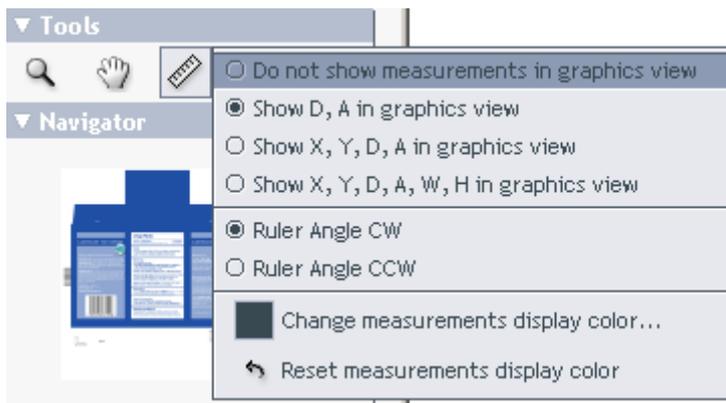
You can change the unit of the D, W and H values with the pop-up-window, open by clicking on the small triangle next to the Size label.

Using an alternative selection style to measure accurately to view borders:

As an alternative to the two-click procedure, the ruler tool also supports a click-drag-release functionality. This is particularly useful when selecting towards the border of the view area where clicking accurately can be difficult. With the click-drag-release selection, you can simply release the mouse outside the view area to snap accurately to the border.

Changing the ruler image view readout:

In addition to the readout in the Info panel, ruler tool supports readout next to the ruler endpoints in the image view. This functionality can be toggled on/off and the details to be shown can be configured by right-clicking the Ruler tool button.



The Ruler tool button right-click popup menu also allows changing the Ruler angle readout between being CW (clockwise i.e. positive downwards) and CCW (counter-clockwise i.e. positive upwards).

4.6. Measure heights and widths

Use the  caliper tool to measure the height or width of multiple, typically aligned, (text) objects. You can measure freely or you can use fixed preset sizes.

Click  to activate it and start measuring using the last chosen style.

Right-click the tool to choose a style or to manage fixed presets.

- **Free Selection** (default)
 - Click on a first point of measurement.
 - Move or drag to the second point.



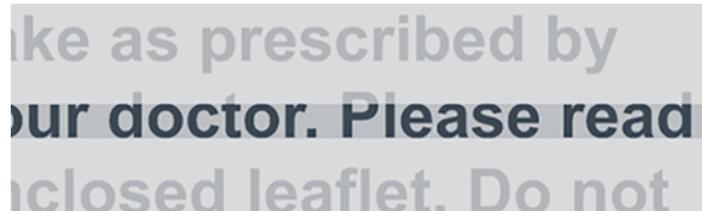
Tip: You can use all zoom and scroll functions while you are navigating to the first or second point.

- Click on the second point. While moving the mouse, a pop-up displays the current gap size and the X / Y coordinate.



Tip: As an alternative to the two-click procedure, this tool also offers a click-drag-release selection. This is useful when you want to select the border of the view area, where clicking accurately can be difficult. With the click-drag-release selection, you can release the mouse outside the view area to snap accurately to that border.

When releasing the mouse, the area outside the selection will be dimmed to highlight the selected area:



Also, the **Info** panel shows the **Width** or **Height**, in .

To adjust the width or height, simply drag the lines that appeared. Click between the lines to move the caliper selection (both lines).

- Right-click  and choose **Save** if you want to use this gap size later.

- **Fixed selection**

This style offers a fixed gap size. Use this when you want to check (text) objects versus a pre-determined size.

- Right-click  and choose **Change** if you see no list of gap sizes yet.
- Use the dialog to **Add** or **Delete** gap sizes. Define their orientation as either **Height** or **Width**. Click **OK** to close.
- Start using the selected gap size.



Tip: The caliper selection will disappear if you switch to another tool. You can also clear it explicitly by choosing **Clear** in the tool's right-click menu.

4.7. Annotate

The viewer contains a number of annotation tools that you can find in the annotation tool panel:

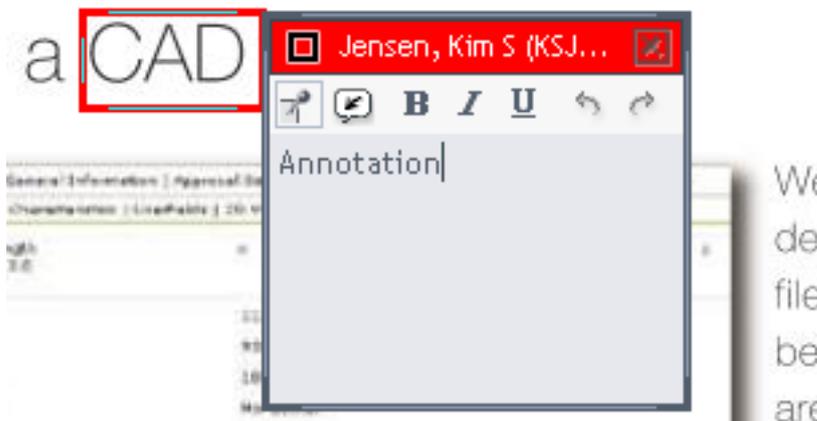


Add an annotation

Click on either the Rectangle annotation tool button  or the Note annotation tool button .

- The  button allows you to select an area on the image by dragging the mouse while the left mouse button is pressed.
- The  button allows you to select a single point on the image, by pointing and clicking with the mouse.

As soon as you have selected a position or an area for your annotation, a window shows up, allowing you to enter a comment for your annotation:



Note that the caption contains the user name of the author and date of creation.

You can enter any text and use the **B** *I* U buttons to emphasize parts of the text with bold, italic or underlined and you can use the   buttons to undo and redo any edits you make to the text.

If you move the window, then the new position will be stored and used next time someone will read the annotation.

You can also change the position of the annotation marking: Use the mouse to drag the position marker or the border lines of the annotation area marker to the new position. You can only do this, if you are the original author of the annotation.

Enable more annotation types

Right-click the first button in the Annotations tools panel to get a list of additional annotation options. To change the button tool to represent a different annotation tool, select one of the following annotation tool options:

- Rectangle annotation tool. Selecting the  button allows you to select an area on the image by dragging the mouse while the left mouse button is pressed.
- Oval annotation tool. Selecting the  button allows you to select an oval area on the image by dragging the mouse while the left mouse button is pressed.

-  Freehand annotation tool. Selecting the  button allows you to make a freehand marking on the image by dragging the mouse while keeping the left mouse button pressed.
-  Line annotation tool. Selecting the  button allows you to make a line marking on the image by dragging the mouse while the left mouse button is pressed.
-  Arrow annotation tool. Selecting the  button allows you to select an arrow marking on the image by dragging the mouse while the left mouse button is pressed. The arrow head will be at the place where the mouse is released.
-  Highlight annotation tool. Selecting the  button allows you to select a highlight area (transparent yellow overprint) on the image by dragging the mouse while the left mouse button is pressed.

The tool will stay available, until another tool is selected.

Show or hide advanced annotation tools

To permanently show more annotation tools, right-click the first button in the Annotations tools panel to get a list of additional annotation options. Select the "Show advanced annotation tools" option to show all available annotation tools with a tool button for each tool.



If the "advanced annotation tools" are already shown, they can be hidden by righting the first tool button in the Annotations tools panel and select the "Hide advanced annotation tools" option.



As a result, the extra annotation tools are hidden.

Modifying an existing annotation

You can only modify an annotation if you are yourself the author of the annotation.

The different annotation types can be modified in different ways.

-  Note annotations  can be moved by dragging them with the mouse. An arrow cursor will be shown when the cursor is in a position where the note marker can be moved.
-  Rectangle annotations  can be modified by dragging either one of the 4 lines or one of the 4 corners. A resize cursor will be shown when the cursor is in a position where the shape of the rectangle can be modified.
-  Oval annotations  can be modified in two ways. You can change the shape by dragging the top, top-left, left, bottom-left, bottom, bottom-right, right, or top-right point of the oval or you can move the oval annotation without changing its shape or size by dragging at any other point on the oval. An

arrow cursor will be shown when the mouse drag will do a move the oval. If a mouse drag will change the shape of the oval, a resize cursor will be shown.

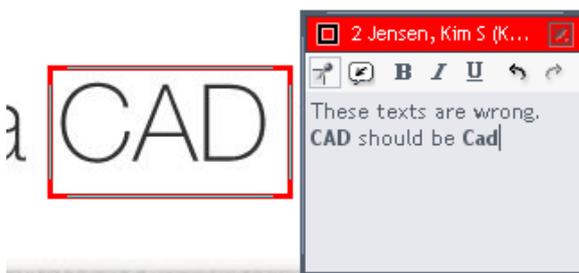
- Freehand annotations  can be moved (not changed) by dragging any point of the drawn shape. An arrow cursor will be shown when the mouse drag will move the annotation.
- Line annotations  can be modified by dragging one of the two end-points. The line can also be moved by dragging the line on any other point. An arrow cursor will be shown when the mouse drag will move the annotation. If a mouse drag will move one of the end-points, a resize cursor will be shown.
- Arrow annotations  can be modified by dragging one of the two end-points. The arrow can also be moved by dragging the line on any other point. An arrow cursor will be shown when the mouse drag will move the annotation. If a mouse drag will move one of the end-points, a resize cursor will be shown.
- Highlight annotations  can be modified in the same way as Rectangle annotations.

Add a linked annotation

You can add multiple annotation areas or to a single annotation note. Do this by selecting the annotation you want to extend. While keeping the Shift key pressed, select the corresponding tool

button  for Rectangle or  for Note. This will make the annotation and the tool active at the same time. While keeping the Shift key pressed add a new annotation area or position. You will see that no new window is created for the linked part. You can add as many linked areas/positions to an annotation as you want.

*the combination of **CAD** and **g***

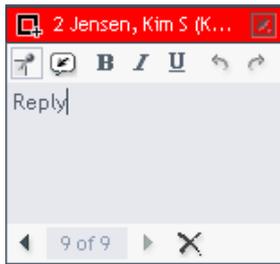


Delete an annotation

You can use the  button to delete an annotation. This is only possible if you are the author of the annotation.

Reply to an annotation

You can add a reply to any annotation by clicking on the  button. The annotation window changes its layout slightly:



In the bottom of the window, you can find controls for navigation through the initial annotation

comment and all the replies to it. There is also a  button for deleting a comment. You can only delete comments that you have entered, not comments from other authors. However all replies to that comment are also deleted, no matter who the author is.

Hiding and opening annotations

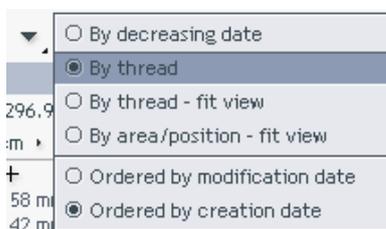
By default each annotation window stays open. You can hide the window by clicking on the  button in the upper right corner of the annotation window or by clicking on the  button and selecting a different annotation. You can open an annotation window again clicking on the annotations position. You can then force the window to stay open by clicking on the  button. Otherwise the window will automatically close again when a different annotation is selected.

Step through annotations

You can step through all annotations on the image by using the button . By default it will step through each annotation and after the last annotation it will go back to the first annotation again. When an annotation is selected, its comment window will automatically be shown.

You can step backwards through the list of annotations by holding down the Shift key while clicking on the  button.

You can select between four different ways of stepping through the annotations by right-clicking the  button:



- **by decreasing modification date:** This mode will step through all annotation comments and replies sorted according to their modification dates.
- **by thread:** This is the default mode. Will step through each annotation, but not through the replies to the annotations.
- **by thread - fit view:** Same as "by thread", but will zoom the view to fit the selected annotation.
- **by area/position - fit view:** Will step through all positions/areas of linked annotation and zoom the view to fit the selected annotation part.

- **By decreasing date:** This mode will step through all annotation comments and replies sorted according to their modification dates.
- **By thread:** This is the default mode. Will step through each annotation, but not through the replies to the annotations.
- **By thread - fit view:** Same as "by thread", but will zoom the view to fit the selected annotation.
- **By area/position - fit view:** Will step through all positions/areas of linked annotation and zoom the view to fit the selected annotation part.

In this dialog you can also select you preferred ordering of the annotations:

- **Ordered by modification date:** This is the default. All annotation comments and replies are sorted according to their modification dates.
- **Ordered by creation date:** All annotation comments and replies are sorted according to their creation dates.

Save annotations to server

Your annotations are not immediately sent to the server. You have to click on the  button in the Annotations panel to save your annotations.

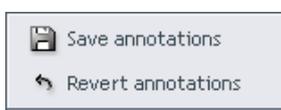
Clicking on the  or  button (same button, but with different icon depending on whether you have changed the annotations since last save/read will also read any new annotations made by other users, so that you will be able of viewing the latest annotations.



Note: You can discard your changes and reload the last saved version by holding down the

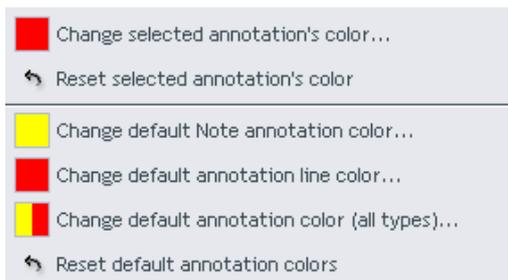
Shift key and click the  button.

As an alternative, you can right-click an annotation window, an annotation marker, or one of the two annotation tool buttons to Update, Save, or Revert (discard changes and reload) the annotations.



Changing annotation colors

Right-click an annotation window, an annotation marker or one of the two annotation tool buttons to change annotation colors.



You can make the following choices:

- **Change selected annotation color:** allows you to change the color of just the selected annotation. A standard color selector dialog will allow you to choose the color.
- **Reset selected annotation color:** Reapply the default colors (red for Rectangle annotation and yellow for Note annotations) for the selected annotation.
- **Change default Note annotation color:** Change the color for all future create Note annotations. After selecting a new color you will be prompted whether you want to apply the change to already created Note annotations in the existing document or not.
- **Change default annotation line color:** Change the color for all future create Rectangle annotations. After selecting a new color you will be prompted whether you want to apply the change to already created Rectangle annotations in the existing document or not.
- **Change default annotation color (all types):** Change the color for all future create annotations regardless of type. After selecting a new color you will be prompted whether you want to apply the change to already created annotations in the existing document or not.
- **Reset default annotation colors:** Reapply the default colors (red for Rectangle annotation and yellow for Note annotations). You will be prompted whether you want to apply the change to already created annotations in the existing document or not.



Note: Remember that you have to save  annotations to make the color changes permanent. Your default annotation colors will be remember only if you close the viewer by clicking the  button in the upper left corner of the viewer.

Annotation list panel

The Annotation list panel provides an alternative view on the created annotations.



The annotations are showed order by the modification dates of the annotation threads with the last modified last. Replies are showed immediately after the annotation they link to. Multiple replies to the same annotation are ordered by modification date with the earliest on top.

Show/hide the Annotation list panel

Click the  button in the top panel to show the Annotation list panel if it is not already visible. It will by default appear in the left side of the application window.

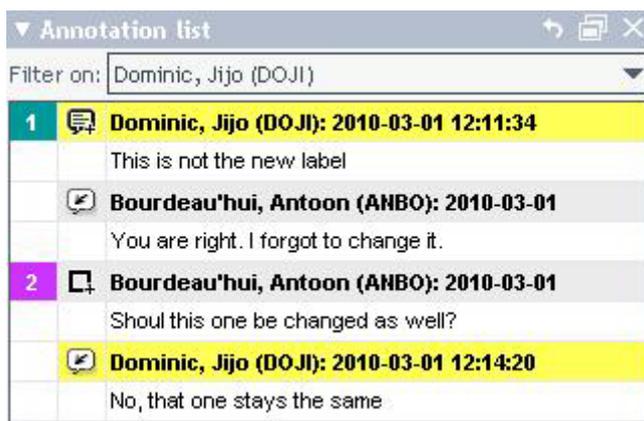
To hide the Annotation list panel, click the  button again or click the close button  in the top of the panel itself.

Filter annotations by author in the Annotation list panel

The combo-box above the annotation list contains the entry “All annotations” and one entry for each author that has contributed to the annotations.

By selecting the name of a single author, only annotation threads where this author has written the original annotation or made a reply are shown.

The header of the entries made by the filtered user is highlighted in the annotation list.



When printing an annotation overview, all annotations are included, but if a specific user is selected in the annotation list user filter, the entries made by this user will be highlighted.

