

Pack Proof 24.03

User Guide

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Contents

| | |
|---|-----------|
| 1. Copyright Notice..... | 4 |
| 2. What is Pack Proof?..... | 6 |
| 2.1. The Pack Proof Workflow..... | 6 |
| 2.2. Color Management..... | 7 |
| 2.2.1. Devices and Color Spaces..... | 7 |
| 2.2.2. Devices' Profiles..... | 7 |
| 2.2.3. Using Profiles for Color Management..... | 8 |
| 2.2.4. Color Strategies..... | 9 |
| 2.2.5. Rendering Intents..... | 10 |
| 2.2.6. The Color Management Database..... | 12 |
| 2.2.7. PantoneLIVE..... | 12 |
| 2.3. Rendering..... | 13 |
| 2.3.1. Anti-Aliasing..... | 14 |
| 2.3.2. Resampling..... | 14 |
| 2.3.3. Identical One-Ups..... | 16 |
| 2.4. Verification..... | 17 |
| 2.4.1. Choosing Color Deviation Tolerances..... | 18 |
| 2.4.2. Choosing a Verification Strip..... | 21 |
| 2.4.3. Measuring with a Spectrophotometer..... | 24 |
| 2.4.4. Reviewing the Verification Feedback..... | 24 |
| 3. Pack Proof Installation and Configuration..... | 26 |
| 3.1. Licensing..... | 26 |
| 3.2. Installation..... | 26 |
| 3.2.1. Installation or Upgrade?..... | 26 |
| 3.2.2. Installation Overview..... | 27 |
| 3.2.3. Upgrade Overview..... | 36 |
| 3.3. Configuration in the Automation Engine Pilot..... | 43 |
| 3.3.1. Imaging Engine Configuration for Pack Proof..... | 43 |
| 3.3.2. Pack Proof Configuration..... | 45 |
| 3.3.3. Pack Proof Configuration for using in AE SaaS..... | 46 |
| 4. The Proof for Contract Approval Task..... | 48 |
| 4.1. General..... | 49 |
| 4.2. Proofer..... | 51 |
| 4.3. Transformations..... | 52 |
| 4.4. PDF Objects..... | 54 |
| 4.5. Processing Steps..... | 56 |
| 4.5.1. Processing Step Groups..... | 56 |

| | |
|---|----|
| 4.5.2. Working with Processing Steps..... | 59 |
| 4.6. Inks..... | 60 |
| 4.6.1. Selecting Inks Manually..... | 61 |
| 4.6.2. Selecting Inks Using Selection Criteria..... | 62 |
| 4.6.3. Switching How You Select Inks..... | 65 |
| 4.6.4. Selecting Inks though Shuttle..... | 65 |
| 4.7. Color Management..... | 68 |
| 4.7.1. Color Management for Standard Proof..... | 68 |
| 4.7.2. Color Management for Emulation Proof..... | 71 |
| 4.8. Output..... | 74 |
| 4.8.1. Color Managing your Proofer's White Ink..... | 75 |
| 4.9. Rendering..... | 75 |
| 4.10. Verification..... | 79 |
| 4.10.1. Offline Verification..... | 83 |
| 4.10.2. Inline Verification..... | 83 |
| 4.11. Summary..... | 83 |

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2. What is Pack Proof?

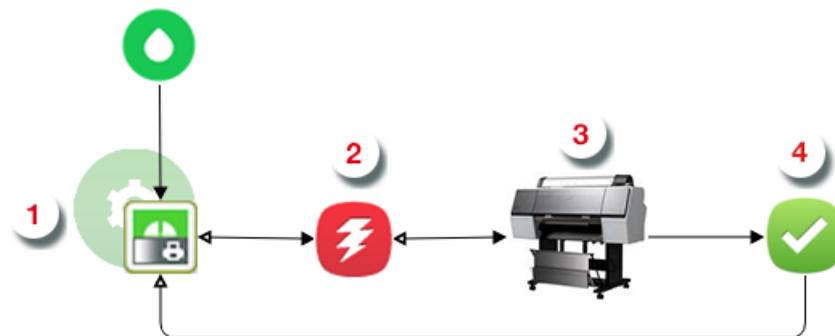
Pack Proof is a **proofing software solution** that enables you to proof your jobs on the most commonly used proofers in the market, using the proofers' native language.

Pack Proof is **integrated with Automation Engine**, so you can send a job through your proofing workflow to the proofer without having to leave the Automation Engine Pilot.

On top of that, Pack Proof ensures **color accuracy**:

- **Color management** ensures color matching throughout your workflow, thanks to Esko's Color Pilot.
- **Verification** allows you to add a color strip to your proof and to verify the strip's color accuracy using a measuring device and the Fiery Verify software.

2.1. The Pack Proof Workflow



1. When sending files to Pack Proof's **Proof for Contract Approval task** , you can:
 - Perform general **file transformations** to make sure the output is as expected (select the right page box, rotate/invert/mirror/scale the file as needed...).
 - **Color manage** your file so that your proof accurately reflects what your press output will look like (using color management settings from Color Pilot ,).
 - See [Color Management](#) on page 7.
 - **Rasterize** the vector graphics to continuous tone bitmaps (using Imaging Engine's RIP'ing capabilities).
 - See [Rendering](#) on page 13.
 - Set **verification** options to later verify your proof's color accuracy using the **Fiery Verify** tool.
 - See [Verification](#) on page 17.
2. The **Proof for Contract Approval task** sends the files to be proofed to the **Esko Proof Server** .
3. The **Esko Proof Server** proofs the files on your **proofer**.

- For **contract proofing** (with accurate color management), your proofer can be any of [these proofer models](#).
 - If you first want to make a **content proof** with only basic color management (to check whether the layout, text, barcodes... in your file are correct), you can use [a wider range of supported proofers](#).
4. You can verify that the colors on your proof match the colors you were expecting, using a **measuring device** and **Fiery Verify**  (the verification tool of the Esko Proof Server).
See the Esko Proof Server documentation on the [Pack Proof page](#) for more information.

2.2. Color Management

Color management is making sure that colors are reproduced consistently at different stages of the printing process.

This consistency is especially important for specific "brand" colors, that have to look the same when printed on different substrates (cardboard, paper, plastic...).

2.2.1. Devices and Color Spaces

Different devices (a digital camera, computer monitor, proofer, press...) display or reproduce colors in different ways.

Colors in photographs are generally defined in the **RGB** color space (Red, Green, Blue), and monitors also use RGB to display colors.

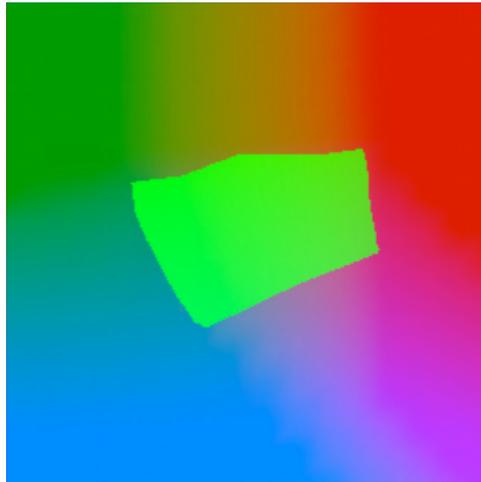
Proofers and presses use **CMYK** (Cyan, Magenta, Yellow and Black -or "Key") for printing, and sometimes additional inks (for example Orange, Green and Blue, to be able to reproduce more colors, or one or two **spot colors** -generally Pantone inks- used in a particular file).

Files coming from a graphic designer may contain CMYK, spot colors and sometimes images in RGB.

2.2.2. Devices' Profiles

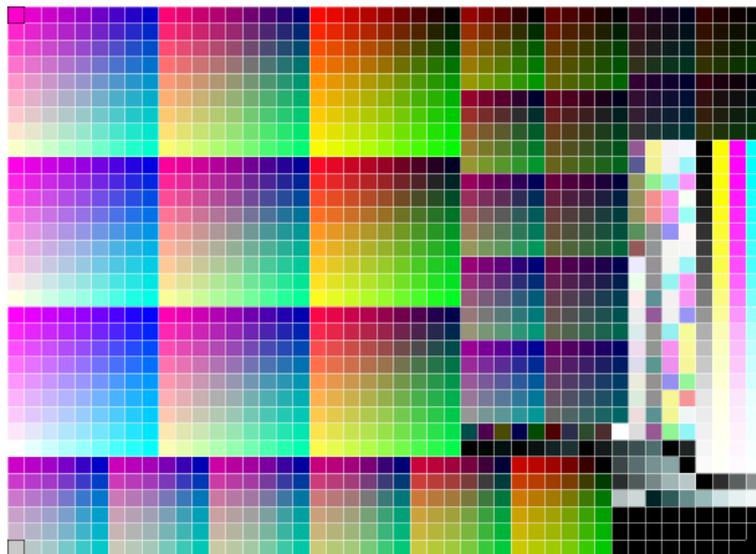
Even within one color space, different devices can reproduce colors differently. For example, two CMYK proofers from different brands may print completely differently.