Select annotations in the Annotation list panel

Clicking an annotation in the annotation list will select this annotation and make its popup window visible and selected.

If the checkbox “Fit view to selected annotation” is checked, selecting a new annotation by clicking it in the annotation list will adjust the image view to make the best possible view of the affected area. Double-clicking an annotation in the annotation list will have the same effect regardless of the state of the “Fit view to selected annotation” checkbox.

Limit annotation display in the image view

If the checkbox “Show only selected annotation” is checked, only the selected annotation and its popup window will be displayed in the image view.

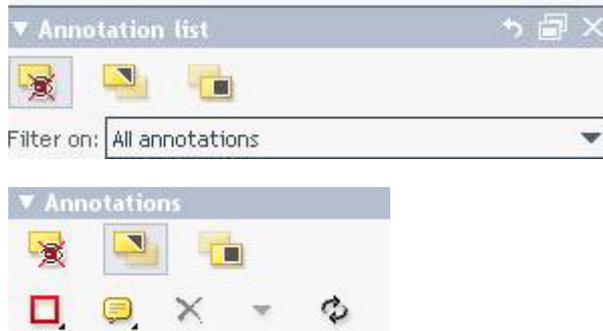
If the checkbox “Show only selected annotation” is not checked, all annotation areas will be displayed in the image view and an additional checkbox, “Show only selected annotation popup” will be enabled.

If this checkbox is checked, all annotation popups are hidden (regardless of their pinning state) except that belonging to the selected annotation.

Show annotations in compare mode

When comparing two documents, no annotations are shown by default, but it is possible to turn on display of annotations from either the current or the reference version.

In the top part of both the Annotation list panel and the Annotations tools panel, three buttons will occur whenever the viewer is in compare mode.



The three options are the same in both locations:

- Show no annotations
- Show annotations from current version
- Show annotations from reference version

Note that, also in compare mode, only annotations in the current version are (potentially) editable.

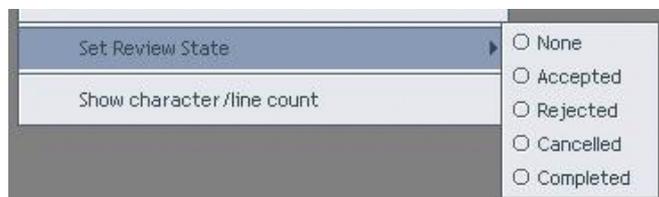
Annotation review state

All annotations, including replies, can have a review state for each user with access to the document.

Add/change a review state

To add a review state or change, right-click the annotation item by right-clicking either in the annotation text window, on the annotation mark in the image view, or on the corresponding item in the annotation list.

In the context sensitive menu that is displayed, select the menu item "Set Review State" and choose one of the options in the sub-menu.



When the review state is set, the "Set Review State" context menu item will have an icon that indicates the current state.

Save the annotations to save the review state.

Once saved, you cannot delete the review state, but there is an item "None" that can be selected to indicate that no review state is intended.

Review states can be changed, but only if annotations are editable and only by the user who originally added it.

A timestamp is added to the review state with the date and time of the last change.

View review state

In addition to viewing the review state for the current user in the annotation context menu, the review state for the current and all other users are visible in the annotation list panel. Review states are added in the list, right after the annotation they refer to. There can be multiple review states for each annotation, but as mentioned above, only one for each user.

| | | |
|---|--------------------------|---|
| 3 | <input type="checkbox"/> | Dominic, Jijo (DOJI): 2010-02-08 |
| | | Remove the logo |
| | ✘ | Jensen, Kim (KSJ): 2010-02-22 |
| | | Review state: Rejected set by Jensen, Kim (KSJ) |
| 4 | <input type="checkbox"/> | Dominic, Jijo (DOJI): 2010-02-08 |
| | | Please change the color |
| | ✔ | Jensen, Kim (KSJ): 2010-02-22 |
| | | Review state: Accepted set by Jensen, Kim (KSJ) |

Filter annotations by review state

The combo-box above the annotation list contains the entry "All annotations", one entry for each author that has contributed to the annotations, and a list of entries that will filter the list based on review states:

- **Any Review State** will select all annotation threads where there is a review state on the main annotation or any of the replies made.
- **NOT Any Review State** will select all annotation threads where there is no review state on the main annotation.
- **Accepted** will select all annotation threads where the review state Accepted is put on the main annotation or any of the replies made.
- **NOT Accepted** will select all annotation threads where there is no review state of type Accepted on the main annotation.
- **Rejected** will select all annotation threads where the review state Rejected is put on the main annotation or any of the replies made.
- **NOT Rejected** will select all annotation threads where there is no review state of type Rejected on the main annotation.
- **Cancelled** will select all annotation threads where the review state Cancelled is put on the main annotation or any of the replies made.
- **NOT Cancelled** will select all annotation threads where there is no review state of type Cancelled on the main annotation.
- **Completed** will select all annotation threads where the review state Completed is put on the main annotation or any of the replies made.
- **NOT Completed** will select all annotation threads where there is no review state of type Completed on the main annotation.
- **None** will select all annotation threads where the review state None is put on the main annotation or any of the replies made.
- **NOT None** will select all annotation threads where there is no review state of type None on the main annotation.

The header of the entries matching the selected review state criteria is highlighted in the annotation list.

Lock annotation filter selection

You can lock or unlock the annotation filter selection by clicking the "pin" button to the left of the filter selector.

If the selection is locked, the selected filter will stay active also after changing active document or even restarting the viewer.

The lock button will not prevent you from change the filter selection manually.

Create or edit a custom annotation filter

In addition to using the default filter in the filter selector, you can create your own annotation filter optimized for your needs.

To select the custom filter, open the filter selector and select the "Custom..." item in the bottom of the list.

If you have no custom filter configured, the "Edit Custom annotation filter" dialog will open automatically.

In this dialog, you can combine the basic author and review state filters described above into a more complex filter with the individual parts chained with a logical AND operator.

To configure a filter part, select the relevant filter type with the type dropdown in top.

You can choose between the two simple types "Review State" and "Author" and the more selective filter type "Review Author and State".

"Review Author and State" allow you to specify both a user and a review state at once hence narrowing the filter to annotations where a specific user submitted a specific review state e.g. those that the current user put on Completed.

In the list of options, you can select one or more items to be matched. The authors available are limited to those having submitted an annotation entry in the currently selected document plus any authors saved with the current custom filter.

You can invert the effect by selecting "is NOT" rather than the default "is" in the selector to the right of the type selector.

To add a new filter part, click the "Add" button in the right side of the dialog.

To delete a filter part, click the "Delete" button under the filter part. You cannot delete the first filter part.

In the lower part of the filter dialog, you can see the logical expression for the current custom filter settings.

The annotation list of the current document will change to show at all times the effect of the filter changes.

When your filter is set up as you want it, click the Save button to close the dialog and activate the custom filter.

You can edit a selected custom filter, by clicking the edit button next to the annotation filter selector. This button is only available when the "Custom..." filter is selected.

Duplicate annotation

To allow easily making a variation (e.g. correction) of an annotation made by another user, the "Duplicate selected annotation" function can be used.

Right-click the annotation to be duplicated to open the annotation context menu and select the item "Duplicate selected annotation".

Duplicate selected annotation

The currently selected annotation (and any linked annotations) is duplicated into a new annotation thread with the current user as author and the date set to current time. The text will be taken from the currently selected item being either the original annotation text or the text of a reply. The color will be the current user's default color for the annotation's type.

Create New Global Rectangle annotation

To help creating a Rectangle annotation that accurately covers the entire image area, use the "New Global Rectangle" function.

Right-click an annotation or an annotation tool button to open the annotation context menu and select the "New Global Rectangle" menu item:

 New Global Rectangle

The created Rectangle annotation does not differ from other Rectangle annotations. Area, color and text can be edited as required.

Show/hide character and line count

Tracking the exact number of characters and lines that are put in an annotation is useful when using annotations to devise new texts for a document changed request.

To enable constant tracking of character and line count in the text window of a selected annotation, enable the "Show character/line count" option by selecting it in the annotation context menu.

Right-click an annotation or an annotation tool button to open the annotation context menu:

Show character /line count

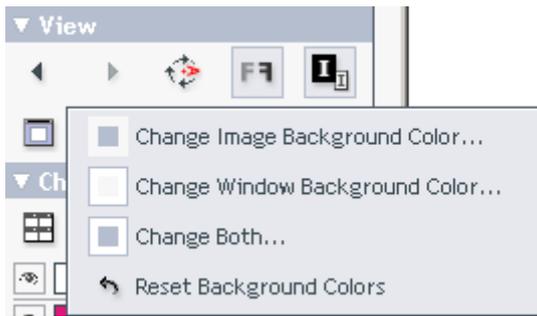
The character and line counts appear in the lower part of the annotation text window for the currently selected annotation.



Choose "Hide character/line count" in the annotation context menu to turn this option off again.

4.8. Change Background color

Right mouse click the background button  and you will get a small menu:



This will allow you to change the background color of the image area and/or of the area outside the image area.

This can be useful for evaluating an image that is to be printed on a material that has a different color than white.



The background color values can subsequently be changed in the Select Background Color panel that is only visible whenever the use of non-standard background colors is activated.

To turn off the use of non-standard background colors without changing the selected colors, simply press the background button  again.

4.9. Show Margin Lines

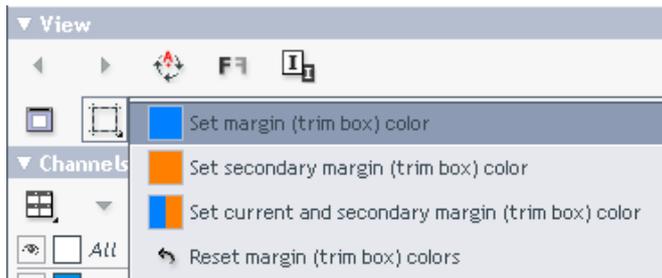
Press the margin button  to toggle the margin (trim box) lines on off.

If the image contains trim box information, the trim box will be shown as colored margin lines on top of the image, otherwise the margin lines will follow the image outline (media box).

If you right-click the margin button, you can:

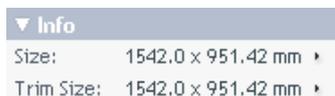
- Hide the margins,
- Show the margins on the current page,
- Show the margins on both pages in reader spread mode.

You also have the following options to change the color of the margin line drawn:



- Set margin (trim box) color, sets the margin color of the primary (current) image.
- Set secondary margin (trim box) color, sets the margin color of the secondary (previous) image.
- Set current and secondary margin (trim box) color, sets the margin color of both the primary and the secondary (previous) image.
- Reset margin (trim box) color, reverts to the viewers default margin color settings.

The trim box size is shown as a separate field, Trim Size in the Info panel.



4.10. Print from the Viewer

The viewer contains a print function that conveniently allows you to print views and image details.

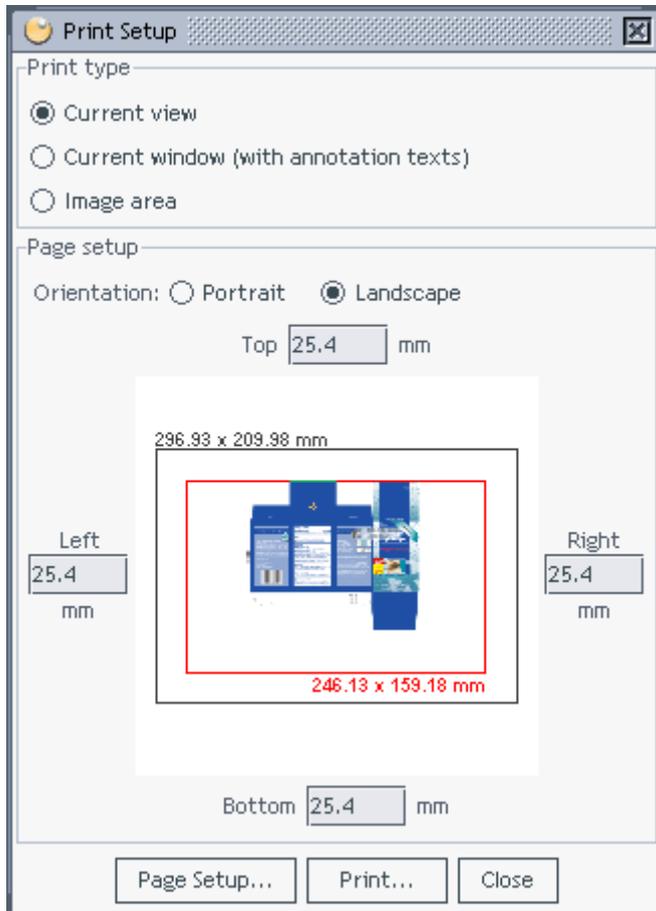


Note: This function is not intended for high-resolution printing or proofing purposes. The output will always be non-color managed display RGB and can not be used to judge colors accurately. Instead, use a dedicated proofing application like Esko-Graphics FlexProof for high quality color managed proofing. Also note that using the viewer print function to print large areas or at high resolutions can lead to out-of-memory errors.

The printer to use is selected in standard print dialog presented when pressing the Print button. Page formats can be changed by pressing the Page Setup button.

The viewer print function can be configured to print just the area of interest whether this is small image detail, a ruler readout, or a complex comparison view.

To configure the print function click the print button  in the top of the viewer window.



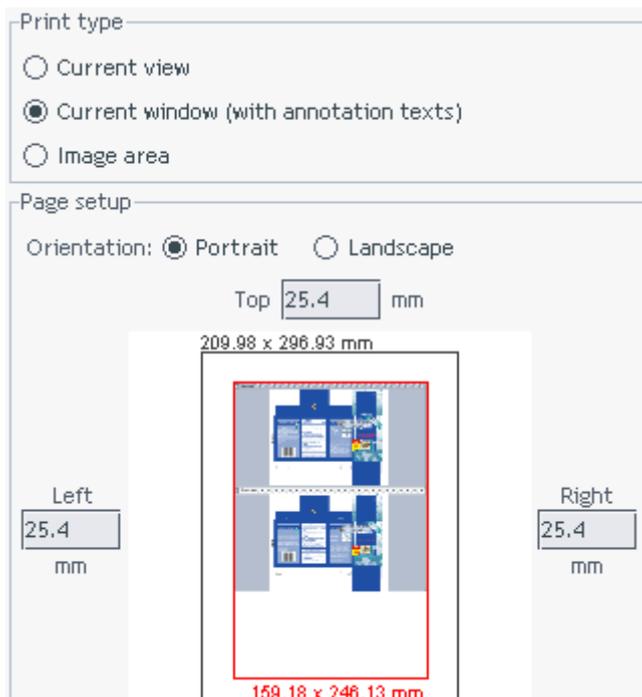
Note: While the print dialog is open, you can still use the view shortcuts for selecting different channels, panning or zooming. This presents a convenient way of printing a series of related views, e.g. one channel at a time or the same detail at different zooms.

Print the current view

To print the current view only, select current view as print type. In this print mode, only the main image view (in case of active split view mode) will be printed without borders, but including any visible ruler endpoint, ruler readouts, and any visible annotation indicators (annotation rectangles and note icons, but not the floating annotation text boxes).

Print the current window

To print the complete image window as it appears on the screen, select current view as print type. In this print mode, all image windows (in case of active split view mode) will be printed complete with borders and any visible background color. In addition to any visible ruler endpoint, ruler readouts, and any visible annotation indicators, visible annotation text boxes will also be printed.



Print a selected image area

If you need to print a specific part of the document in a well defined scaling and/or a specific resolution you can select the image area print type.

The resolution is specified in the current resolution units (can be toggled with the Ctrl-Shift-U shortcut).

You can choose the area to print: entire image, current view (if not the entire image), or current selection (if a selection was made before opening the dialog).

You can either specify the magnification yourself or check the Resize to fit page size check-box to use as much of the printable area as possible.

If only some of the channels are selected, you can also choose between printing just these or all channels.

If the area you have specified exceed the printable area of the currently selected page format, you can see this indicated with a red color in the page preview thumbnail image.

Print type

- Current view
- Current window (with annotation texts)
- Image area

Parameters

Resolution: dpi

Resize to fit page size

Magnification: %

Area to print:

- Entire image
- Current view area
- Current selection

Channels to print:

- All channels
- Selected channels

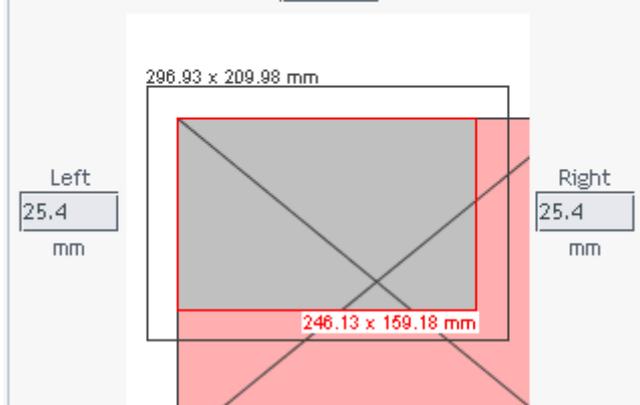
Page setup

Orientation: Portrait Landscape

Top mm

Left mm

Right mm



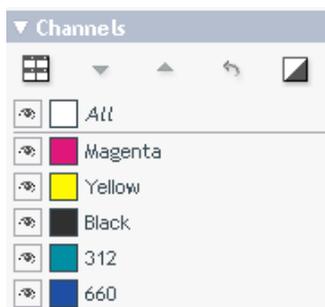
The diagram illustrates the page layout for printing. It shows a page with a total width of 296.93 mm and a height of 209.98 mm. The image area is 246.13 mm wide and 159.18 mm high. The margins are 25.4 mm on the left and right sides. The image area is highlighted with a red border, and the page is oriented in landscape mode.

5. Work with Graphics

5.1. Work with Channels

Display Channels

The channels panel shows the channels used in the current image:



The channel name and two square buttons are shown for each channel. The first button is a checkbox, with an eye indicating that the channel is active. The second button is a colored square indicating the color of the channel. At the top two square buttons with the label "All" is shown, representing all of the channels.

You can hide each channel by clicking on the eye button.

If you click on "All", then all channels will be shown.

Display a single channel

If you click with the right mouse button on one of the eye buttons, then all other channels will be deselected.

If all channels are already shown and you click on "All", then only the first channel will be shown.

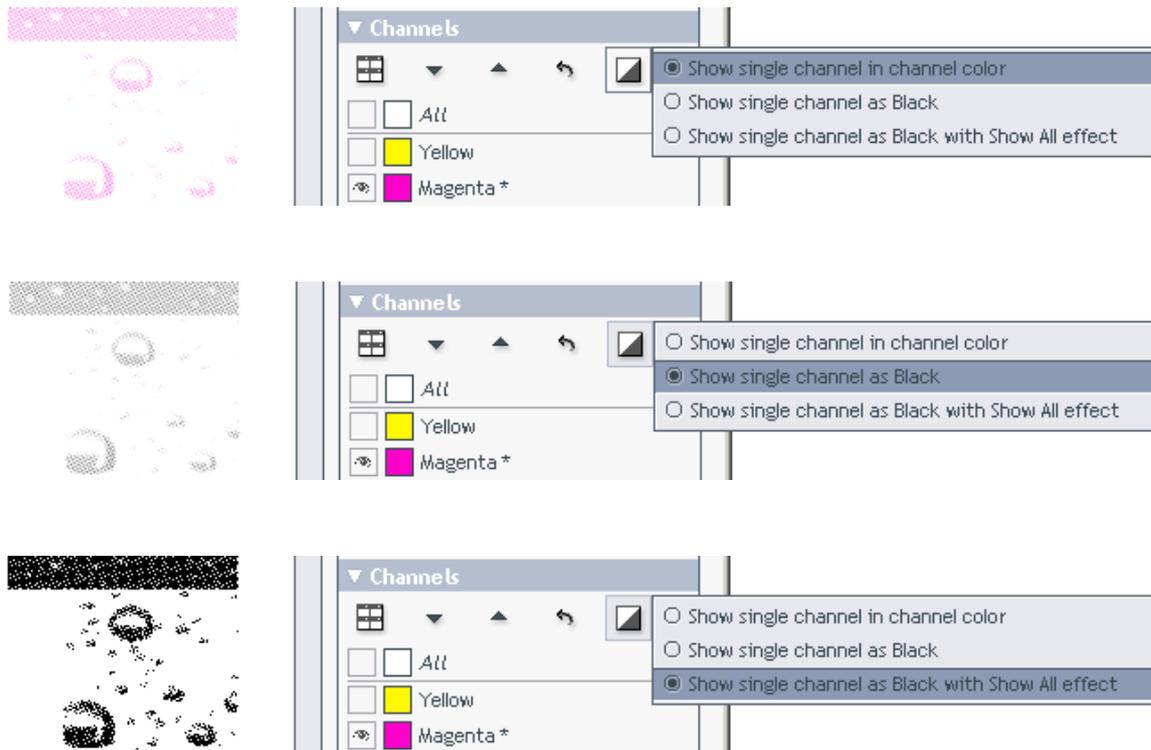
If you deselect the only channel selected then the next channel will automatically be selected. This is an easy way to step through the channels one by one.

Changing how single channels are displayed

You can choose to display that channel in black instead of its own color. You do that by clicking on the button .

For screened (bitmap) channels, you can get more options by right-clicking the button. In addition to the display in channel color and display in black, you have the choice to turn the "Show All" option on when showing the channel in black.

The "Show All" option further eases the the detection of areas with small dots by using black rather than a grey value for a display pixel that represents a partially covered area in the channel.



Change channel sequence

Opaque colors covers previously printed colors, so the sequence of the channels can be important when opaque colors are used. You can change the sequence of the channels by selecting those

channels that you want to move and then use the  buttons to move the channels up or down. Moving the channels down means to put them later in the printing sequence, which would put them on top of the other colors.

Alternatively you can change the sequence, by dragging the colored box of a channel to a different position.

Please note that this does not have any influence on the actual printing sequence, only the display in the viewer is affected.

If you have modified the channel sequence, then you can reset it to the original channel sequence with the channel revert button  as described below.

Modify color definitions

You can click on any of the colored buttons to open the **Channel Colors dialog** and edit the selected channels starting with the one clicked. See [The Channel Colors dialog](#) on page 45

Clicking the colored button next to the "All" label will let you edit all channels.

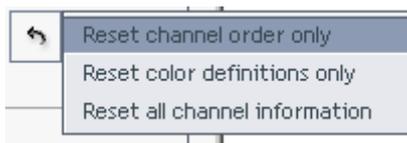
Right-click a colored button for a channel to go directly to a color chooser for that channel. This provides a convenient 3-click way of changing a channels display color.

By default an ink book based color selector will be opened, but if you hold down the Shift key a simple color chooser will be shown. See [The Channel Colors dialog](#) on page 45

Reverting changes

Reverting to the previous display color can be done by using the Back button or the channel revert

button . Note that the channel revert by default button will undo all display color edits. By right-clicking the button you can choose to revert either channel order changes, channel color edits or both.



These functions will reset the channel order and/or all color definitions to how they were when the files were first opened. To revert a single channel to its original color, use the channel revert button in the Channel Colors dialog. See [The Channel Colors dialog](#) on page 45.

Show each channels in its own view

Press the channel split view button  to turn display of each visible channel in its own view on or off.

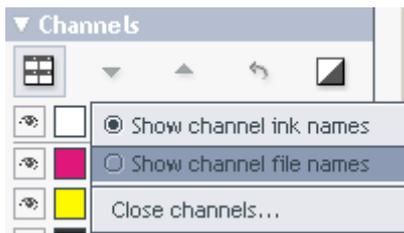
The composite view will always be shown as the first view followed by the visible channels in the order they are listed in the channels list.

By default, the views will be tiled to give each view as regular an area as possible, but if you prefer to force a specific tiling upon the views, this can be done by right-clicking the channel split view button.



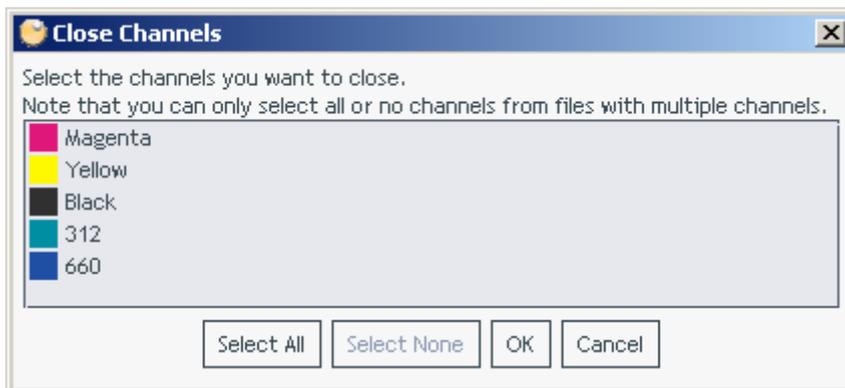
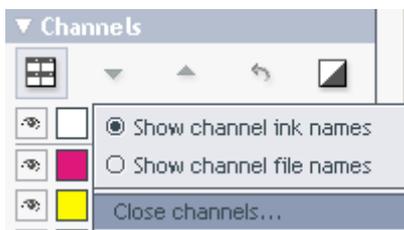
Change the channels list labels

Right-click the "All" channels label to select between using the channel ink names or the channel file names as channel labels.



Close channels in current image

The last item in the "All" channel label right-click menu, Close channels, lets you to close individual channels in the image.



Use Shift and or Ctrl keys together with mouse clicks to select multiple items from the list.

Keyboard shortcuts

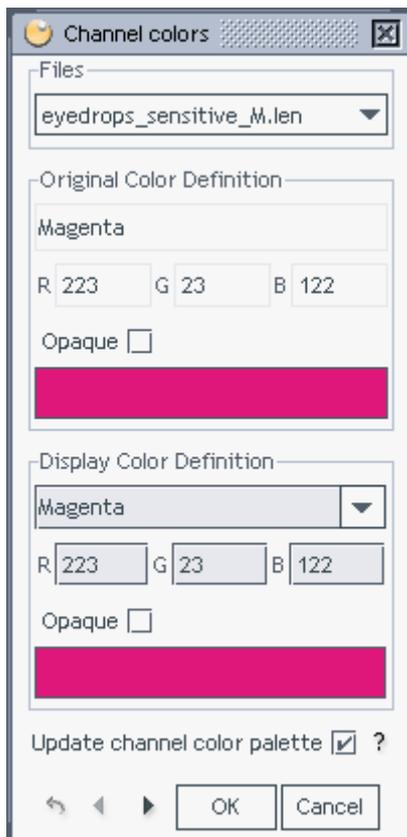
If you hold down the Ctrl-key and press one of the number keys, then the corresponding channel will be selected and all other channels will be deselected. 1 is the first channel, 2 is the second etc.

If you have more than 9 channels, you can use shortcuts Ctrl-Shift-0, Ctrl-Shift-1,... , Ctrl-Shift-9 to select channels 10 to 19.

Pressing **Ctrl-0** will select all channels.

Ctrl-N will select a single channel. If multiple channels are selected, the first channel will be selected. If a single channel is selected, the channel after the currently selected will be selected, or if the currently selected is the last, the first will be selected.

5.1.1. The Channel Colors dialog



At the top there is a list box allowing you to select the image file containing the channel.

The next part of the dialog shows the original color definition: Name, RGB values, opacity and a color sample rectangle.

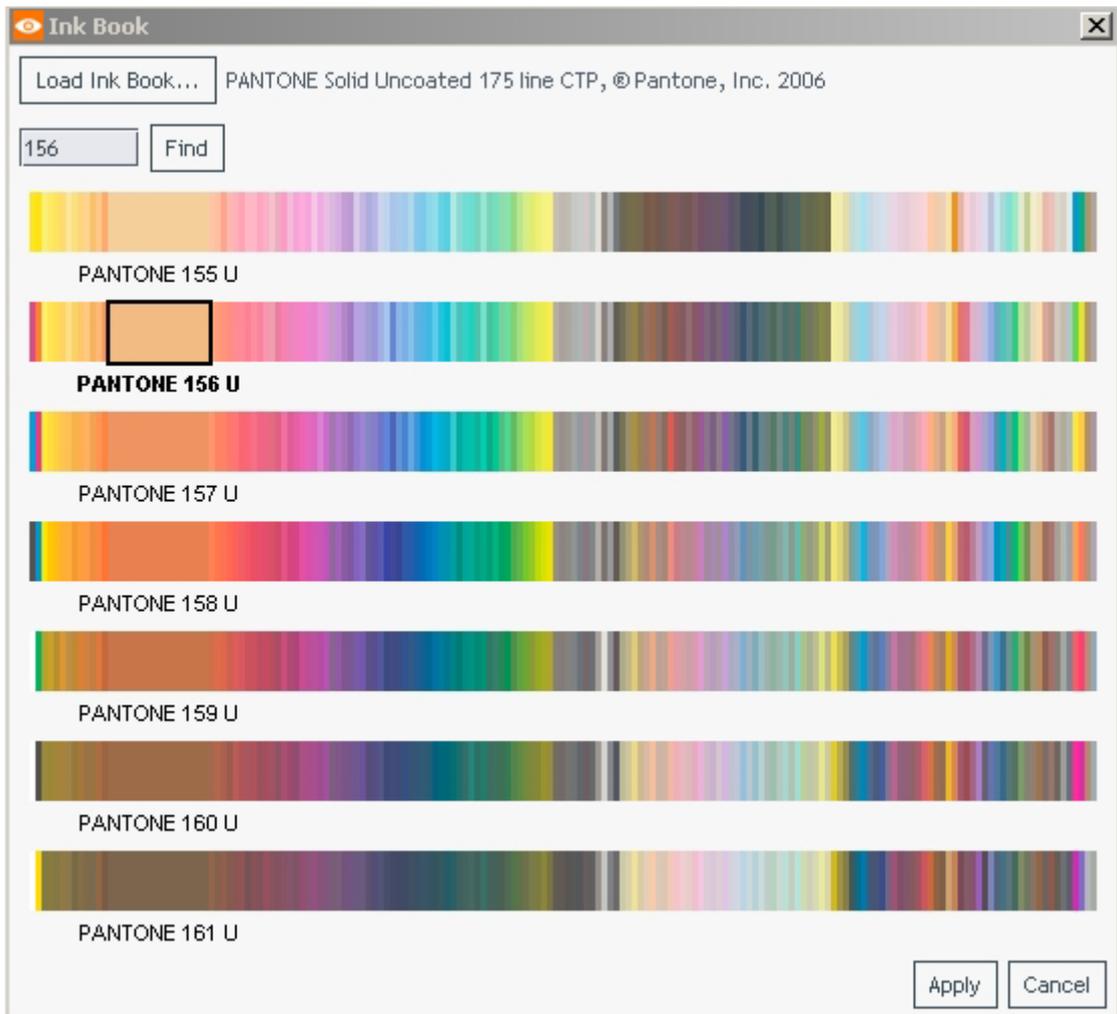
The lower part allows you to redefine all these parameters.

RGB values can either be typed directly or selected from a color palette opened when clicking the color patch in the "Display Color Definition" section of the dialog.

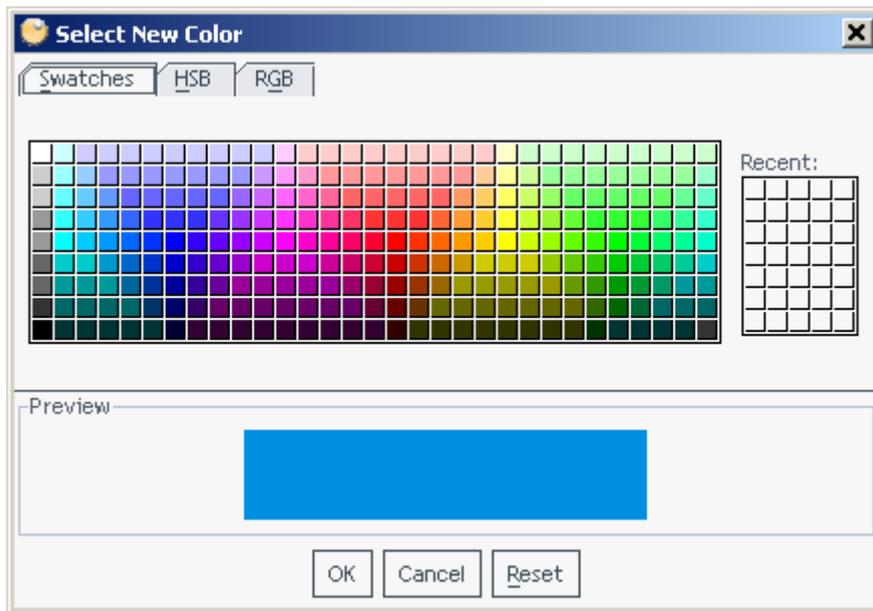
The viewer supports loading an Ink Book file (*.ink) from where you can select a specific ink. Click Load Ink Book to browser to the location of an ink book.