A device's **gamut** is the totality of the colors that device can reproduce (for example, the area shown in light green below).



This is captured in the device's **profile**, which describes all the colors achieved when using different combinations of percentages from the base colors (RGB, CMYK, or CMYK + extra colors).

To create a profile for a press or proofer, you need to print and measure a profiling chart containing these combinations of percentages.



See the [Color Pilot documentation](#) for more information about creating profiles.

Pack Proof support the following types of device profiles:

- Esko profiles, created in Color Pilot,
- ICC profiles, created in a third party application and written in a standard format.

2.2.3. Using Profiles for Color Management

You need to have a profile for **each of your devices** to perform color management.


Note:

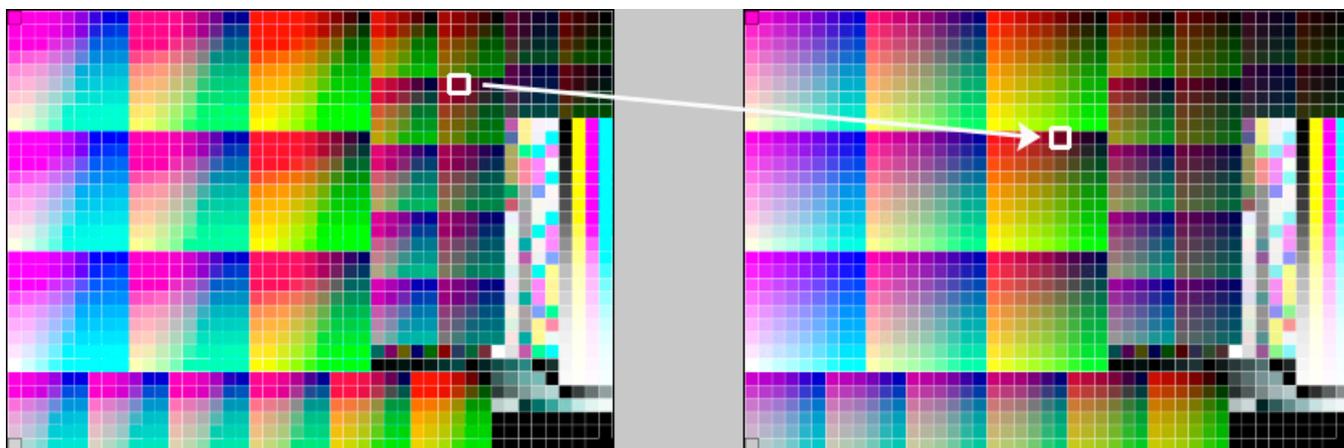
Proofer and presses' profiles need to reflect the device's exact printing characteristics (inks, substrate...).

So if for example you change your substrate, you need to make a new profile taking that substrate into account.

Once you have made the profiles, you can perform a **controlled conversion** of the colors between the different device profiles.

For example if you are printing a photograph, you need to convert its colors from the digital camera's RGB profile (the **source profile**) to the printer's CMYK profile (the **destination profile**).

This means that every color in the source profile is converted to the closest possible color that can be reproduced by the destination profile.


Note:

If you want to proof a file that will be printed on your press, you are trying to reproduce your **press'** colors on your **proofer**.

This means that the press profile is your **source** profile, and the proofer profile is your **destination** profile.

2.2.4. Color Strategies

If you want to refine your color management, you can use **color strategies**.

A color strategy is a bundle of color management settings that contains at least the source and destination *profiles* of the devices you are using, and can contain other color management settings (for example a *rendering intent* for converting *out-of-gamut* spot colors and the background color, other settings for converting specific spot colors, etc).

Your company's color management expert can create these color strategies in Color Pilot, and you can simply select the one you need in your proofing ticket.

For more detailed information about color strategies, see the [Color Pilot documentation](#).

2.2.5. Rendering Intents

A **Rendering Intent** is a part of your [color strategy](#) that handles the conversion of [out-of-gamut](#) spot colors and of the background color.

Each rendering intent does this in a different way, so you should choose the one that is more adapted to the way you are printing and the result you want to achieve:

- Use the **Relative Colorimetric** rendering intent if you don't want to simulate the source background (the point that has 0% of all inks in the source profile).

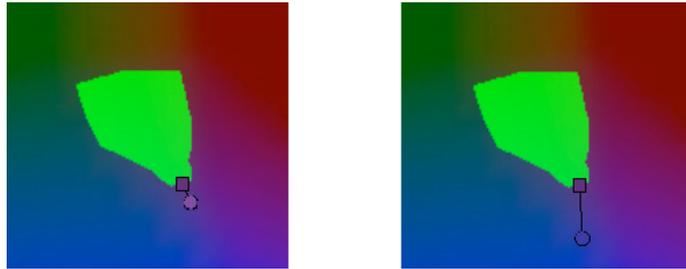
This will proof your file as if the proofer substrate was exactly the same as the substrate defined in your source profile.

For example: your press prints on cream colored card stock whereas your proofer prints on bright white paper, but you don't want to simulate the cream background on your proof.



With this rendering intent, colors from the source profile that cannot be reproduced by the proofer will be converted to the closest color(s) the proofer can reproduce.

In some cases several colors will be converted to the same color, which means that you can sometime lose some detail, especially in dark saturated areas and the dark parts of gradations.



Note that typically the proofer profile has a bigger gamut than the press profile, so there are not many colors that the proofer cannot reproduce.

- Use the **Absolute Colorimetric** rendering intent if you want to simulate the source background to get as exact a color match as possible.

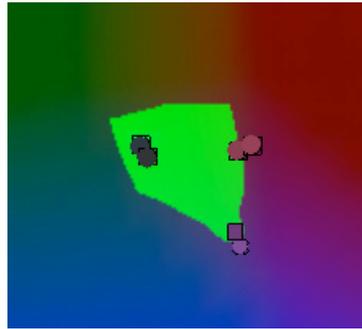
For example: you do want to simulate the cream colored card stock used on your press on your proofer substrate, to see how the final output will look like (this doesn't only affect the white but all the colors in your file).



As with the Relative Colorimetric rendering intent, colors from the source profile that cannot be reproduced by the proofer will be converted to the closest color(s) the proofer can reproduce, meaning you can sometime lose some detail, although there are typically not many press colors that a proofer cannot reproduce.

- Use the **Perceptual** rendering intent if you are not trying to get an exact color match but want the proof to look visually pleasing.

If there are colors from the source profile that cannot be reproduced by the proofer, this will shrink the source gamut to fit inside the gamut of the proofer, so that all colors are converted (even the colors already in the proofer's gamut), but the relationship between colors is kept.



This means that colors won't be really accurate, but you won't lose detail in dark saturated areas or gradations.

This rendering intent is most commonly used in commercial printing (for newspapers, magazines, posters...).

- Use the **Saturation** rendering intent if you mostly want to make sure the colors on your proof are saturated enough.

Colors from the source profile that cannot be reproduced by the proofer will be mapped onto close saturated colors that are in the proofer's gamut.

This rendering intent is most commonly used for business presentations containing graphics, or cartoons/comics.

2.2.6. The Color Management Database

All your [profiles](#), [color strategies](#) and inks are stored in a color management database (also called "CMS database").

You install this color management database when installing Automation Engine. You can install it on your Automation Engine server or on another server (the server you install your color management database on is called the "resources server").

After this, the profiles, color strategies and inks in your color management database are automatically available in the [Proof for Contract Approval task](#).



Important:

You should also install Color Pilot when installing Pack Proof.

This will enable you to create your own profiles, color strategies and inks, and to access [PantoneLIVE inks](#) (if you have a PantoneLIVE license).

2.2.7. PantoneLIVE

PantoneLIVE® is a database of Pantone inks in the cloud. It contains information about how different tints of an ink look like, and how the ink will look like on different substrates.

Because it is in the cloud, the same color data is accessible to every actor of the packaging production, globally (while being protected by a login). This ensures that you get predictable and accurate color every step of the way, saving time and costs.

To use PantoneLIVE inks, you need Color Pilot and a PantoneLIVE license.

After logging on to the PantoneLIVE cloud from Color Pilot, you will be able to download PantoneLIVE ink books from the cloud, and use PantoneLIVE inks in your files.

Please see the [Color Pilot documentation](#) for more information about accessing PantoneLIVE ink books.



Note:

If you don't have a PantoneLIVE license, any PantoneLIVE ink in your files will be treated as an unregistered ink (an ink not present in your color database), and you will not be able to proof or RIP it accurately.

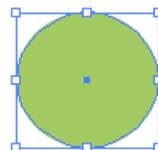
In this case you should ask the file's designer to replace the PantoneLIVE ink by an ink that is present in your color management database.