Once an ink book is loaded, you can select a color by clicking in the ink palette or using the Find function.

To use Find, add a pattern to match and click the Find button repeatedly to locate the correct ink amongst all matched.



If you have no such ink books or just want to select a color from the build-in color selector, hold down the Shift key when clicking the color patch.



The  buttons at the bottom allows you to step through all channels, so that you can modify several channels without reopening the dialog. This is an alternative to use the drop-down list box at the top.

The  button resets the channel's color definition to the original color definition.

Please note that changing the channels color definitions in the viewer does not change the actual image file. Only the display in the viewer is affected.

The use of the **Update channel color palette** check-box is described along with the usage of the channel color palette. See [The File Selection Bar](#) on page 8

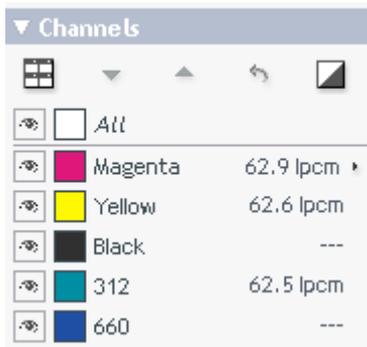
5.2. Measure Screen Ruling and Angle

Select the screen ruling tool: .

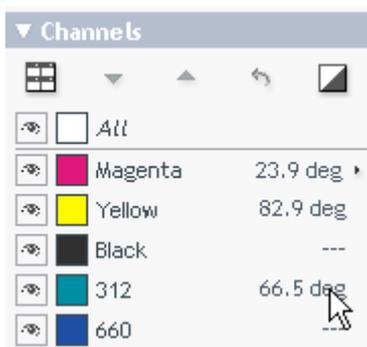
Select the area in which to measure the screen by holding down the left mouse button and moving the mouse and releasing the mouse button.

You can also just click the image at the location of interest or double-click the tool button to make a measurement based on the current selection or, if no selection is active, the current view.

After a while the result will show up in the Channels panel:

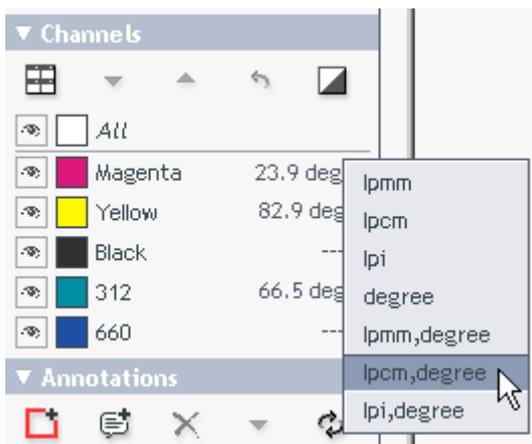


If you click on any of the measured values, the measured angle is shown instead:



Note that in this example there was no screen in the channels named "Black" and "660", so no values are shown at those lines.

If you click on the small triangle next to the values, you will be offered a number of units:



You can even show the screen ruling and the screen angle simultaneously. You might have to make the panel wider to view both values.

Changing the screen angle orientation

You can change the way measured screened angles are shown by right-clicking the screen ruling tool

button  .



The default selection, Screen Orientation from XMP, will use XMP orientation information to make the measured screen angles have the same orientation as used in the **XMP Info Screens** section (see [The File Information Window](#) on page 16) i.e. make the angle be as it is intended to be printed. This selection makes comparison between intended and measured screen angles straightforward.

If preferred, screen angle orientation can be set to be CW (clockwise i.e. downwards counting) or CCW (counter-clockwise i.e. upwards counting) regardless of XMP orientation information.

If no XMP orientation info is found, the Screen Orientation from XMP will give the same results as Screen Orientation CW.

Keyboard shortcuts

You can hide the dashed lines indicating a selection by pressing Ctrl-D

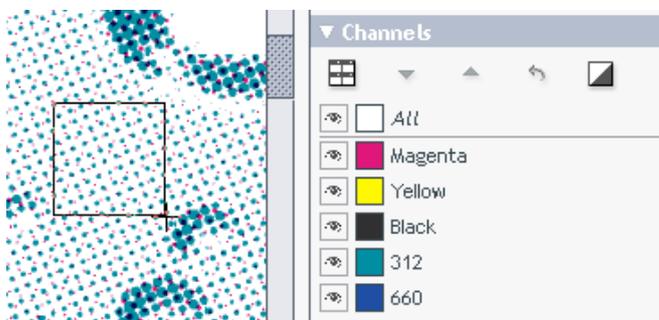
You can select the entire image by pressing Ctrl-A. Used in combination with tool button double-click.

5.3. Measure Ink Coverage or Count Pixels

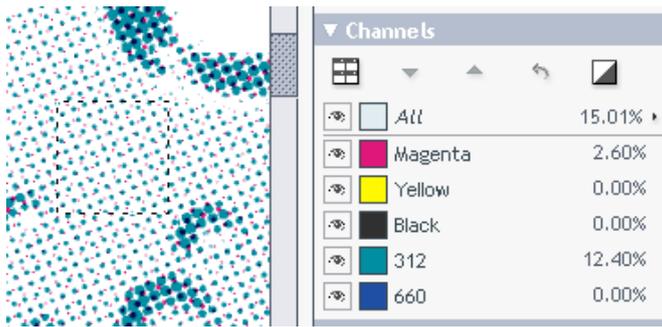
Select the color densitometer tool: 

Select the area to be measured by holding down the left mouse button, move the mouse, and release the mouse button when the desired area is covered.

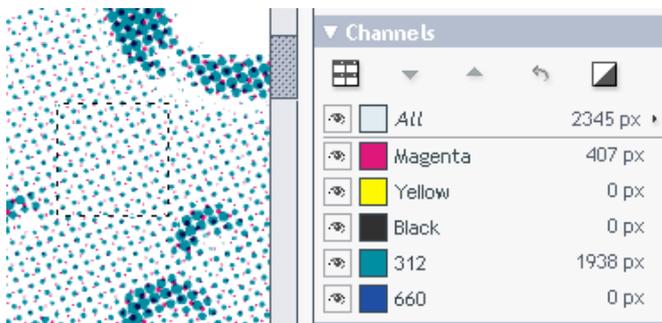
You can also just click the image at the location of interest or double-click the tool button to make a measurement based on the current selection or, if no selection is active, the current view.



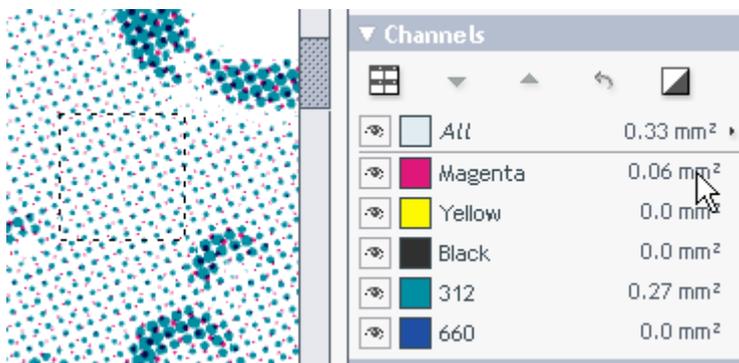
After a while the ink coverage values will be shown in the channels panel:



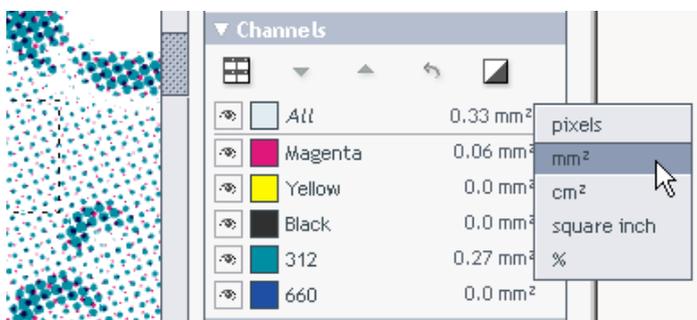
If you click on one of the ink coverage values, then the display will be changed to pixel counts (this works only on linework/bitmap images):



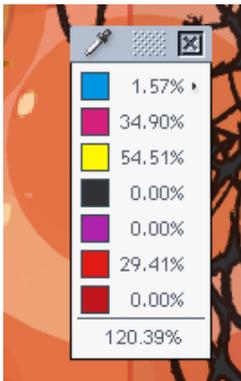
If you click again, the display will show the covered area instead:



If you click on the small triangle next to the values, you will get a pop-up window allowing you to select the desired unit (again this only works on linework/bitmap images):



By default, the densities are also shown in a pop-up near the location you measured.



Right-click the densitometer tool to hide or show this pop-up.

Keyboard shortcuts

You can clear a selection by pressing Ctrl-D.

You can select the entire image by pressing Ctrl-A. Used in combination with tool button double-click.

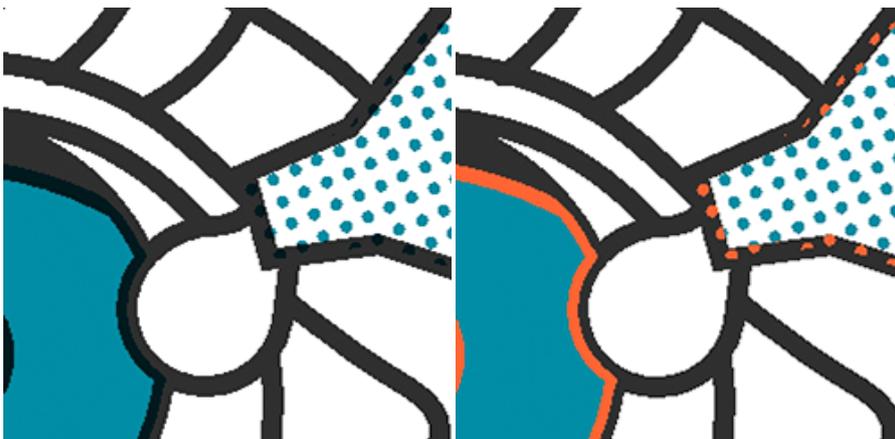
5.4. Check Trapping and Overprint

The overprint highlight tool lets you select a mask color to display in all areas where two or more active channels are overlapping. This is a convenient way to check if trapping is done correctly.

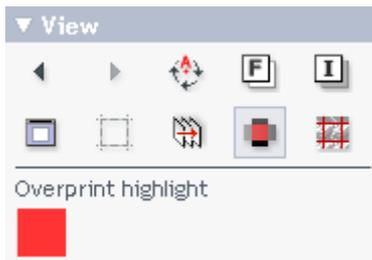


Click the overprint tool button in the View panel to turn the overprint color mask on or off.

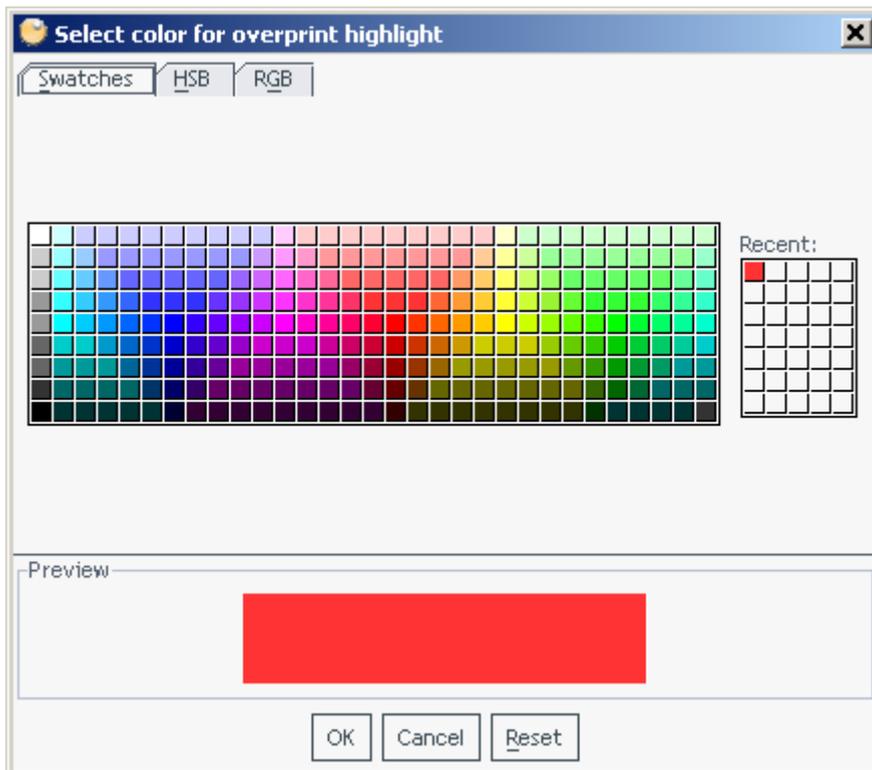
Below is an example with overprint highlight turned off and on respectively.



When overprint is selected, the view panel will be extended with a button to select the color used for the overprint indication:



Click on that button and the color chooser will open:



You can turn view of individual channels on and off in the Channels panel to highlight overprint between specific channels only.

Keyboard shortcuts

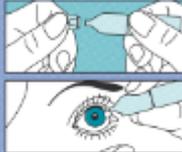
Use Ctrl-H to quickly toggle between no overprint display and overprint display with the last selected color.

5.5. Check for Seamless Printing

You might have an original that should print seamless like the following:

Lubricant Eye Drops

How To Use:
 To open, **TWIST AND PULL TAB TO REMOVE.**
 Instill 1 or 2 drops in the affected eye(s) as needed and discard container.



Many things can make your eyes feel dry, scratchy, or uncomfortable. Air conditioners or heaters. Computer use. Reading. Some medications. Wind. Or a reduction the amount of tears your body produces – tears which to lubricate and nourish your eyes. **REFRESH PLUS®** Lubricant Eye Drops restores the moisture your eyes with a special formula that has some of the same health qualities as natural tears.

Since **REFRESH PLUS®** is preservative-free, it also the potential irritation to your eyes caused by the preservatives found in bottled eye drops. So you can **REFRESH PLUS®** Lubricant Eye Drops as often as without the risk of preservative-induced irritation.

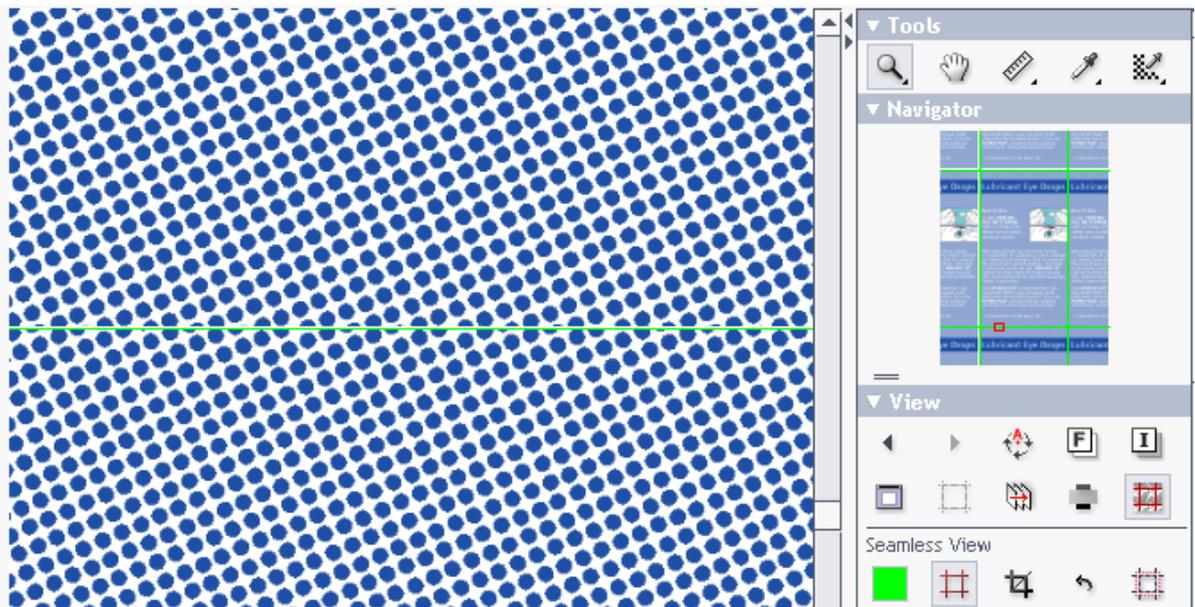
1. #1-Selling Eye Drop. IRI Data. August, 2001

To check how well it is suited for seamless printing, click on the seamless button .