2.3. Rendering

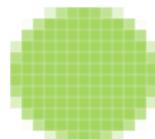
What is Rendering?

Files coming from a graphic designer may contain **vector graphics** or "linework" (especially for fonts or logos).

Vector graphics are highly scalable without any loss of quality (as they are not based on pixels but on mathematical formulas), but they are **not printable**.



To be able to print those graphics, you need to **render** them on a **raster** (this is also called **rasterizing**). This raster is a rectangular grid composed of square pixels. You then get **bitmap images**, or "contones" (continuous tone images), made up of pixels.



The raster has a certain width and height in pixels, and a certain **bit depth**. This is the range of colors that its pixels can have (for example 1-bit is monochrome, 8-bit is grayscale or a limited range of colors, 16-bit is a larger range of colors...).

Low-resolution bitmaps can look pixellated, but Pack Proof generates high-resolution bitmaps.

Rendering Options

Depending on your input file type and the result you want, you can set several options in Imaging Engine to help you make sure your bitmap images look good on print:

- [Anti-Aliasing](#) on page 14,
- [Resampling](#) on page 14,
- [Identical One-Ups](#) on page 16.

2.3.1. Anti-Aliasing

You may sometimes experience issues with jagged edges, in text and along other slanted or curved edges. This happens more often at lower resolutions, and is due to the square pixels not being able to represent these edges finely enough.

In such cases, you can apply **Anti-aliasing**, to average the color of the edge pixels, and make these edges appear smoother.

In the example below, you can see the difference between output without anti-aliasing (on the left), and with anti-aliasing applied (on the right).

text text



Attention: Because anti-aliasing changes the output sampling to smooth the jagged edges, you cannot [resample](#) your images if you use anti-aliasing.

2.3.2. Resampling

When rendering an input file with images, the images' pixels may not map exactly to output pixels if:

- the images' resolution is different from the output resolution you chose,
- scaling and rotation effects change the size and placement of the images' pixels.

This is especially problematic when the images' resolution is much lower than the output resolution, as this makes them look pixellated and/or fuzzy in the output. In such cases, you need to **resample** these images to be able to output them at the same resolution as the rest of the file.

You can choose between two resampling methods:

- Use the **Auto Resampling** method to upsample the images to an automatically calculated resolution (generally half or a third of the output resolution) before smoothing them.

This makes images a lot less pixellated and fuzzy.



- This method takes some time but gives images of a good quality, so it is recommended in most cases.
- Use the **Full Resampling** method to upsample the images to the full output resolution. This method is the slowest, but gives the highest quality images (not pixelated and only slightly fuzzy).



- Use this if **Auto Resampling** doesn't give you the results you want.


Attention:

Resampling to full resolution can require significant amounts of memory when the output resolution is high (especially from 4000 dpi).

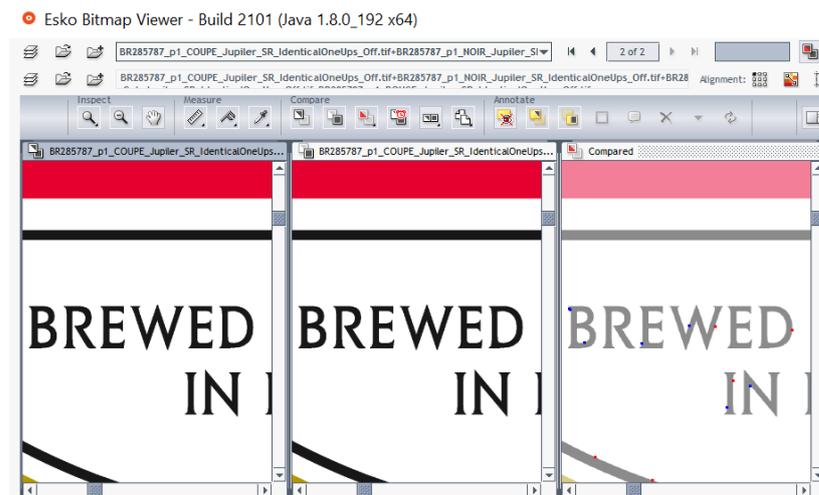
If you want to do this, we recommend that you have at least 8GB of RAM available for each worker (see the installation documentation).

2.3.3. Identical One-Ups

When working with Step and Repeat files, you sometimes want your one-ups to look exactly identical on print.

This is because small differences in your one-ups may be visible on print: fine details may be different between one-ups (in images or text, for example in Asian characters).

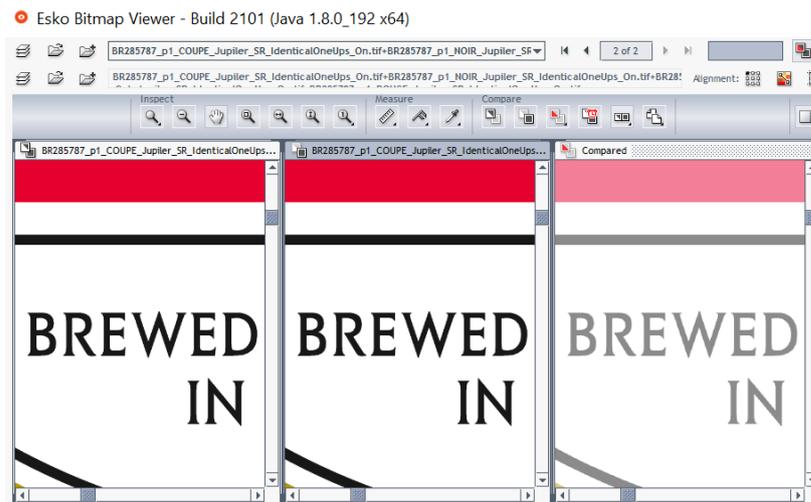
Below you can see a zoomed in area of two one-ups, and the pixel comparison of these one-ups (on the right) in the Bitmap Viewer.



To counter this, you can choose to make your one-ups identical in Pack Proof.

While *rendering* the file, Pack Proof makes subtle shifts to the one-ups' positions on the pixel grid so that they are rendered identically. The shifts used are the smallest possible, to keep the output as predictable as possible.

This corrects (most of) the pixel differences between the one-ups.



Note: In some cases, there can still be some very small pixel differences detectable in the Viewer, but these are too small to be visible on print.

You can choose to render identical one-ups for the following input file formats:

- [Plato](#) files (.pdfpla files and Normalized PDFs from Plato),
- Step and Repeat files in the Native PDF format (made by ArtPro+ or 3rd party software),
- Step and Repeat files in the ArtPro Classic file format (.ap or .art), if they were previously Normalized.

Apart from Step and Repeat files, you can also use this for input files using the **same external file several times** (for example, using the same image in several places), if:

- the input files are PDF+, and created in ArtPro+,
- each occurrence of the repeated external file has been added as "placed art" in ArtPro+,
- all occurrences of the repeated external file are identical (for example they all have the same size and orientation).

2.4. Verification

Once you have color managed and proofed your file(s), you may want to check the color accuracy of your proof. This is especially important for contract proofing, as it is a measure of the proof's quality that you can show your customers.

You can do this in Pack Proof the following way:

1. Before proofing, you define [color deviation tolerances](#) (how close the colors on your proof must be to the colors in your input file for you to accept the proof as color accurate).
2. When proofing your file, you add a [verification strip](#), containing patches of the separations present in your input file.
3. Once your file is proofed, you measure this verification strip in **Fiery Verify**, with a [spectrophotometer](#).
4. In **Pack Proof**, you get detailed [feedback](#) about whether the measured separations are within your tolerances, helping you decide to either accept or reject the proof.



Tip: You can also use verification to monitor your proofer's stability over time (for example by printing a test job with a verification strip at regular intervals).

2.4.1. Choosing Color Deviation Tolerances

Your color deviation tolerance is how close the colors on your proof must be to the colors in your input file for you to accept the proof as color accurate.

If you are unfamiliar with how to determine color accuracy, please read the next sections:

- [Quantifying Colors](#) on page 18
- [Difference Between Colors: Delta E](#) on page 19
- [Difference Between Colors: Other Measures](#) on page 20

You enter your color deviation tolerance in the **Proof for Contract Approval** task (see [Verification](#) on page 79).



Note: You cannot use a tolerance set created in the Esko Proof Server for verification in the **Proof for Contract Approval** task.