The viewer will show the image replicated in all directions:



You can then zoom in to the relevant edges and check if they will print seamless. See [Zoom](#) on page 20

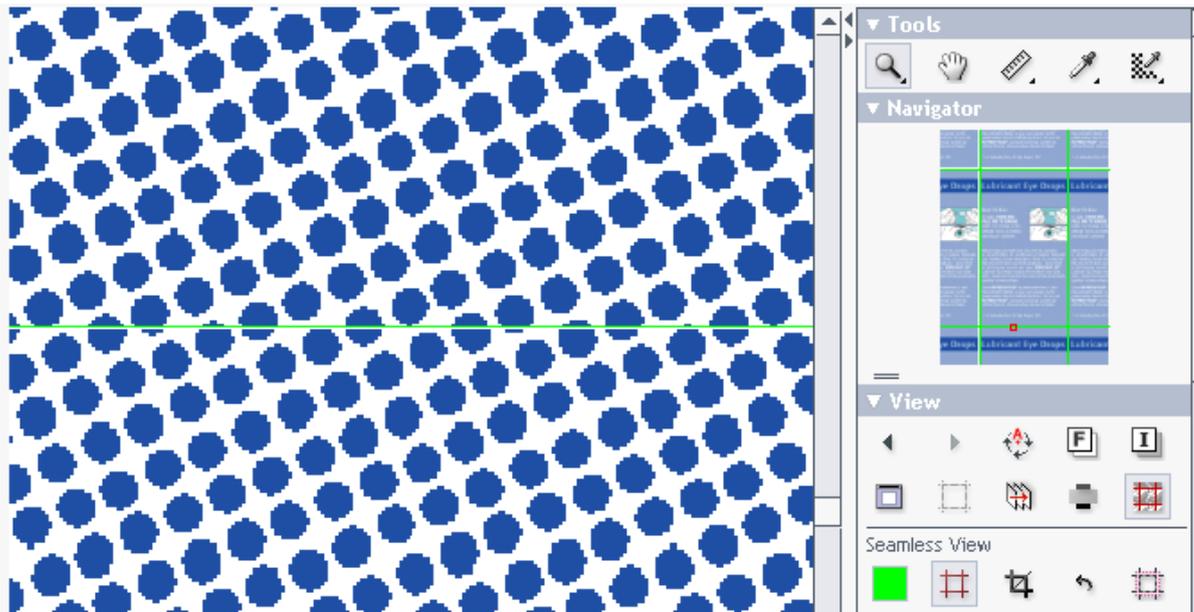


If the green line indicating the border of the image disturbs the view, then turn it off with the button



in the View panel. You can also modify the color used for the border lines by clicking on the colored button.

In this case the screen at the bottom does not match the screen at the top. You correct that with the seaming filter in FlexoPerfection. The seaming filter stretches the screen slightly, so that the screens at the edges fit together. After that the image will look like this:



Change seamless crop area

By default, the seamless repetition will be made around the trim-box, or, when the trim-box (margin) is not defined (in the image XMP), around the image boundaries. To select a different (smaller) area for

the seamless repetition, use the seamless crop tool .

The seamless crop tool  has two functions:

1. If no selection is active, a click on the seamless crop tool button will set the current selection to be identical to the current seamless crop area. Initially this will be the image trim box, or, if that is not defined, the image boundary. The selection can now be modified to the wished trim area by dragging the corners or sides.
2. With a selection active, and different from the current seamless crop area, a click on the seamless crop tool button will set the seamless crop area to be identical to the selection.

To revert to the original seamless crop area, click the seamless reset button  located next to the seamless crop button .

Seamless with Overlap

By default, the seamless repetition will be made by clipping the image at the trim-box, and repeat the clipped part. Sometimes however, the design to be checked is created to have a non-rectangular clipping.



To check such designs, the Overlap button can often be helpful.

When turned on, the viewer will overlap the repeated areas rather than tiling them at the trim-box.



Keyboard shortcuts

Ctrl-R will toggle the seamless border lines on and off.

Ctrl-D will clear the current selection.

5.6. Advanced View Tools

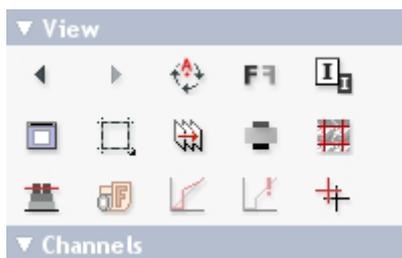
The Advanced View Tools is a collection of tools designed to help in detailed checking of the technical details of a graphics document.

There are 5 tools available:

-  **Total Area Coverage**
-  **Flexo Plate**
-  **Flexo Print**
-  **BreakOut**
-  **Registration Error**

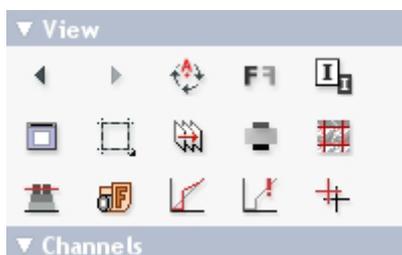
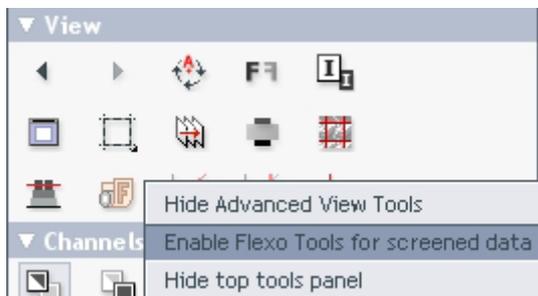
Turning Advanced View Tools on or off

By right-clicking in the background of the right side tools panel, you can turn the display of the Advanced View Tools on or off.



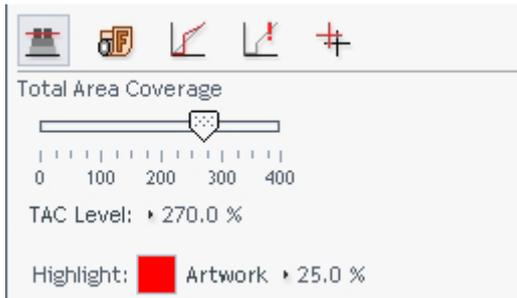
Enabling All Advanced View Tools for screened (1 bit per sample) documents also

Since some of the advanced view tools are specifically designed for non-screened (continuous tone) documents, they are by default disabled for screened data. The tools can however be useful for screen data also if used only at a zoom ratio where the individual screen dots are not visible. To enable for screen data, right-click the background of the Advanced View Tools panel.



Using the Total Area Coverage tool

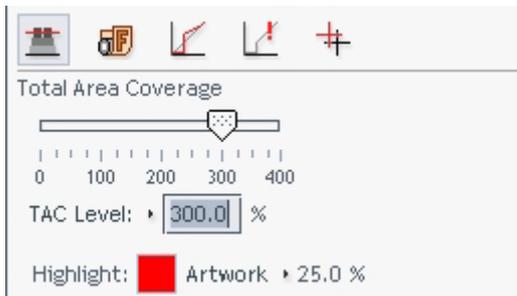
The Total Area Coverage (TAC) tool will help identify areas where the total amount of ink in the selected channels are larger than a given percentage.



In the image area, the image will be showed dimmed with the areas where the total ink coverage exceeds the specified percentage indicated with a highlight color

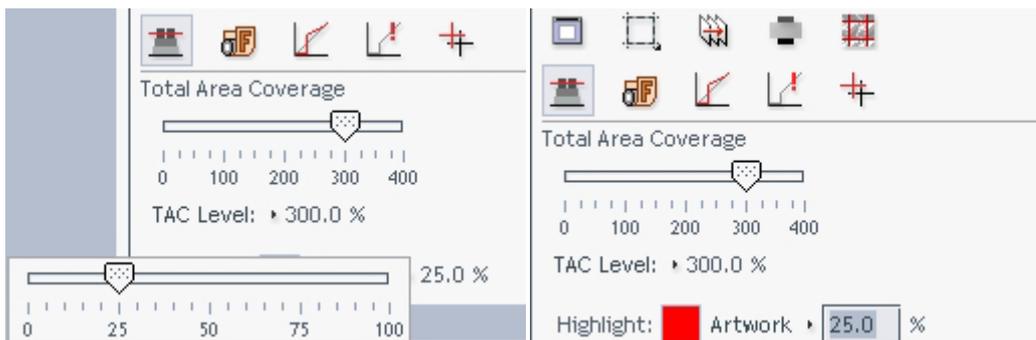


The percentage can be adjusted between 0 and 400% using the slider or by clicking the TAC Level percentage and entering a new percentage.



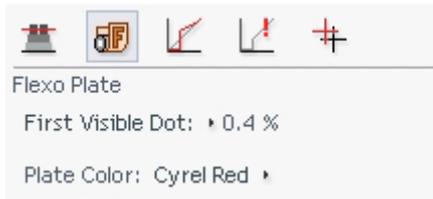
The highlight color can be changed by clicking the highlight color sample.

The dimming of the artwork outside the highlighted area can be specified by changing the artwork percentage - either with the slider that pops up when the Artwork label is clicked - or by typing a number after clicking the artwork dimming percentage



Using the Flexo Plate tool

The Flexo Plate tool simulates the look of the selected channel imaged as a flexo plate. A First Visible Dot percentage and a Plate Color selection is used to characterize the flexo plate.

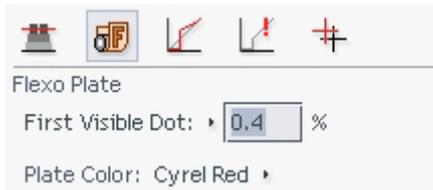


In the image area, the selected channel will show using the plate definition specified.

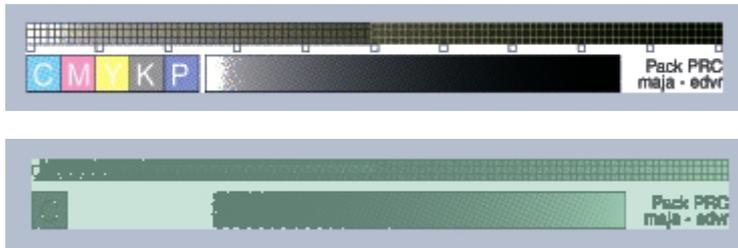


In this mode, it is only possible to view a single channel at a time unless the **View channels in separate windows** button is selected. See [Work with Channels](#) on page 41

To change the First Visible Dot percentage, click the value and enter a new percentage.

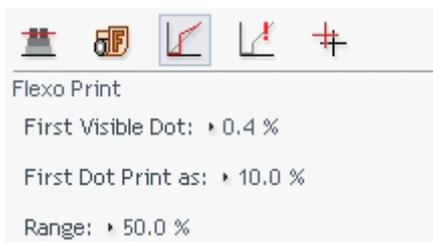


To change plate color, click the Plate Color label and select a new plate color from the list.

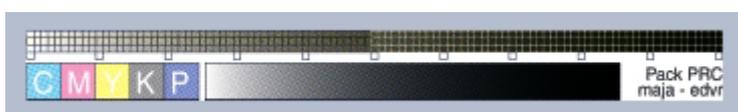


Using the Flexo Print tool

The Flexo Print tool helps predict the effects of the flexo printing process in the highlight areas by applying a non-linear transfer curve to the selected channels.



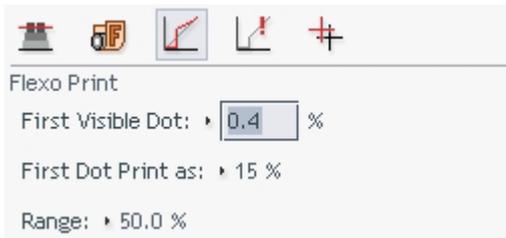
The effect of the Flexo Print tool is visible in the image area. The first image is with Flexo Print view turned off; in the second it is turned on.



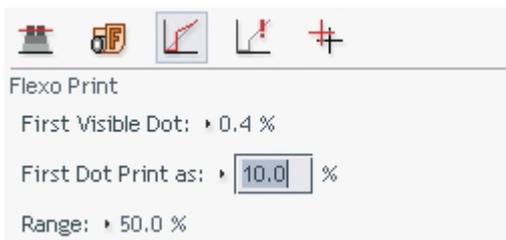


The transfer curve used for the Flexo Print tool has three adjustable parameters that all can be changed with a popup slider - opened by clicking the corresponding label - or by clicking the current value and typing a new value:

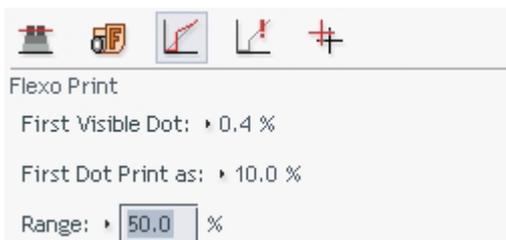
- **First Visible Dot** Under this value the output is zero (break out value).



- **First Dot Print as** The output value at the First Visible Dot percentage. The value will typically be somewhat higher than the First Visible dot percentage, creating what is typically called a bump-up effect.

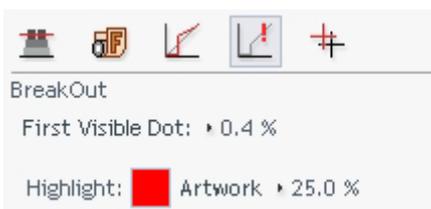


- **Range** The highest affected input value. Between the First Visible Dot and the Range percentage, the effect of the bump-up is linearly decreasing.

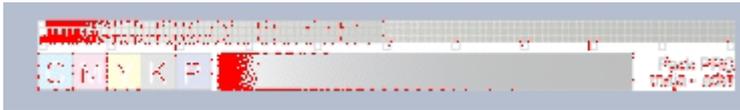


Using the BreakOut tool

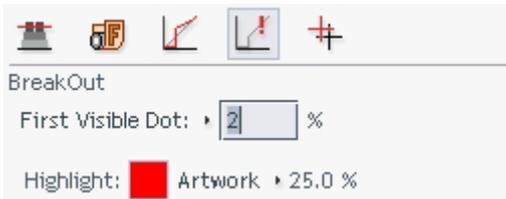
The BreakOut tool helps locating errors that might break out in the flexo printing process. These are areas below a given percentage, the First Visible Dot.



In the image area, the image will be showed dimmed with the areas below the First Visible Dot indicated with a highlight color

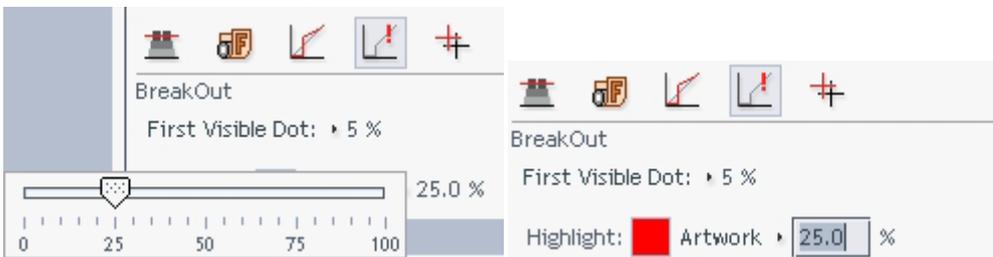


The First Visible Dot is best adjusted by clicking the existing value and typing a new.



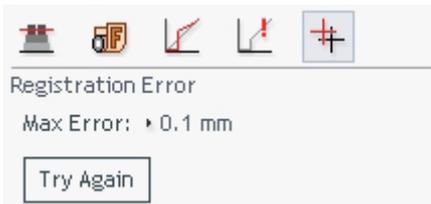
The highlight color can be changed by clicking the highlight color sample.

The dimming of the artwork outside the highlighted area can be specified by changing the artwork percentage - either with the slider that pops up when the Artwork label is clicked - or by typing a number after clicking the artwork dimming percentage



Using the Registration Error tool

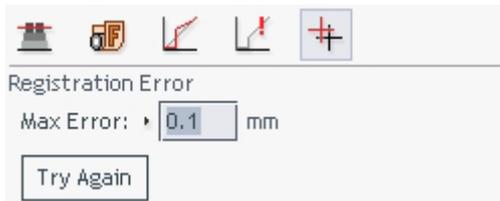
The Registration Error tool simulates the effect of registration errors in the printing process by randomly offsetting the visible channels by a specified distance, the Max Error.