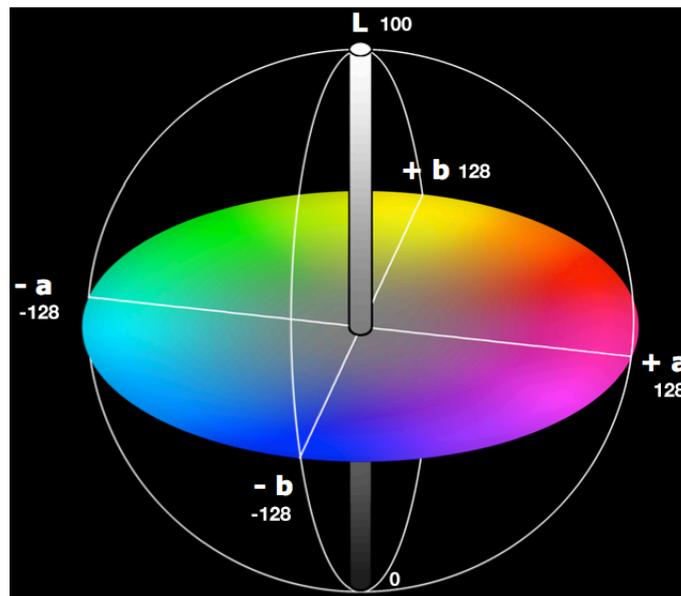
Quantifying Colors

The Lab Color Space

Colors are generally defined by their position in the **Lab** color space, which is a 3D color model representing all colors visible to the average human eye (developed by the Commission Internationale de l'Eclairage).

It is based on three axes:

- the **L** axis (going from 0 to 100) defines the lightness of the color (a dark color has a low **L** value, a light color has a high one),
- the **a** axis (going from -128 to 128) defines how green or red a color is (a greenish color has a low **a** value, a reddish color has a high one),
- the **b** axis (going from -128 to 128) defines how blue or yellow a color is (a blueish color has a low **b** value, a yellowish color has a high one).

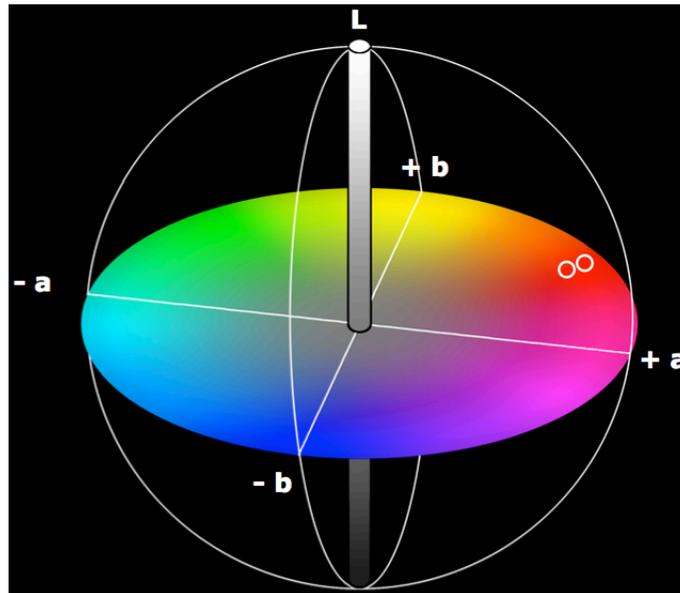


For example:

| Color | Lab values |
|--|-------------------|
|  light yellow | Lab (100, 0, 60) |
|  dark green | Lab (15, -128, 0) |
|  medium gray | Lab (50, 0, 0) |

Difference Between Colors: Delta E

The difference between two colors is often calculated in **Delta E** (or ΔE) units: this is the difference between the colors' respective positions on the **L**, **a** and **b** axes.



The more different two colors are, the higher the Delta E number is. Generally a human eye can perceive color differences that are above 2 Delta E.



Note:

There are several Delta E formulas, that have been developed at different points in time (**CIE76**, **CMC**, **CIE94** and **CIE2000**).

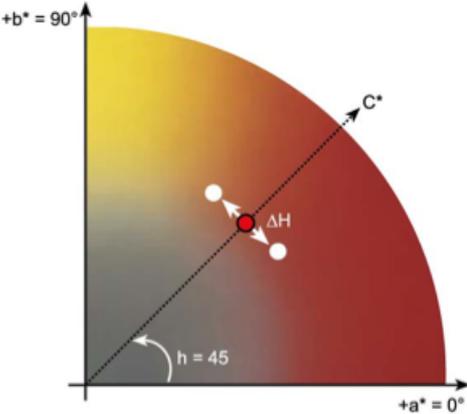
- If your company is already using one of those formulas, we recommend that you use the same one.
- If not, you should use **CIE2000**, which is the best reflection of the visual difference between colors.
- However, if you are trying to verify a proof according to the ISO 12647-7 proofing standard, you should use the formula specified in the standard, **CIE76**.

Difference Between Colors: Other Measures

Apart from **Delta E**, there are additional color differences indicators, that measure other colors characteristics.

You can use those if you want to have a more comprehensive picture of how well your colors are reproduced, or to quantify a particular color problem of your press.

| | |
|------------------------|---|
| <p>Delta CH</p> | <p>Use this to measure the difference in saturation (or "chroma") between the colors in your job and the printed colors.</p> <p>This is based on the positions of the two colors on the a and b axes in the Lab color space, and can be a good indication of whether the gray balance on your press is good or not.</p> |
| <p>Delta H</p> | <p>Use this to measure the difference in hue between the colors in your job and the printed colors.</p> |

| | |
|-----------------------|--|
| | <p>The hue is the angle between two colors relative to the a and b axes in the Lab color space.</p>  |
| <p>Delta T</p> | <p>Use this to measure the difference in colorimetric tone value between the colors. Colorimetric tone value means that the dot gain is measured by a spectrophotometer instead of a densitometer.</p> <p>This gives more information about the colors (for example 50% of a warm yellow and 50% of a cold yellow look the same to a densitometer, but different to a spectrophotometer).</p> <p>This is only applicable to the primary colors (CMYK).</p> |

2.4.2. Choosing a Verification Strip

You can choose from different types of verification strips to add to your job.

Keep in mind that the type of strip you can use depends on:

- what is available on your Esko Proof Server (by default, the Esko Proof Server comes with a large number of strips),
- the [spectrophotometer](#) you will use to measure your strip (as different spectrophotometers support different strip types).

This means that depending on your way of working, you will see a certain subset of the strips mentioned below.

Esko Strips

| | |
|--------------------------|--|
| <p>Esko Strip</p> | <p>This strip type contains the following CMYK patches:</p> <ul style="list-style-type: none"> • patches of C, M and Y at 100%, 70% and 40%, • overprints of C and M at 100%, 70% and 40%, • overprints of C and Y at 100%, 70% and 40%, • overprints of Y and M at 100%, 70% and 40%, • an overprint of CMYK at respectively 100%, 40%, 40% and 20%, • an overprint of CMYK at respectively 40%, 100%, 40% and 20%, |
|--------------------------|--|

| | |
|----------------------------------|---|
| | <ul style="list-style-type: none"> • an overprint of CMYK at respectively 40%, 40%, 100%, 20%, • patches of K at 0%, 20%, 40%, 70% and 100%. |
| Esko + Solid Colors Strip | <p>This strip type contains the same patches as the Esko Strip type, plus a 100% patch for every spot color present in the job.</p> <div style="border: 1px solid black; padding: 5px;">  <p>Note: When using an Esko + Solid Colors Strip, you must color manage your strip.</p> </div> |
| Esko Equinox Strip | <p>This strip type is only available when you use a color strategy containing an Equinox source profile.</p> <p>For more information about Equinox, see the Equinox documentation.</p> <div style="border: 1px solid black; padding: 5px;">  <p>Note: When using an Esko Equinox Strip, you must color manage your strip.</p> </div> |

Industry Standard Strips

| | |
|--------------------------|--|
| Fogra strip types: | <ul style="list-style-type: none"> • Fogra MediaWedge V3.0 XE 1Z • Fogra MediaWedge V3.0 XE 2Z • Fogra MediaWedge V3.0 XE 3Z <p>These industry standard strip types are widespread and used to check compliance with the Media Standard Print rules (based on ISO 12647). 1Z has one line, 2Z has two and 3Z has three.</p> |
| IDEAlliance strip types: | <ul style="list-style-type: none"> • IDEAlliance ISO 12647-7 2009 • IDEAlliance ISO 12647-7 Control Wedge 2013 (2 lines) • IDEAlliance ISO 12647-7 Control Wedge 2013 (3 lines) • IDEAlliance ISO 12647-7 Control Wedge 2013 (4 lines) • IDEAlliance ISO 12647-7 Control Wedge 2013 (6 lines) <p>These industry standard strip types are widespread and used to check compliance with ISO 12647-7.</p> |
| Japan Color strip types: | <ul style="list-style-type: none"> • Japan Color • Japan Color 54 (1 line) • Japan Color 54 (2 lines) <p>These strip types have 54 patches and are used to check compliance with the Japan Color standard.</p> |
| Ugra Fogra strip types: | <ul style="list-style-type: none"> • Ugra Fogra-MediaWedge V2.2 • Ugra Fogra-MediaWedge V3.0 |

| | |
|--|---|
| | <p>These industry standard strip types are widespread and used to check compliance with ISO 12647-7.</p> <p>They consists of 72 CMYK patches, which correspond to the most important patches of the ECI 2002 color chart.</p> |
|--|---|

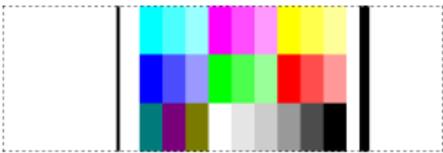
Other Strips

| | |
|------------------------------------|---|
| 3DAPv3 CMYK Wedge | This strip type is used to check compliance with the 3DAPv3 proofing specifications (based on ISO 12647-2 and ISO 12647-7). |
| EFI Color Verifier Chart | These strip types come with Fiery Verify. |
| EFI Color Verifier Chart US | The EFI Color Verifier Chart US is used to check compliance with the SWOP specifications. |

Strip Layouts

For each strip type, several strip layouts are available, each layout being designed for a type of spectrophotometer (i1, i1io, etc.).

Pack Proof automatically uses the correct strip layout, based on the spectrophotometer and strip type you selected. For example, for the **Esko Strip** type, the following layouts can be used:

| Spectrophotometer | Strip layout |
|-----------------------------|--|
| Epson SpectroProofer |  |
| X-Rite i1io |  |
| HP DesignJet Zx100 |  |
| X-Rite i1iSis |  |
| X-Rite SpectroScan |  |

| Spectrophotometer | Strip layout |
|-------------------|--------------|
| | |

2.4.3. Measuring with a Spectrophotometer

After proofing your job with its verification strip on your Esko Proof Server, you can measure it with your spectrophotometer to verify its color accuracy.

For this, you can use either an inline spectrophotometer (embedded in your proofer), or an offline one (a separate device).

Supported Spectrophotometers

| Inline | Offline |
|--|---|
| <ul style="list-style-type: none"> • Epson SpectroProofer (X-Rite ILS20) • Epson SpectroProofer (X-Rite ILS30) • Epson SpectroProofer (X-Rite ILS30) for SC-Px5x • HP DesignJet Zx100 non UV • HP DesignJet Zx100 | <ul style="list-style-type: none"> • X-Rite i1Pro 3 • X-Rite i1Pro 2 • X-Rite i1Pro • X-Rite i1i0 • X-Rite i1i0 for iPro3 • X-Rite i1iSis UV • X-Rite i1iSis • X-Rite SpectroScan • Barbieri Spectro Swing • Barbieri Spector LFP Basic |

For more information about choosing a device and measuring your strip for verification, see:

- [Verification](#) on page 79,
- [Offline Verification](#) on page 83,
- [Inline Verification](#) on page 83.

2.4.4. Reviewing the Verification Feedback

In Pack Proof

You get feedback in the Pilot's **Files** and **Tasks** views:

- When sending the file(s) ready to be proofed to the Esko Proof Server: the **Proof for Contract Approval** task has a **Send to Proof Server** subtask; it has a green check  when the files have been sent to the Esko Proof Server.
- After measuring and verifying your strip: you can see either **Verification successful**  or **Verification failed** .

You can see verification details in the log file (which color deviation tolerances and Delta E formula you used, which tolerances were met or not met...).

On the Proof

If you are working with an [inline spectrophotometer](#), you can also [print a report](#) on the proof itself.

This report shows information relative to the proof and verification (the printer used, the date and time, the verification strip used, the tolerances and whether they were met...).

3. Pack Proof Installation and Configuration

3.1. Licensing

To use the Pack Proof functionality in Automation Engine, you need a Pack Proof license (in the form of a product key file).

If you don't have this license, you will not be able to [configure Pack Proof in the Automation Engine Pilot](#), or see the [Proof for Contract Approval Task](#).

For more information about the Pack Proof license, please contact your Esko representative.

3.2. Installation

3.2.1. Installation or Upgrade?

Software Version

This document covers the installation of / upgrade to the latest version of **Pack Proof** (and related applications):

| | |
|-----------------|---|
| Product version | Pack Proof 24 |
| Current release | Pack Proof March 2024 Release also called Pack Proof 24.03 |
| Including | Esko Proof Server 24 |

For more information about the released version and build number of each of the applications, please see the **Released versions** page on the installation DVD.

Installation or Upgrade?

If...

- no Esko software has been installed on your computer yet, you need to perform a new installation of Pack Proof 24.03.
See [Installation Overview](#) on page 27.
- Esko RIP or proofing software is installed on your computer, you need to upgrade to Pack Proof 24.03 instead.

See [Upgrade Overview](#) on page 36.

3.2.2. Installation Overview

To use Pack Proof, you will need to first license then install the following applications:

| application: | before installing, please check: |
|---|---|
| <p>Automation Engine</p> <div data-bbox="272 613 331 674" style="float: left; margin-right: 10px;">  </div> <p>Note: You should have already installed Automation Engine before starting to install Pack Proof and the Esko Proof Server. See the Automation Engine installation documentation for details if needed.</p> | <p>the Automation Engine system requirements</p> |
| <p>Pack Proof and Esko Proof Server</p> | <p>the Pack Proof and Esko Proof Server system requirements</p> |

You can either install these applications on the same server, or on two or three different servers. If you install them on different servers, these servers need to be in the same Local Area Network.

General installation procedure:

1. Make sure you have the relevant DVDs.
 - To install Pack Proof, you need the **Esko Software - Imaging Engine 24 Installation** DVD.
 - To install the Esko Proof Server, you need the **Esko Software - Pack Proof 24.03 Installation** DVD.



Note: If you downloaded the software from MySoftware.esko.com, you will need to mount the corresponding .iso files as virtual DVDs, or unpack the .iso files first.

2. Make sure you have the relevant **licenses**.
 You need a product key file for Pack Proof 24 (which includes all necessary licenses). If you do not have a product key file yet, contact [Esko Customer Support](#).
3. On all servers on which you want to install Esko software, [prepare for the installation](#).
4. On your license server (which can be either your Automation Engine server or a central license server), [activate your licenses](#).
5. On the server on which you want to install Pack Proof, perform the steps listed in [Installing Pack Proof](#) on page 29.
6. On the server on which you want to install the Esko Proof Server, perform the steps listed in [Installing the Esko Proof Server](#) on page 32.

Preparing for the Installation

Before you install Pack Proof 24.03 on your system, check the following:

- You need to have Administrator privileges.
- You need Internet access.
- Your computer must meet the minimum requirements for the installation, as described on [the System Requirements page](#).
- You must make sure your anti-virus software is not blocking the installation or configuration.

Activating the Licenses

Pack Proof 24 is protected with licenses. These licenses are distributed as a product key file (in .html).

You need to activate the product keys in the product key file using the **Network License Manager** application, on the server that you are using as a **license server** (this can be either your Automation Engine server or a central license server).

You should have installed the Network License Manager as part of your Automation Engine installation. See the Automation Engine installation documentation if needed.

You need:

- A product key file for Pack Proof 24 (which includes all necessary licenses). If you do not have a product key file yet, contact [Esko Customer Support](#).
- Internet access on the server that you are using as a license server.
- An **Esko ID** in order to activate the licenses. You can get one at <http://www.esko.com/licensing/CreateAccount>.

On the server that you are using as a license server:

1. Open the **Network License Manager**.

Depending on your operating system, you can do this by:

- going to **Start > All Programs > Esko > Network License Manager > Network License Manager**,
- going to **Start > Esko > Network License Manager**,
- clicking **Network License Manager** on your **Apps** screen.

2. In the **Esko Network License Manager**, do one of the following:

- drag your product key file in the area marked **Drag your Product Key File or your Response file here**,
- click the **Activate** button.

3. Follow the instructions of the **Activate License Wizard**.

4. When asked about the product keys, choose **I have received an HTML file containing my Product Keys**.

5. Click **Browse** to select the product key file.

6. When asked, fill in your **Esko ID** and **Password**.

7. Click **Finish**.

The licensed products you can use are now visible in the Network License Manager.

Installing Pack Proof

You need the **Esko Software - Imaging Engine 24 Installation** DVD for the installation. Use the following procedure to install Pack Proof 24.03:

1. Open the **Esko Software - Imaging Engine 24 Installation** window:
 - If you insert the **Esko Software - Imaging Engine 24 Installation** DVD into the DVD drive, or mount the corresponding .iso file, the window appears automatically.
 - If you unpacked a downloaded .iso file, or if the window doesn't open automatically, double-click `setup.exe` in the root folder.
2. Select the installation language.
3. Click **Proceed to the installation**.
4. Under **Imaging Engine/Pack Proof 24 installation, including related tools (Color Pilot, Curve Pilot, HD Flexo Screens and ScreenManager)**, click **Install**.
5. On the page that opens:
 - a) If you [activated your licences](#) on a central license server (not the server on which you are installing Pack Proof), connect your Pack Proof server to this license server.
See [How to Connect to the License Server](#) on page 29 for details.
 - b) Check and install the prerequisites.
See [How to Install the Pack Proof Prerequisites](#) on page 29.
 - c) Proceed with the software installation.
See [How to Install Pack Proof](#) on page 31.