The effect of the Registration Error tool is visible in the image area. The first image is with Registration Error view turned off; in the second it is turned on.



The Max Error is best adjusting by clicking the existing value and typing a new.



The offset stays identically the same until the Try Again button is hit. This allows using zoom and pan tools to visually inspect the effects of a given registration error on different parts of the design.



5.7. Compare Documents

If a document exists in two or more versions, it is possible to compare these efficiently in the viewer.

The first step of a comparison is to select the documents to compare and ensure that they are aligned as well as possible. See [The File Selection Bar](#) on page 8)

When comparing is enabled, an extra row of radio buttons is displayed in top of the Channels panel.

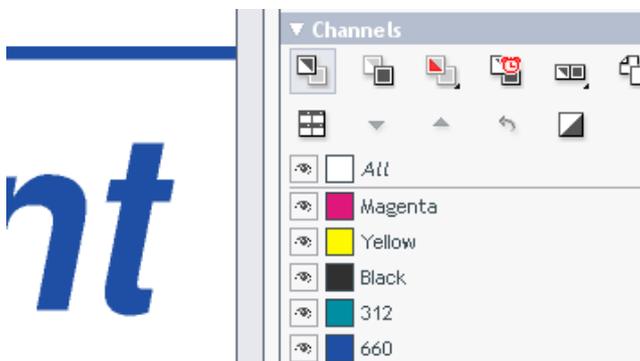


With these buttons, it is possible to select viewing the current version only, the previous version only, or a combination of the two with different degrees of highlight of the differences. The selected view mode will control not only the image view, but also the channels readout in the Channels panel.

Viewing the current version only



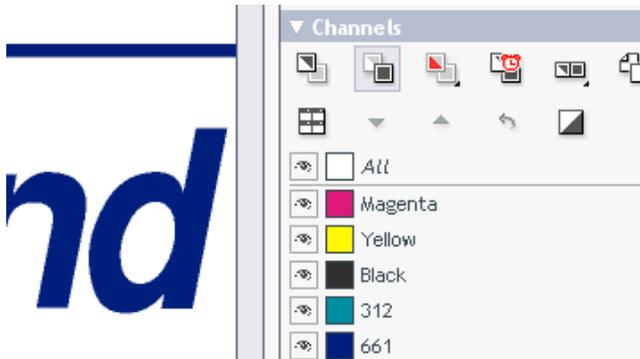
Push the current version button  to view only the current version of the document. This is the standard display mode where the previous version is not shown at all.



Viewing the previous version only



Push the previous version button to view only the previous version of the document. The displayed channels will change to those present in the previous version. Note that the image dimensions will stay the same as for the current version.

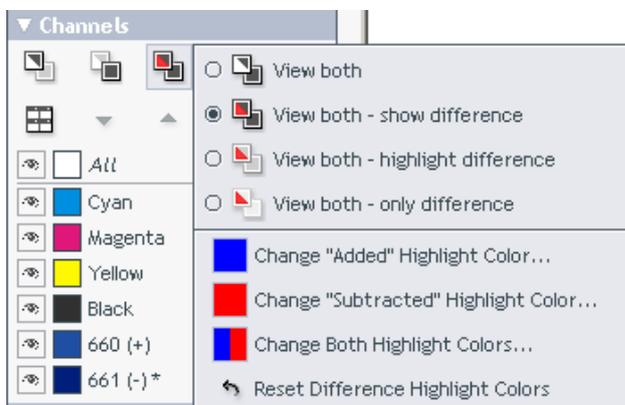


Viewing both the current and the previous version

There are five different view modes for displaying a combination of the current and the previous



channels in the same window. Four of these are reached through the view both button. The functionality of this button is set by right-clicking the button itself. The top four menu items select which of the four modes that should be activated when the view both button is selected.



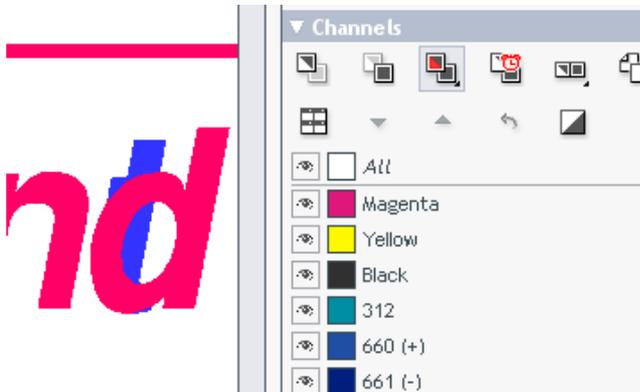
The first mode is used to simply overlay the two versions. This is typically used when they together form a complete layout e.g. a left and a right page of a reader spread. Or two parts of a package design that is rendered separately, but where some parts have to be aligned to one another. Use the **alignment** and **alignment offset** controls in the top panel to set the correct alignment of the two parts. See [The File Selection Bar](#) on page 8

Comparing two versions of the same document

The three remaining view modes that can be activated through the view both button are all used to compare different versions of the same document. The only difference between these modes is how the parts of the document that is unchanged between the current and the previous mode

are displayed. In all three modes, special highlights colors are used for added and removed details respectively.

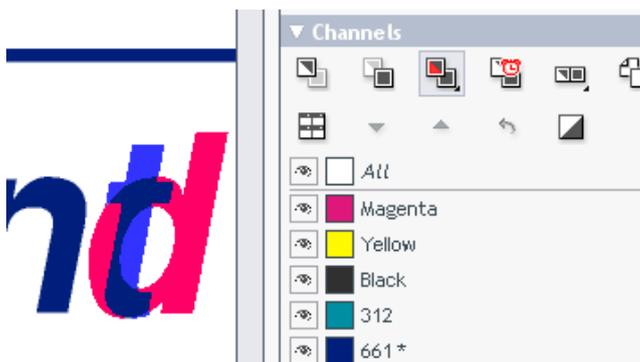
Select the view both - show differences mode  to show the unchanged image parts with normal colors.



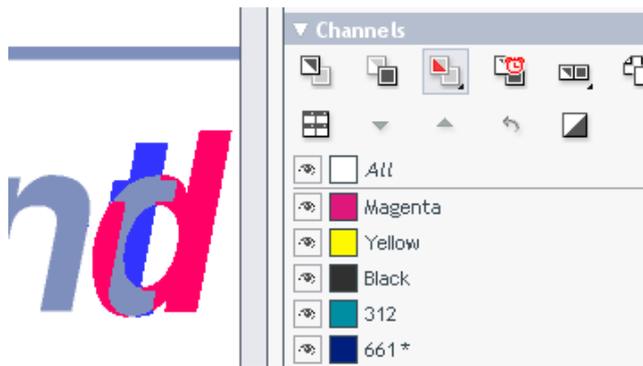
Added channels, i.e. channels only present in the current version of the document, is indicated with a trailing "(+)" after the channel name. In the image, the "added" highlight color - here blue - is used to indicate the content of both added channels and added objects on common channels.

Subtracted channels, i.e. channels only present in the previous version of the document, is indicated with a trailing "(-)" after the channel name. In the image, the "subtracted" highlight color - here red - is used to indicate the content of both deleted channels and deleted objects in common channels.

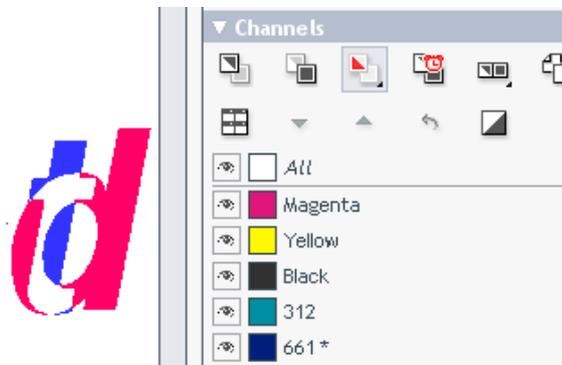
To make it easier to compare the content of channels that does not have the same definition in the two compared versions, it can be a good idea to revert channel definitions to their previous definition. In our example the channel "660" would have to be reverted to "661". This is done as described below and results in a changed display where the changed channel only is listed once and only true image changes are highlighted in the image area.



Select the view both - highlight difference mode  to show the unchanged image parts with lightened colors making it easier to spot the differences in a colorful image.



Select the view both - only difference mode  to show the changed image parts only. Unchanged areas will be white.



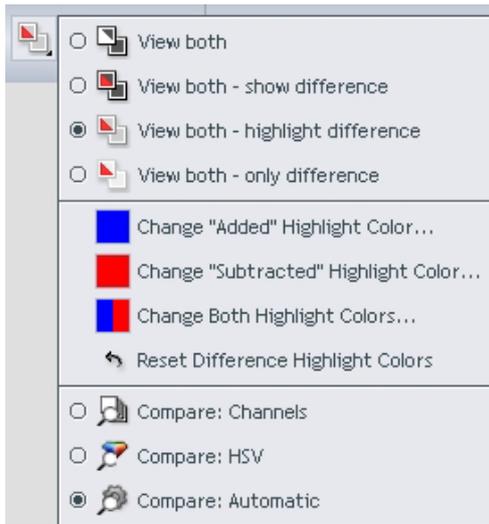
This mode is especially useful for spotting small differences in the navigator or when zoomed to view the entire document.

Selecting compare color space

By changing the compare color space, it can become easier to judge the nature of the differences between the compared documents.

To change the compare color space setting, right-click the active view both button ,  or

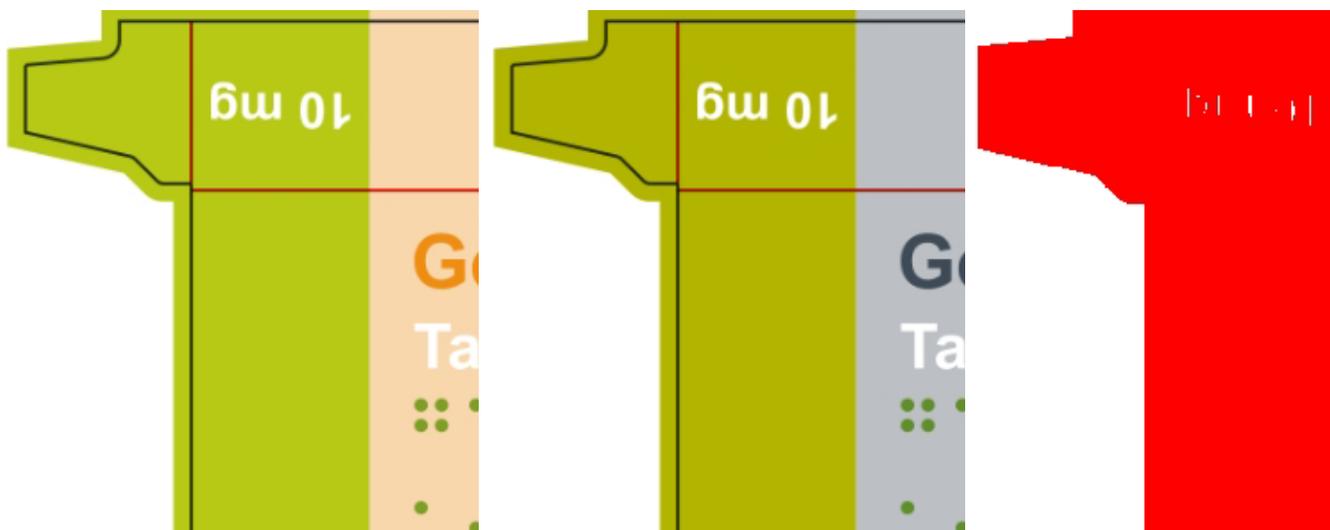




Three options are available:

- **Compare: Channels** - This is the default mode. Channels are compared one at a time and added/subtracted content is displayed with two solid highlight colors independently of the magnitude of the difference.
- **Compare: HSV** - Compare colors rather than channel content. The HSV color of the two documents are compared and the relative difference is shown in a graded color overlay and common parts are shown in a neutral gray color. The overlay color will be a grade of the selected "Subtracted" color with the strength depending on the magnitude of the difference. This will make it easier to compare documents where the channels are not the same e.g. a CMYK document and a document with a combination of Pantone spot color channels.
- **Compare: Automatic** - With this selection active, Channels will be used as compare color space if the definition of all the visible channels are the same in the two compared documents. If this is not the case, HSV compare will be used.

In the example below, the two first documents are compared. The third image is the result of Channels mode compare; everything looks changed because the channel definitions are not matching. The last image is the result of HSV mode compare which in this example gives a better view of the changes made.



Viewing both the current and the reference version - blinking

The view both - blinking mode will toggle between the two compared versions. The toggle interval is fixed. It is possible to use other viewer tools like channel selection, zoom and pan while in blinking compare mode.

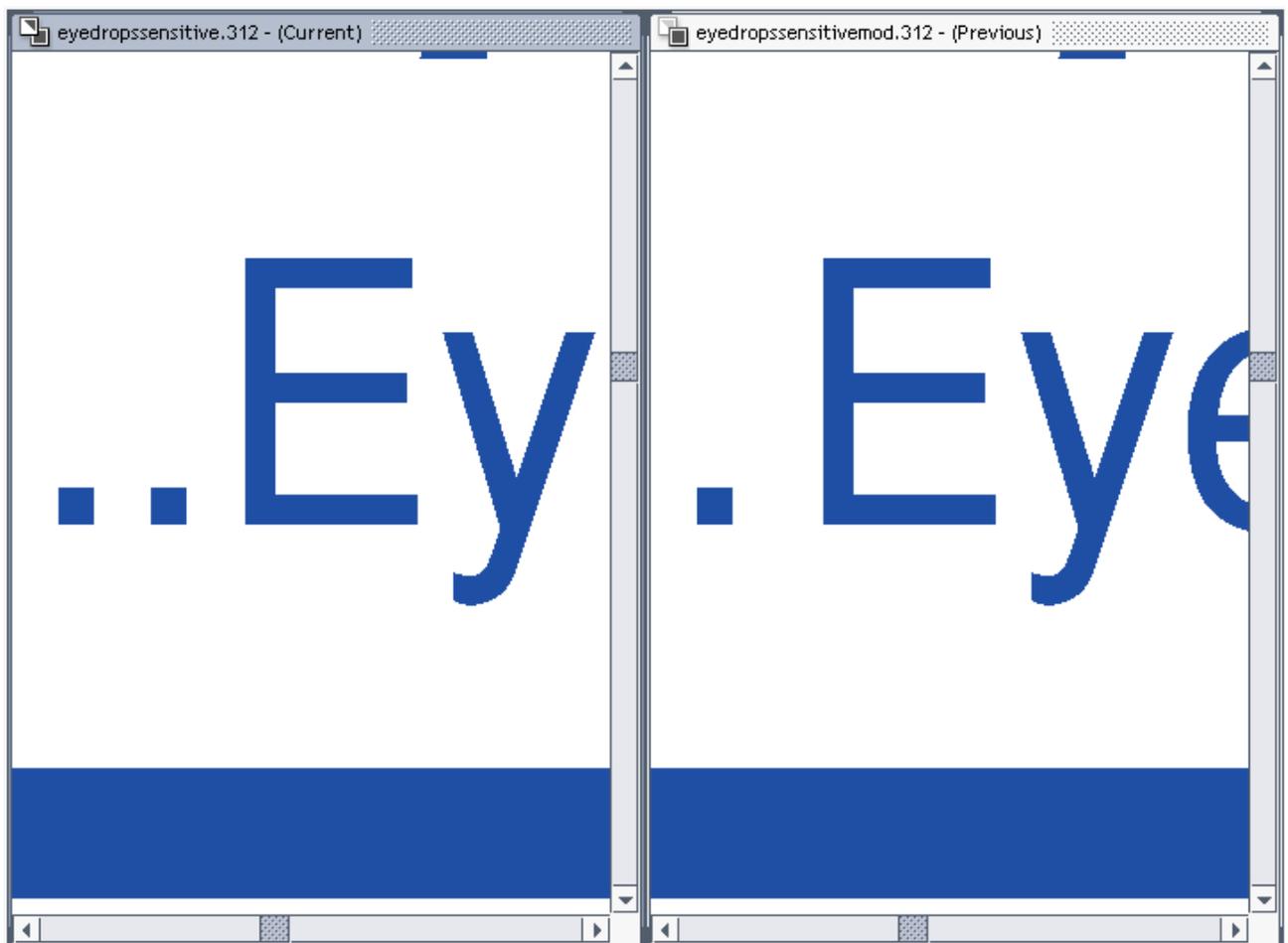
Press the View both - blinking button to select this view mode.