How to Connect to the License Server

If you [activated your licences](#) on a central license server, you need to connect to this license server from your Pack Proof server.

1. On the **Imaging Engine 24 Installer** page, click on **Install the Network License Manager**.
2. Follow the instructions of the installation wizard.
3. Back on the **Imaging Engine 24 Installer** page, click **Activate the licenses** to open the **Network License Manager**.
4. In the **Esko Network License Manager**, go to **Tools > License Client Configuration**.
5. In the **License Client Configuration** dialog:
 - a) Enter the name of the server that you are using as a [license server](#).
If your license server is also the server you are installing Pack Proof on, you can enter `localhost` here.
 - b) Click **Apply**.
 - c) Click **Exit**.
6. Close the **Network License Manager** and go back to the **Imaging Engine 24 Installer** page.

How to Install the Pack Proof Prerequisites

Before you install Pack Proof, you need to install the Pack Proof prerequisites.

1. On the **Imaging Engine 24 Installer** page, click on **Check and install the Imaging Engine/Pack Proof System prerequisites**.

This checks whether the operating system is suited for installing and running Pack Proof 24.03, and starts the Pack Proof 24.03 prerequisites installation.

2. If:

- you see an error message about the Windows version, your operating system is not suited for running Pack Proof 24.03.

Check the [System Requirements](#) again and install Pack Proof 24.03 on a suitable operating system.

- you see the message Ready to install the prerequisite components for the Imaging Engine software. Do you want to start the installation?, click **Yes**.

3. The installation wizard for the prerequisite components will check the licenses, list the prerequisite components to install on the system, request confirmation for the installation and then install the required components.

Follow the instructions of the installation wizard.

The installation wizard will install the following components:

- Microsoft Visual Studio Redistributables
- Message Passing Interface service

If you are prompted to reboot your computer, do so and restart this installation procedure.

4. If the installer doesn't find a running Automation Engine 24.03 server on the local machine, you will see the **Enter Server name** window, prompting you to enter the name of the server running your Automation Engine.



Note:

- You should be able to access this server from your Pack Proof machine.
- You can still use the local machine as Automation Engine server (if Automation Engine 24.03 is installed on it): start up Automation Engine, and leave the field in the **Enter Server name** window blank.

The installer then checks if the server you entered has a running Automation Engine 24.03 server.

| If you get the following error: | then: |
|--|---|
| <pre>ERROR - Imaging Engine requires Automation Engine 24.03 The provided master server does not have Automation Engine 24.03 running Checked server: [yourservername]</pre> | <p>Automation Engine 24.03 is not running on the server you entered.</p> <ol style="list-style-type: none"> 1. Check that you entered the server name correctly. 2. Make sure Automation Engine 24.03 is running on it. |

| If you get the following error: | then: |
|--|--|
| | <ol style="list-style-type: none"> Restart the Pack Proof prerequisites installation. |
| <pre>ERROR - Imaging Engine requires Automation Engine 24.03 The provided master server does not have Automation Engine 24.03 installed Checked server: [yourservername] (version [yourserverversion])</pre> | <p>Automation Engine 24.03 is not installed on the server you entered.</p> <ol style="list-style-type: none"> Check that you entered the server name correctly. Install Automation Engine 24.03 on it. Restart the Pack Proof prerequisites installation. |

- In the **Set Automation Engine System Account** pop-up, enter the credentials (user name and password) of the system account you want to use for Automation Engine.



Note: The user name of the default Automation Engine system user is pre-filled in. You can either choose a password for this system user, or use different credentials.

These credentials will be stored and remembered during subsequent updates / upgrades of the software.

- Click **Exit** when the installation wizard is finished.

How to Install Pack Proof

- On the **Imaging Engine 24 Installer** page, click **Install the Imaging Engine/Pack Proof 24 products**.
- Follow the instructions of the installation wizard.
- Read the **End user license agreement** carefully and select **Yes, I accept the license agreement**.
- When asked to select the products to install on this system, select **Imaging Engine, Color Pilot**, and the desired related products (the products available depend on your license).
 - The **System Components** group cannot be deselected and will be installed on all systems.
 - The products' **Common Components** that are used by several products (for example the **Color Management System**) will only be installed once (each product's installer will check if the necessary components are present, and update them if necessary).
 - Installing Imaging Engine will install the **Proof for Contract Approval task**, and a basic version of Imaging Engine to RIP your files before proofing.
However, if you have also *activated* a full Imaging Engine license, it will install a full Imaging Engine, with the options covered in your license.
- Select a **Destination Folder** for the chosen products or use the default folder.
- At the end of the installation, click **Finish**.

Repairing Your Installed Software

In case something goes wrong during the installation (for example, the Automation Engine server *you are connected to* goes offline while you are *installing your products*), you can repair your installation.

You can also repair/reinstall your software later, for example if:

- a component stops working because its program tree has become corrupt on the system,
- you loaded licenses for new functionality after your initial installation.


Note:

- You can only repair installed software that has the same version as the software in your installation DVD.
If you have a different version installed, either use/request an installation DVD of that version to repair it, or uninstall your software and [perform a new installation](#) using the installation DVD you have.
- If you have installed hotfixes, you will need to install them again after the repair/reinstallation.

1. From the DVD's home page, select the installation language then click **Proceed to the installation**.
2. Under **Imaging Engine/Pack Proof 24 installation, including related tools (Color Pilot, Curve Pilot, HD Flexo Screens and ScreenManager)**, click **Repair/re-install**.
3. On the next page, click on the software component that you want to repair:
 - **Repair the Network License Manager (including the License Server)**
 - **Repair/re-install installed Imaging Engine/Pack Proof 24 components**
4. If you are repairing the Network License Manager, follow the instructions of the installation wizard and click **Finish** when it is done.
5. If you are repairing one or more of the products:
 - a) Click **Next** on the first screen of the installation wizard.
 - b) Select the component(s) that need repair.


Tip:

After selecting a component, you can click the **Version Info** button to see more details about that component (the creation date, build number, installed date...).

You can also **Select All** or **Deselect All** components.

- c) Follow the instructions of the installation wizard.
- d) Click **Finish** when it is done.

Installing the Esko Proof Server

You need the **Esko Software - Pack Proof 24.03 Installation** DVD for the installation. Use the following procedure to install the Esko Proof Server:

1. Open the **Esko Software - Pack Proof 24.03 Installation** window:
 - If you insert the **Esko Software - Pack Proof 24.03 Installation** DVD into the DVD drive, or mount the corresponding .iso file, the window appears automatically.
 - If you unpacked a downloaded .iso file, or if the window doesn't open automatically, double-click `setup.exe` in the root folder.
2. Select the installation language.
3. Click **Proceed to the installation**.
4. On the **Esko Pack Proof 24 Installer** page:

- a) If you [activated your licences](#) on a central license server (not the server on which you are installing the Esko Proof Server), connect your Esko Proof Server server to this license server. See [How to Connect to the License Server](#) on page 33 for details.
- b) Check and install the prerequisites. See [How to Install the Pack Proof Prerequisites](#) on page 33.
- c) Proceed with the software installation. See [How to Install the Esko Proof Server](#) on page 34.
- d) If you are installing the Esko Proof Server on a separate server (not your Automation Engine server), make sure that Automation Engine can send files to the Esko Proof Server share. See [Giving Automation Engine Access to the Esko Proof Server Share](#) on page 35 for details.

How to Connect to the License Server

If you [activated your licences](#) on a central license server, you need to connect to this license server from your Esko Proof Server.

1. On the **Esko Pack Proof 24 Installer** page, click on **Install, update or repair the License Server (Network License Manager component)**.
2. Follow the instructions of the installation wizard.
If the wizard asks you to restart the computer, do so, then relaunch the installation.
3. Back on the **Esko Pack Proof 24 Installer** page, click **Activate the licenses** to open the **Network License Manager**.
4. In the **Esko Network License Manager**, go to **Tools > License Client Configuration**.
5. In the **License Client Configuration** dialog:
 - a) Enter the name of the server that you are using as a [license server](#).
 - b) Click **Apply**.
 - c) Click **Exit**.
6. Close the **Network License Manager** and go back to the **Esko Pack Proof 24 Installer** page.

How to Install the Pack Proof Prerequisites

Before you install the Esko Proof Server, you need to install the Pack Proof prerequisites.

1. On the **Esko Pack Proof 24 Installer** page, click on **Check and install the Esko Pack Proof 24 Prerequisites**.
This checks whether the operating system is suited for installing and running your Pack Proof and Esko Proof Server software, and starts the Pack Proof 24.03 prerequisites installation.
2. If:
 - you see an error message about the Windows version, your operating system is not suited for running your Pack Proof and Esko Proof Server software.
Check the [System Requirements](#) again and install your software on a suitable operating system.
 - you see the message Ready to install the prerequisite components for the Imaging Engine software. Do you want to start the installation?, click **Yes**.