Viewing two documents side by side

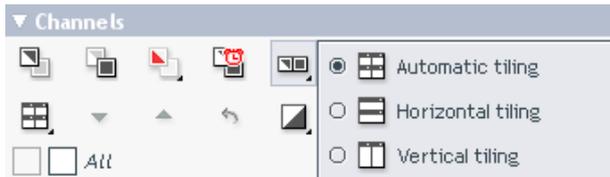
The side by side view mode presents an alternative way of comparing two versions of a document. In this view mode the image display is split in two tiled sub-windows - one for each version. The display in these window will at all times be fully synchronized with respect to channel selection, view position and zoom ratio.



Press the side-by-side button to select this view mode.

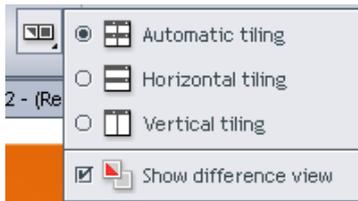


By default, the shape of the image view area will determine if the two versions are displayed next to one another or on top of one another (Automatic tiling). If you want to changes this behavior, right-click the side-by-side button and select either horizontal or vertical tiling.



Viewing two documents side by side with difference view

It is also possible to show get the difference view shown next to the two compared versions. To toggle this function on or off, right-click the side-by-side button and select the Show difference view menu item.



When the function is turned on, three rather than two panels are shown. With the compared view on the right (if vertical tiling) or bottom (if horizontal tiling).

The compare mode will be the one last used for comparing two document versions: the View both - show difference, the View both - highlight difference or the View both - only difference mode.

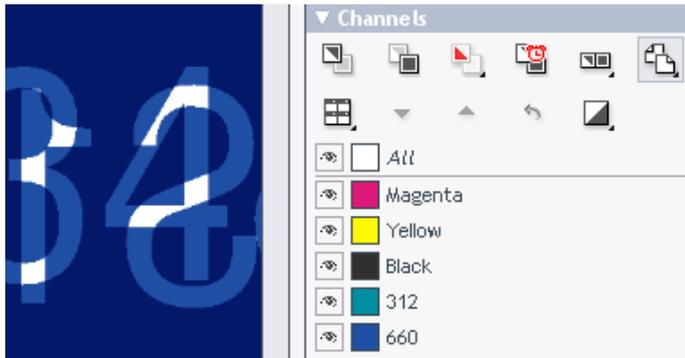


Displaying two documents with one mirrored (recto-verso)

To check from-back alignment of document elements, the recto-verso display mode



can be selected.



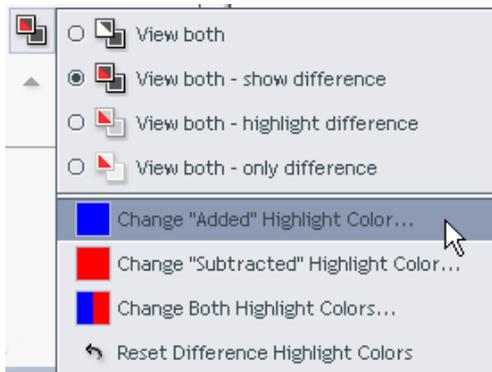
By default, the previous version of the image will be mirrored horizontally. To change this behavior, right-click the recto-verso button and select the preferred mirroring mode.



Configure difference highlight colors

If the current colors selected for added and deleted image details respectively are difficult to distinguish from the colors present in the current document, it is simple to select different colors that are more suitable.

Right-click one of the three last difference view mode buttons to get a pop-up menu.

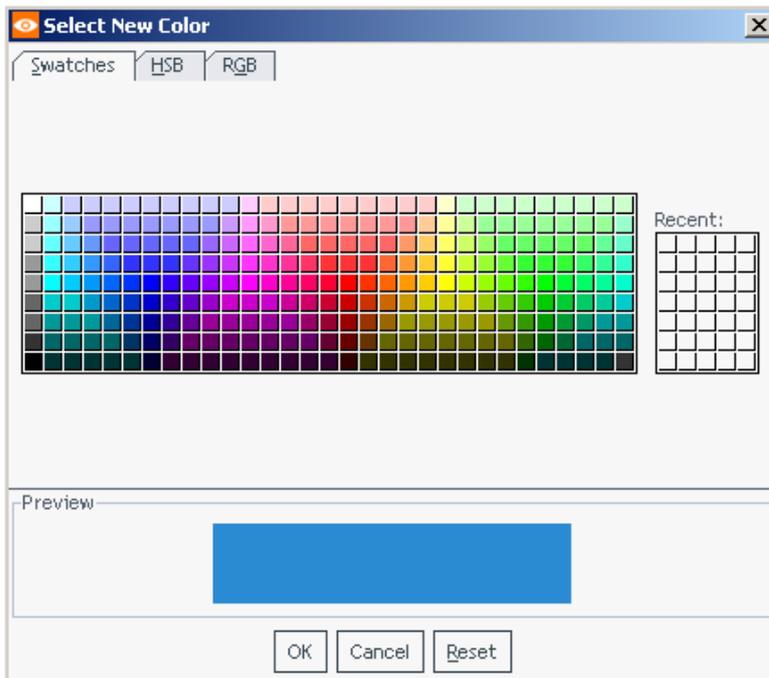


To change the highlight color for added details, select the Change "Added" Highlight Color pop-up menu item.

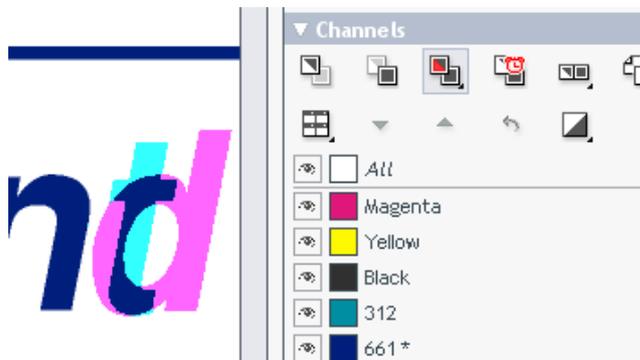
To change the highlight color for deleted details, select the Change "Subtracted" Highlight Color pop-up menu item.

To display both added and deleted details using the same color, select the Change Both Highlight Color pop-up menu item.

To go back to the original colors (blue and red), select the Reset Difference Highlight Colors pop-up menu item.

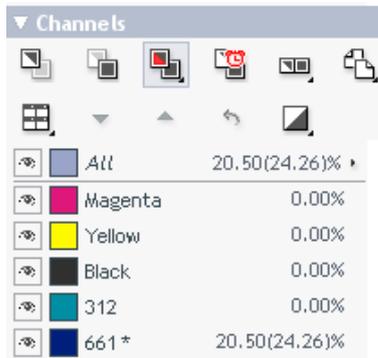


When the change is made and the dialog is closed, the difference image will be updated using the newly selected color.



Using difference view to inspect changes in dot percentage and pixel count or screen ruling and angle

The readout of dot percentage, pixel count, screen ruling and angle will change depending on the difference view mode selected. If one of the modes that show both versions is selected, the readouts will show differences between the versions if any.



The value in parenthesis will be the value from the previous version. If only one value is displayed, no differences have been measured.

Compare channels with different names or display color definitions

When comparing documents it can sometimes be advantageous to allow channels to be compared directly even if their channel definitions are changed. An example could be if the channel has simply been renamed from say "Blue" to "Pantone 660" as part of the prepress process.

There are two ways of changing which channels are directly compared to which other channels. One is to use the channels edit dialog (see below) to change the channel definition of the current document to match that of the reference document. The easiest way is however to use the channel matching dialog. See [The Channel Matching dialog](#) on page 75

Alternatively, documents with non-matching channels can be compared using the HSV color space compare (see above).

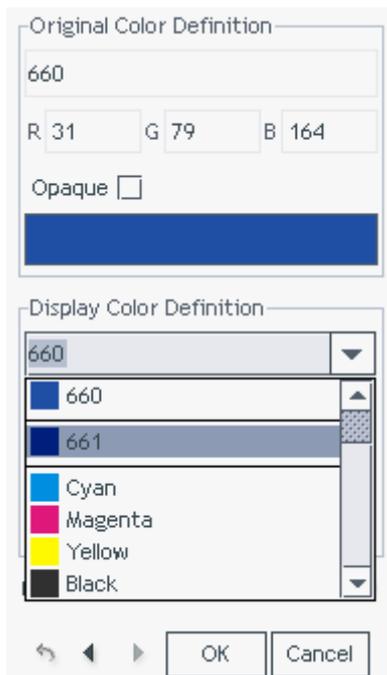
Use channel edits to compare channels with different names or display color definitions

If one or more channels in a document has been redefined between the two compared versions of the document, it can be relevant to revert the channel definition changes to allow comparison of the image details in these channels.

Note that only channels in the current version can be edited and that the difference view has to be set to view current only for the channel color edit to be enabled.



To make this operation simple, the channel definitions present in the previous version but not in the current can be easily selected from the current color definition drop-down menu in the Channels Color dialog where they are placed below a horizontal divider line. See [The Channel Colors dialog](#) on page 45



Adjust comparison settings to distinguish between minor and major differences

When comparing images with documents that cannot be perfectly aligned or has minor tonal changes it can be very useful to be able to specify a threshold on when a difference should be highlighted. This can be done with the difference adjustment controls that can be enabled from the right-click popup menu on the channels difference view button.

Simply type a percentage value corresponding to the smallest differences value that you want highlighted.

As an alternative, you can also click the little right arrow next to the label use a slider to do the adjustment.



Note: The view will be updated as soon as you have type a new number and press the Enter key, allowing you to easily type in different values and see the effect on the highlighted differences.

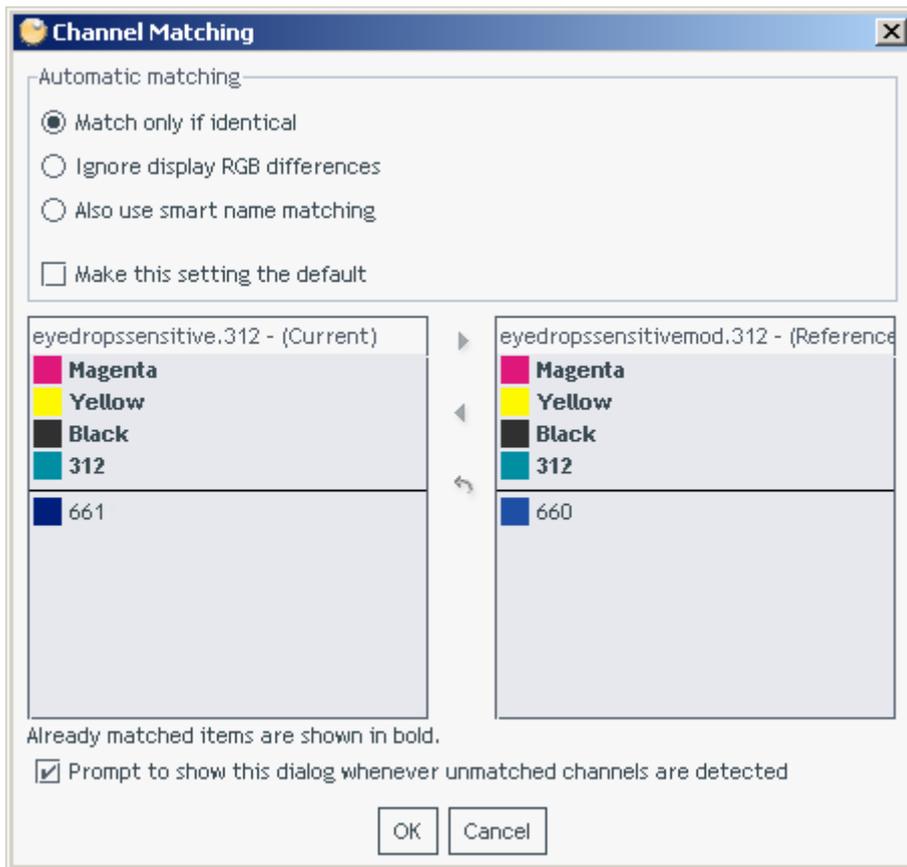
In the Difference adjustment panel, you can also change the color space used for the comparison. The Default is Channels compare.

Keyboard shortcuts

The **Ctrl-S** shortcut can be used to quickly toggle between the current and the previous version.

5.7.1. The Channel Matching dialog

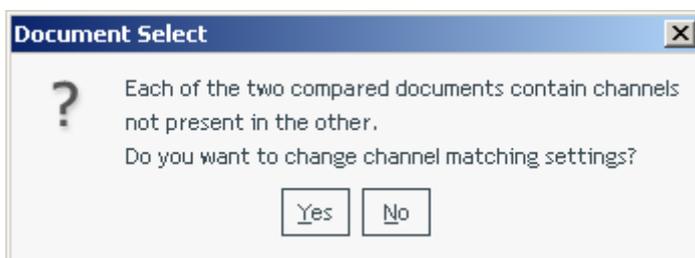
The Channel Matching dialog is used in document comparison to link channels that have been changed from one document to another, but where it is still valuable to compare the channels directly. These changes can be anything from insignificant differences in channel display color to name changes from designer ink names to production ink names.



This dialog has two columns of channel names, one for each of the compared documents. In the top of each column are the channels that are already matched with the current channel matching settings. The matched channels will be shown in **bold** and placed opposite to the channels they match. If both matched and unmatched channels are present in one of the channel lists, a horizontal line will split the two parts of the list.

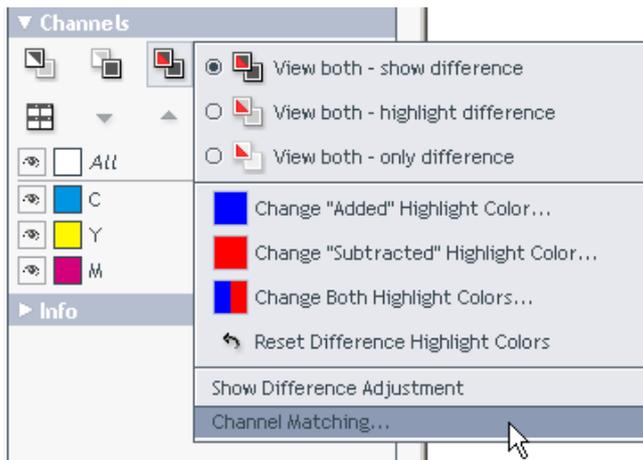
Open the Channel Matching dialog

There are several ways to get into the channel matching dialog. When selecting a new document for comparison, you might be prompted to open the dialog if the compared document both contain channels not matched to channels in the other.



You can open the dialog when in difference compare mode by right-clicking a channel name in the Channels tool panel.

Finally, you can select the Channel Matching item from the right-click popup menu on the difference tool button in the Channels menu.



Changing your automatic channel matching settings

The Channel matching dialog contains controls for changing how automatic channel matching should be performed.

There are 3 possible settings:

1. **Match only if identical:** with this setting selected, only channels that have identical names and display colors are matched automatically.
2. **Ignore display RGB differences:** will match channels automatically if their names match and ignore differences in display colors.
3. **Also use smart name matching:** in addition to ignoring display color differences, this setting will match channels that have related names such as:
 - names that only differ in use of upper and lower case. Example: Magenta - magenta
 - names that have only differ in color book specification. Examples: 660 - Pantone 660 C, and Cyan - Process Cyan
 - names that are known abbreviations of each other. Example C - Cyan

The effect of changing the automatic matching setting will show up in the two lists of channels.

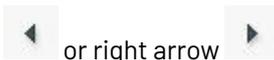


Note:

By default, changing the automatic matching settings only apply to the current document, but you can change the default behavior by checking the **Make this setting the default** checkbox.