3. The installation wizard for the prerequisite components will check the licenses, list the prerequisite components to install on the system, request confirmation for the installation and then install the required components.

Follow the instructions of the installation wizard.

The installation wizard will install the following components:

- Microsoft Visual Studio Redistributables
- Message Passing Interface service

If you are prompted to reboot your computer, do so and restart this installation procedure.

4. Click **Exit** when the installation wizard is finished.

How to Install the Esko Proof Server

1. On the **Esko Pack Proof 24 Installer** page, under **Install or upgrade the Esko Proof Server component**, click the **Install or upgrade the Esko Proof Server component** link.

Click **Yes** in the pop-up asking whether you want to install the Esko Proof Server component.

2. Follow the instructions of the installation wizard.

- If the wizard needs to install any redistributables, click **Yes** to install them.
- Select the **Destination Folder** to use for the installation, or use the default folder.
- At the end of the wizard, we recommend you select **Yes, I want to restart my computer now** before clicking **Finish**.

You can choose to restart your computer later, but you need to do so before using the application.



Note:

This also installs the Esko EPL linearization files for the proofing devices tested and supported by Esko.

An EPL linearization file adjusts how your proofer prints to get best results on a certain substrate (it adapts the quantities of inks used so that your proofer can achieve maximum color density without hue shifts).

Esko provides you with a number of EPL files made in controlled conditions for different proofer models and substrate types. We strongly recommend you use the one made for your proofer and substrate combination (before profiling your proofer). This will improve the color accuracy of your proofs. Please see [this knowledge base article](#) to know how to use and evaluate the EPL file(s) made for your proofer series.

3. After restarting your computer, the **Esko Server Control** application pops up.

Esko Server Control starts the Esko Proof Server automatically.

4. If you want to install **Fiery Command WorkStation** (the client application of the Esko Proof Server) on the same server:

- a) If your computer has the Network License Manager installed, stop the Esko Network License Services before installing **Fiery Command WorkStation**.

If needed, contact Esko AfterCare for assistance.

- b) Relaunch the installation.
- c) Select your language and click **Proceed to the installation** to go back to the **Esko Pack Proof 24 Installer** page.
- d) Under **Install or upgrade the Esko Proof Server component**, click the **Install or upgrade the Fiery Command WorkStation component** link.
- e) Click **Yes** in the pop-up asking whether you want to install the Fiery Command WorkStation component.
- f) The **Fiery Command WorkStation Package** wizard installs Fiery Command WorkStation.
The installation wizard may take a long time (up to one hour on some systems).
- g) At the end of the wizard, select **Yes, I want to restart my computer now** before clicking **Finish**.

Alternatively, you can install **Fiery Command WorkStation** on another machine using this same DVD.

5. If you want to install the **Fiery Verify** tool (the proof verification application of the Esko Proof Server) on the same server:
 - a) Relaunch the installation.
 - b) Select your language and click **Proceed to the installation** to go back to the **Esko Pack Proof 24 Installer** page.
 - c) Under **Install or upgrade the Esko Proof Server component**, click the **Install or upgrade the Fiery Verify component** link.
 - d) Click **Yes** in the pop-up asking whether you want to install the Fiery Verify component.
 - e) The **Fiery Verify** wizard installs Fiery Verify.



Note: If you try to install Fiery Verify in a machine that is not connected to an Esko Proof Server via Fiery Command Workstation, you will receive a warning about the same.

- f) Click **Exit** at the end of the installation.

Alternatively, you can install **Fiery Verify** on another machine using this same DVD.

Giving Automation Engine Access to the Esko Proof Server Share

If you installed the Esko Proof Server on a separate server (that has no other Esko software), you need to make sure that Automation Engine can send files to the Esko Proof Server share.



Note: If you installed the Esko Proof Server on the server where Automation Engine is installed, this is done automatically.

Do the following:

1. On the Automation Engine server, check under which user Automation Engine is running.
Automation Engine runs as a service under either a **local user** or a **Windows domain user**. You can see which user that is:
 - in Automation Engine's **Server Admin**, under **System Account** (see the Automation Engine documentation for more details).
 - in your Automation Engine server's **Task Manager** (in **Processes**, select **Show processes for all users**, and check which user the **bgmd.exe** process runs under).
2. On the server where you installed the Esko Proof Server, locate the `ProofFolder` share in which Automation Engine will send files to be printed by the Esko Proof Server.

If you used the default installation location (C:\Esko), this is C:\Esko\ProofFolder.

3. Give the Automation Engine user **Full Control** on this share.
 - If the Automation Engine user is a **local user**:
 1. Make sure the same user exists on the Esko Proof Server computer (with the same password).
 2. Open the ProofFolder's sharing properties (right-click it, select **Properties** and go to the **Sharing** tab).
 3. Add the user to the share with full rights (click **Share...**, type the user name and click **Add**, select **Read/Write** as **Permission Level** and click **Share** to confirm).
 - If the Automation Engine user is a **Windows domain user**:
 1. Open the ProofFolder's sharing properties (right-click it, select **Properties** and go to the **Sharing** tab).
 2. Add the user to the share with full rights (click **Share...**, type the user name and click **Add**, select **Read/Write** as **Permission Level** and click **Share** to confirm).

3.2.3. Upgrade Overview

You can upgrade from any working previous version of Pack Proof or FlexProof/E.

In case you need help with the upgrade (especially from older FlexProof/E versions), contact [Esko Customer Support](#).

For the Esko Proof Server:

- If you have an Esko Proof Server 20.0 or older, you need to upgrade it. See [How to Upgrade the Esko Proof Server](#) on page 42.



Note:

Make sure no users are using the system or are connected to the server.
When upgrading, it is advised that all users save their work and create a backup.

License and System Requirements:

To upgrade Pack Proof, you will need to first license then install the latest version of the following applications:

| application: | before upgrading, please check: |
|---|--|
| <p>Automation Engine</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  <p>Note: You should have already upgraded Automation Engine before starting to upgrade Pack Proof and the Esko Proof Server. See the Automation Engine installation documentation for details if needed.</p> </div> | <p>the Automation Engine system requirements</p> |

| application: | before upgrading, please check: |
|----------------------------------|--|
| Pack Proof and Esko Proof Server | the Pack Proof and Esko Proof Server system requirements |


Note:

If you have a distributed setup (these applications are installed on two or three different servers), you should keep the same setup for the upgrade.

However, please make sure that the server hosting Automation Engine, the one hosting the Esko Proof Server, and your proofing device(s) are in the same Local Area Network.

General upgrade procedure:

1. Make sure you have the relevant DVDs.
 - To upgrade Pack Proof, you need the **Esko Software - Imaging Engine 24 Installation** DVD.
 - To upgrade the Esko Proof Server, you need the **Esko Software - Pack Proof 24.03 Installation** DVD.



Note: If you downloaded the software from MySoftware.esko.com, you will need to mount the corresponding .iso files as virtual DVDs, or unpack the .iso files first.

2. Make sure you have the relevant **licenses**.
You need a product key file for Pack Proof 24 (which includes all necessary licenses). If you do not have a product key file yet, contact [Esko Customer Support](#).
3. On your license server (which can be either your Automation Engine server or a central license server), [activate your licenses](#).
4. On the server on which you want to upgrade Pack Proof, perform the steps listed in [Upgrading Imaging Engine](#).
5. On the server on which you want to upgrade the Esko Proof Server, perform the steps listed in [Upgrading the Esko Proof Server](#).

Activating the Licenses

Pack Proof 24 is protected with licenses. These licenses are distributed as a product key file (in .html).

You need to activate the product keys in the product key file using the **Network License Manager** application, on the server that you are using as a **license server** (this can be either your Automation Engine server or a central license server).

You should have installed the Network License Manager as part of your Automation Engine installation. See the Automation Engine installation documentation if needed.

You need:

- A product key file for Pack Proof 24 (which includes all necessary licenses). If you do not have a product key file yet, contact [Esko Customer Support](#).
- Internet access on the server that you are using as a license server.
- An **Esko ID** in order to activate the licenses. You can get one at <http://www.esko.com/licensing/CreateAccount>.

On the server that you are using as a license server:

1. Open the **Network License Manager**.
Depending on your operating system, you can do this by:
 - going to **Start > All Programs > Esko > Network License Manager > Network License Manager**,
 - going to **Start > Esko > Network License Manager**,
 - clicking **Network License Manager** on your **Apps** screen.
2. In the **Esko Network License Manager**, do one of the following:
 - drag your product key file in the area marked **Drag your Product Key File or your Response file here**,
 - click the **Activate** button.
3. Follow the instructions of the **Activate License Wizard**.
4. When asked about the product keys, choose **I have received an HTML file containing my Product Keys**.
5. Click **Browse** to select the product key file.
6. When asked, fill in your **Esko ID** and **Password**.
7. Click **Finish**.
The licensed products you can use are now visible in the Network License Manager.