Manually match channels not matched by the automatic matching

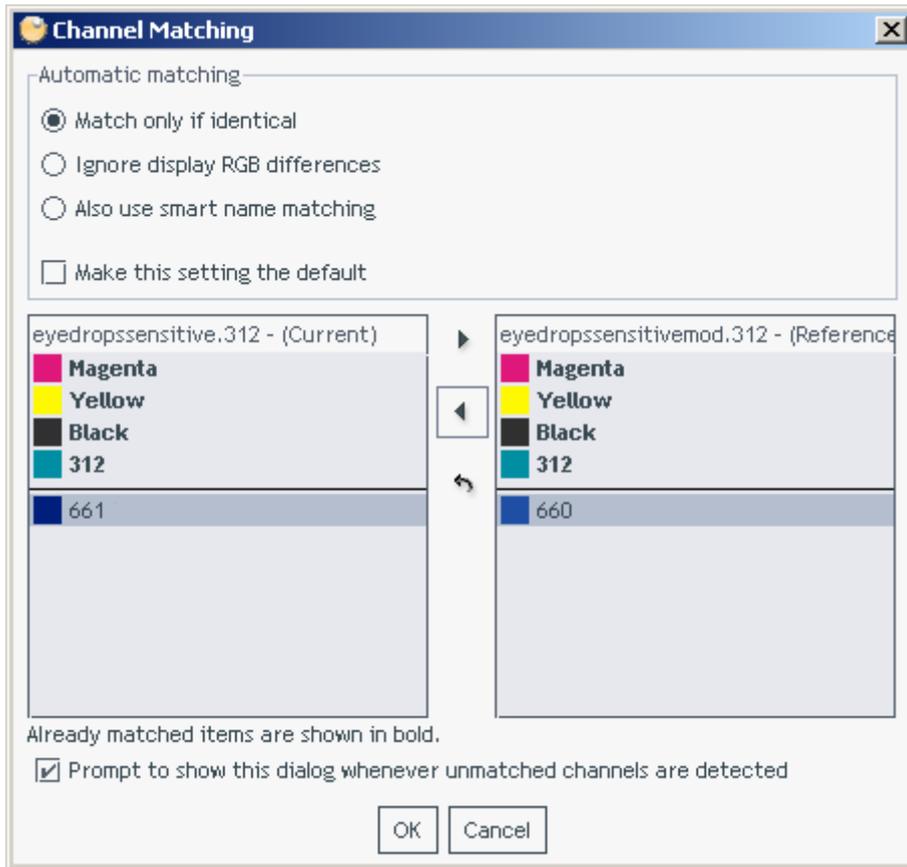
If the automatic matching settings does not match all the channels that can be compared directly, you channel edit channel definitions of one image to match those of the other. This can be done easily in this dialog simply by selecting the source and target channels for the change and press the left arrow

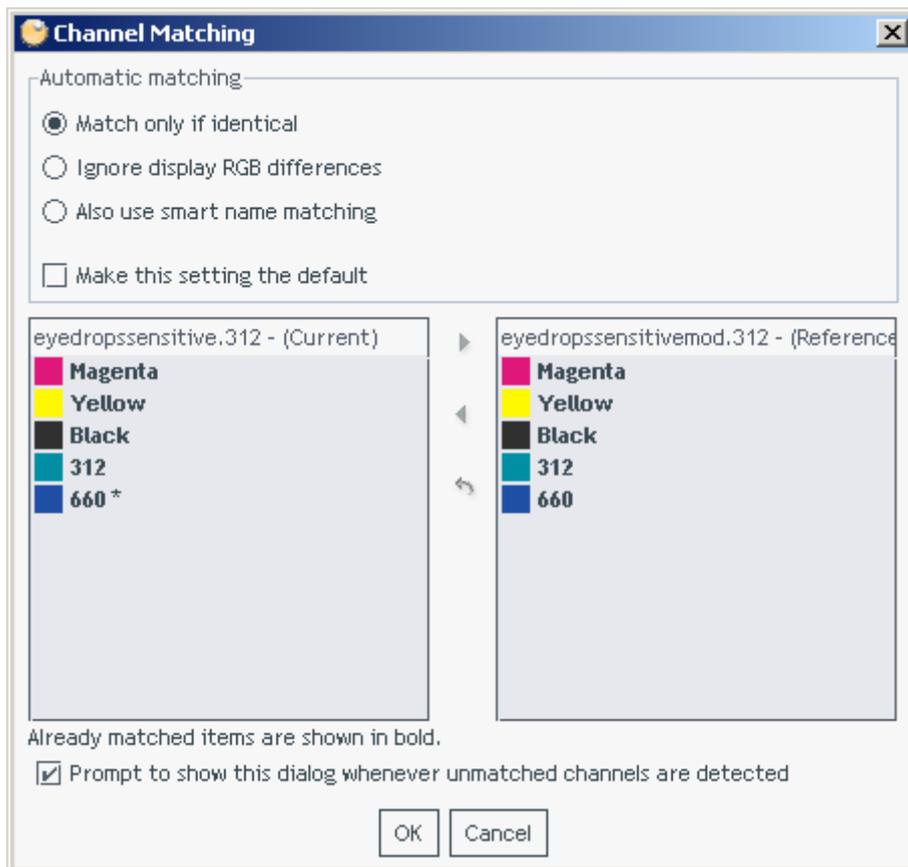


or right arrow



depending on which way you want the mapping to go.





Changed channels will be shown with a pending asterisk (*) character.

The reset button  provides an easy way to revert the channel definition of a selected channel.

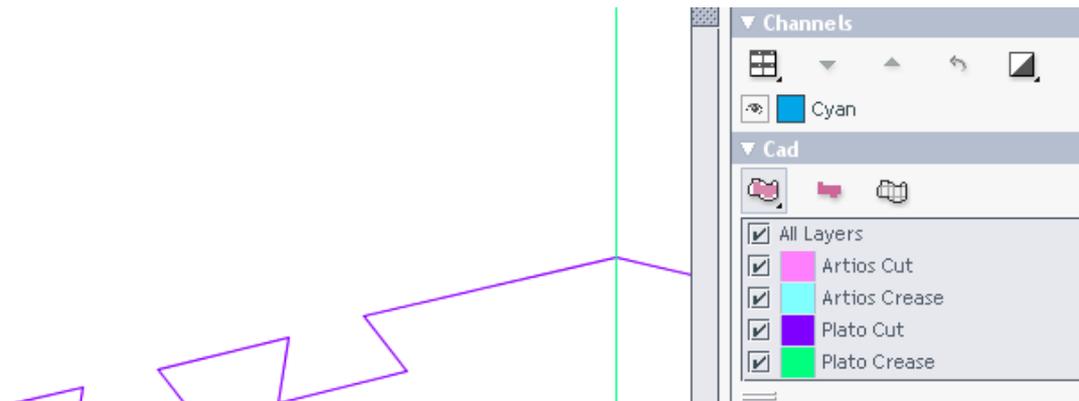
5.8. Check Embedded CAD Data

The Viewer will automatically open CAD data embedded in Esko LEN files. The CAD data can come from applications like Plato or ArtiosCAD and will contain structural design data used in the packaging production like cut or crease lines.

Other than inspecting the correctness of the CAD data itself, the Viewer operator can also use the CAD data as guide lines when checking seaming. See [Check for Seamless Printing](#) on page 52

CAD Tool Panel

If you are viewing a single channel file, you will have a CAD tool panel like the following:



The CAD tool panel allows you to control what to see when displaying graphics with CAD data.

Selecting Graphics-CAD view mode

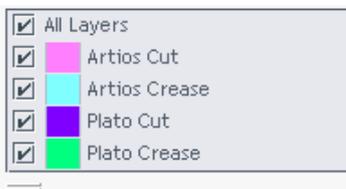


The three buttons:    controls the display of CAD and graphics. Selecting the first will display both CAD and graphics. The second will display graphics only and the third will display CAD only.

If you right click the first button, you will be able of selecting various degrees of dimming of the graphics data, so that the CAD data becomes more visible.

Selecting CAD layers

The list box in the CAD panel allows you to turn individual CAD layer off and back on.



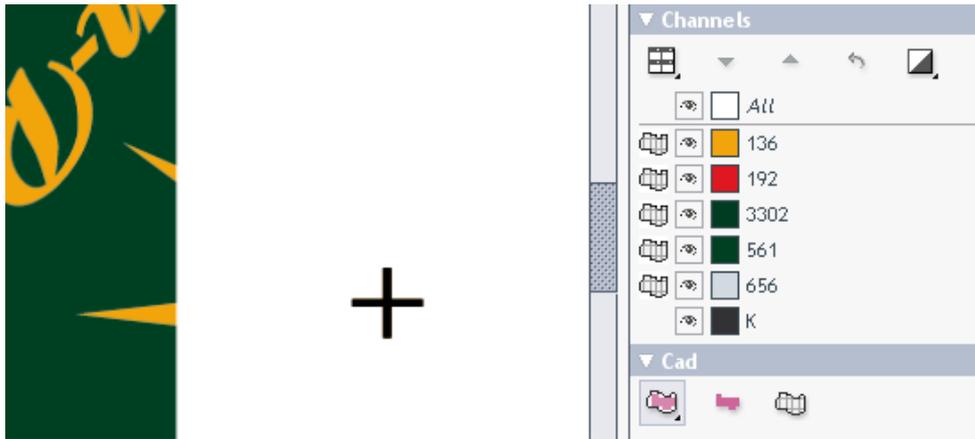
Resize layer list

The heights of the list box can be changed by dragging the horizontal double line symbol below the list:

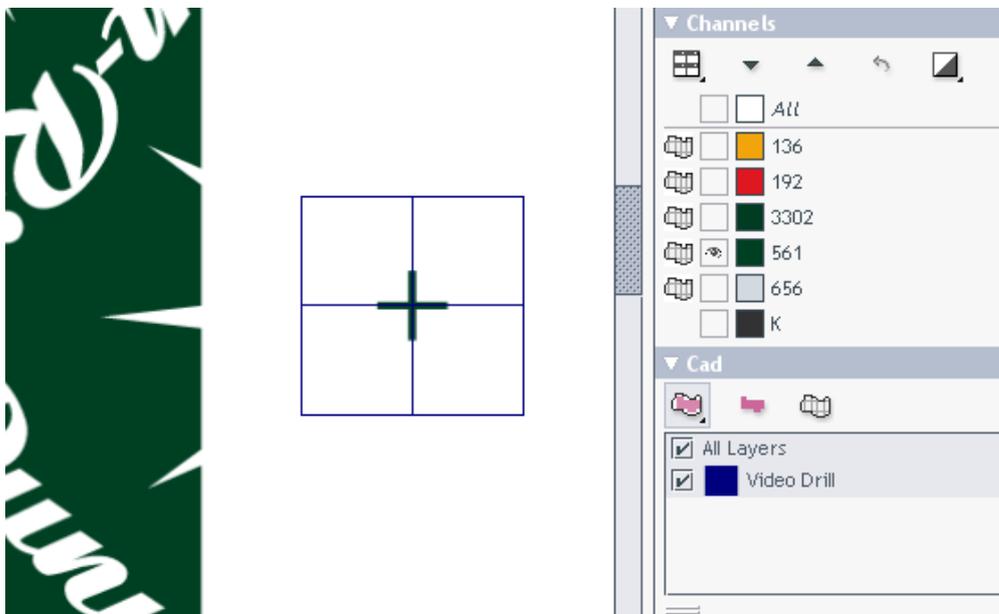
If you double-click on the horizontal double line, then the list box will adjust its height to exactly fit the entries in the list box.

Viewing CAD in multi-channel files

If you are displaying a multi-channel document with CAD data in one or more channels, no CAD data will be shown by default, but the Channels window will contain an indication of the channels that has CAD data:



A single channel with CAD data can be selected by clicking the CAD icon  in front of the channel name. The selected channel's CAD data will be shown both in the CAD panel and in the main image window.



If you are displaying a file without CAD data, the CAD tool panel will not be present.

6. Shortcuts

6.1. Keyboard Shortcuts

This page contains a comprehensive list of Bitmap Viewer shortcuts. Most of these are also described on the relevant topic pages.

| Windows Keyboard Shortcut | Mac Keyboard Shortcut | Description |
|------------------------------|---|--|
| Ctrl-Down Arrow | Ctrl-Down Arrow | Pan display 1/4 screen up |
| Ctrl-Left Arrow | Ctrl-Left Arrow | Pan display 1/4 screen left |
| Ctrl-Right Arrow | Ctrl-Right Arrow | Pan display 1/4 screen right |
| Ctrl-Up Arrow | Ctrl-Up Arrow | Pan display 1/4 screen down |
| End | End | Go to last document or page |
| Home | Home | Go to first document or page |
| Page Down | Page Down | Go to next document or page |
| Page Up | Page Up | Go to previous document or page |
| Ctrl-Shift-Spacebar | Cmd-Shift-Spacebar | Temporarily shift to pan (hand) mode |
| Ctrl- '+' (plus) | Ctrl- '+' (plus) or Cmd- '+' (plus) | Zoom in |
| Ctrl-Shift- '+' (plus) | Ctrl-Shift- '+' (plus) | Rotate view 90 degrees clockwise |
| Ctrl- '-' (minus) | Ctrl- '-' (minus) or Cmd- '-' (minus) | Zoom out |
| Ctrl-Shift- '-' (minus) | Ctrl-Shift- '-' (minus) | Rotate view 90 degrees counter clockwise |
| Ctrl-0 | Ctrl-0 or Cmd-0 | Select all channels |
| Ctrl-1 to Ctrl-9 | Ctrl-1 to Ctrl-9, or Cmd-1 to Cmd-9 | Select channel 1 to 9 |
| Ctrl-Shift-0 to Ctrl-Shift-9 | Ctrl-Shift-0 to Ctrl-Shift-9, or Cmd-Shift-0 to Cmd-Shift-9 | Select channel 10 to 19 |
| Ctrl-A | Ctrl-A or Cmd-A | Select all |
| Ctrl-D | Ctrl-D or Cmd-D | Clear selection |
| Ctrl-H | Ctrl-H | Toggle overprint highlight on/off |
| Ctrl-L | Ctrl-L | Auto align |

| Windows Keyboard Shortcut | Mac Keyboard Shortcut | Description |
|---------------------------|-----------------------|--|
| Ctrl-M | Ctrl-M | Mirror view |
| Ctrl-N | Ctrl-N | Toggle between channels showing them one at a time |
| Ctrl-O | Ctrl-O or Cmd-O | Open file |
| Ctrl-Shift-O | Ctrl-Shift-O | Add file |
| Ctrl-R | Ctrl-R | Toggle seamless view bounding lines on/off |
| Ctrl-S | Ctrl-S | Toggle between current and previous view (in difference view mode) |
| Ctrl-U | Ctrl-U | Toggle current size units |
| Ctrl-Shift-U | Ctrl-Shift-U | Toggle current resolution and screen ruling units |
| F1 | F1 | Show help pages |
| F5 | F5 | Zoom in |
| F6 | F6 | Zoom out |
| F7 | F7 | Temporarily shift to pan (hand) tool. Return to previous tool after one zoom operation |
| F8 | F8 | Temporarily shift to zoom tool. Return to previous tool after one pan operation |
| F9 | F9 | Zoom to fit image in current view |



Note: The function (Fn) keys can in most cases be used with modifier keys (Shift or Ctrl) to avoid a clash with the existing shortcut keys in the browser or operating system.

6.2. Mouse Shortcuts

| Mouse shortcut | Description |
|---------------------------------|---|
| Right button + simple click | Zoom in by a factor of 2 |
| Right button + drag | Zoom in on the selected area |
| Right button + Ctrl key + click | Zoom out by a factor of 2 |
| Double-click the Screen tool | Measure screen ruling and angle centered in current selection |

| Mouse shortcut | Description |
|------------------------------------|--|
| Double-click the Densitometer tool | Measure dot percentage for current selection (or in the current view if there is no selection) |
| Double-click the Zoom tool | Zoom to fit the selection (if any) or the full image |



Note: On MacOS X: use the Apple modifier key with a normal mouse click to simulate a right-mouse click.

6.3. Buttons with special mouse-click options

| Buttons with special mouse-click options | Description |
|---|--|
| Ruler tool + right click | Select display parameters from a pop-up menu |
| Rotate + Shift key + click | Rotate 90 degrees counter clockwise |
| View both (in difference view mode) + right click | Select the button function and the difference highlight display colors from a pop-up menu |
| View recto-verso + right click | Select the mirror mode from a pop-up menu |
| View side-by-side + right click | Select the tile style from a pop-up menu |
| Split channels view + right click | Select the tile style from a pop-up menu |
| Revert channel edit + right click | Select the channel edit revert action from a pop-up menu |
| Single channel display mode + right click | Choose single channel display mode from a pop-up menu |
| Channel color buttons + simple click | Open the channel colors edit dialog for the selected channels, with the current channel active |
| Channel color buttons + right click | Open the color picker for the current channel if it is active |
| "All" channel color button + right click | Select the channel list label display style from a pop-up menu |
| Channel color buttons + drag and drop | Change the channel order |
| Channel eye check-box + right click | Select this channel and deselect all others |
| Next annotation + right click | Select the annotation traversal mode from a pop-up menu |



Note: On MacOS X: use the Apple modifier key with a normal mouse click to simulate a right-mouse click.