Upgrading Pack Proof

You need the **Esko Software - Imaging Engine 24 Installation** DVD for the upgrade. Use the following procedure to upgrade to Pack Proof 24.03:

1. Open the **Esko Software - Imaging Engine 24 Installation** window:
 - If you insert the **Esko Software - Imaging Engine 24 Installation** DVD into the DVD drive, or mount the corresponding .iso file, the window appears automatically.
 - If you unpacked a downloaded .iso file, or if the window doesn't open automatically, double-click **setup.exe** in the root folder.
2. Select the installation language.
3. Click **Proceed to the installation**.
4. Under **Imaging Engine/Pack Proof 24 installation, including related tools (Color Pilot, Curve Pilot, HD Flexo Screens and ScreenManager)**, click **Install**.
5. On the page that opens:
 - a) If you are using a central license server, connect to it.
See [How to Connect to the License Server](#) on page 29 for details.
 - b) Check and install the prerequisites.
See [How to Upgrade the Pack Proof Prerequisites](#) on page 39.
 - c) Proceed with the software upgrade.
See [How to Upgrade Pack Proof](#) on page 40.

How to Connect to the License Server

If you [activated your licences](#) on a central license server, you need to connect to this license server from your Pack Proof server.

1. On the **Imaging Engine 24 Installer** page, click on **Install the Network License Manager**.
2. Follow the instructions of the installation wizard.

3. Back on the **Imaging Engine 24 Installer** page, click **Activate the licenses** to open the **Network License Manager**.
4. In the **Esko Network License Manager**, go to **Tools > License Client Configuration**.
5. In the **License Client Configuration** dialog:
 - a) Enter the name of the server that you are using as a [license server](#).
If your license server is also the server you are installing Pack Proof on, you can enter `localhost` here.
 - b) Click **Apply**.
 - c) Click **Exit**.
6. Close the **Network License Manager** and go back to the **Imaging Engine 24 Installer** page.

How to Upgrade the Pack Proof Prerequisites

Before you upgrade Pack Proof, you need to upgrade the Pack Proof prerequisites.

1. On the **Imaging Engine 24 Installer** page, click on **Check and install the Imaging Engine/Pack Proof System prerequisites**.

This checks whether the operating system is suited for installing and running Pack Proof 24.03, and starts the Pack Proof 24.03 prerequisites installation.

2. If:

- you see an error message about the Windows version, your operating system is not suited for running Pack Proof 24.03.

In this case you need to perform a [fresh installation](#) on a suitable operating system instead. Check the [System Requirements](#).

- you see a message saying that the prerequisite components will be upgraded, click **OK**.

3. The installation wizard for the prerequisite components will check the licenses, list the prerequisite components to upgrade on the system, request confirmation for the upgrade and then upgrade the required components.

Follow the instructions of the installation wizard.

The installation wizard will upgrade the following components:

- Microsoft Visual Studio Redistributables
- Message Passing Interface service

If you are prompted to reboot your computer, do so and restart this installation procedure.

4. The installer then checks if Automation Engine 24.03 is running on your Automation Engine server.

| If you get the following error: | then: |
|--|---|
| <pre>ERROR - Imaging Engine requires Automation Engine 24.03 The provided master server does not have Automation Engine 24.03 running Checked server: [yourservername]</pre> | <p>Automation Engine 24.03 is not running on the server you entered.</p> <ol style="list-style-type: none"> 1. Check that you entered the server name correctly. 2. Make sure Automation Engine 24.03 is running on it. |

| If you get the following error: | then: |
|--|--|
| | <ol style="list-style-type: none"> Restart the Pack Proof prerequisites installation. |
| <pre>ERROR - Imaging Engine requires Automation Engine 24.03 The provided master server does not have Automation Engine 24.03 installed Checked server: [yourservername] (version [yourserverversion])</pre> | <p>Automation Engine 24.03 is not installed on the server you entered.</p> <ol style="list-style-type: none"> Check that you entered the server name correctly. Install Automation Engine 24.03 on it. Restart the Pack Proof prerequisites installation. |

- Click **Exit** when the installation wizard is finished.

How to Upgrade Pack Proof

- On the **Imaging Engine 24 Installer** page, click **Install the Imaging Engine/Pack Proof 24 products**.
- Follow the instructions of the installation wizard.
- Read the **End user license agreement** carefully and select **Yes, I accept the license agreement**.
- When asked to select the products to install on this system, select **Imaging Engine, Color Pilot**, and the desired related products (the products available depend on your license).
 - The **System Components** group cannot be deselected and will be installed on all systems.
 - The products' **Common Components** that are used by several products (for example the **Color Management System**) will only be installed once (each product's installer will check if the necessary components are present, and update them if necessary).
 - Installing Imaging Engine will install the **Proof for Contract Approval task**, and a basic version of Imaging Engine to RIP your files before proofing.
However, if you have also *activated* a full Imaging Engine license, it will install a full Imaging Engine, with the options covered in your license.
- At the end of the installation, click **Finish**.

Upgrading the Esko Proof Server

You need the **Esko Software - Pack Proof 24.03 Installation** DVD for the upgrade. Use the following procedure to upgrade the Esko Proof Server:

- Back up the data from your existing Esko Proof Server.
Please see the documentation of your existing Esko Proof Server version on the [Pack Proof documentation page](#) for details.
- Open the **Esko Software - Pack Proof 24.03 Installation** window:
 - If you insert the **Esko Software - Pack Proof 24.03 Installation** DVD into the DVD drive, or mount the corresponding .iso file, the window appears automatically.
 - If you unpacked a downloaded .iso file, or if the window doesn't open automatically, double-click `setup.exe` in the root folder.

3. Select the installation language.
4. Click **Proceed to the installation**.
5. On the **Esko Pack Proof 24 Installer** page:
 - a) If you are using a central license server, connect to it.
See [How to Connect to the License Server](#) on page 33 for details.
 - b) Check and install the prerequisites.
See [How to Install the Pack Proof Prerequisites](#) on page 33.
 - c) Proceed with the software upgrade.
See [How to Upgrade the Esko Proof Server](#) on page 42.
6. Restore the Esko Proof Server data you backed up.
Please see the Esko Proof Server documentation on the [Pack Proof documentation page](#) for details.

How to Connect to the License Server

If you [activated your licences](#) on a central license server, you need to connect to this license server from your Esko Proof Server.

1. On the **Esko Pack Proof 24 Installer** page, click on **Install, update or repair the License Server (Network License Manager component)**.
2. Follow the instructions of the installation wizard.
If the wizard asks you to restart the computer, do so, then relaunch the installation.
3. Back on the **Esko Pack Proof 24 Installer** page, click **Activate the licenses** to open the **Network License Manager**.
4. In the **Esko Network License Manager**, go to **Tools > License Client Configuration**.
5. In the **License Client Configuration** dialog:
 - a) Enter the name of the server that you are using as a [license server](#).
 - b) Click **Apply**.
 - c) Click **Exit**.
6. Close the **Network License Manager** and go back to the **Esko Pack Proof 24 Installer** page.

How to Install the Pack Proof Prerequisites

Before you install the Esko Proof Server, you need to install the Pack Proof prerequisites.

1. On the **Esko Pack Proof 24 Installer** page, click on **Check and install the Esko Pack Proof 24 Prerequisites**.
This checks whether the operating system is suited for installing and running your Pack Proof and Esko Proof Server software, and starts the Pack Proof 24.03 prerequisites installation.
2. If:
 - you see an error message about the Windows version, your operating system is not suited for running your Pack Proof and Esko Proof Server software.
Check the [System Requirements](#) again and install your software on a suitable operating system.
 - you see the message `Ready to install the prerequisite components for the Imaging Engine software. Do you want to start the installation?`, click **Yes**.

3. The installation wizard for the prerequisite components will check the licenses, list the prerequisite components to install on the system, request confirmation for the installation and then install the required components.

Follow the instructions of the installation wizard.

The installation wizard will install the following components:

- Microsoft Visual Studio Redistributables
- Message Passing Interface service

If you are prompted to reboot your computer, do so and restart this installation procedure.

4. Click **Exit** when the installation wizard is finished.

How to Upgrade the Esko Proof Server

If you have an Esko Proof Server 20.0 or older, you need to upgrade it to the latest version .

1. On the **Esko Pack Proof 24 Installer** page, under **Install or upgrade the Esko Proof Server component**, click the **Install or upgrade the Esko Proof Server component** link.
2. Follow the instructions of the installation wizard.
 - a) If the wizard needs to install any redistributables, click **Yes** to install them.
 - b) Click **Yes** in the pop-up asking to remove your previous Esko Profiles.

If you are instructed to restart your computer, do so and then relaunch the installation.



Note: This is only applicable if you are upgrading from Esko Proof Server 18.0

- c) Click **Yes** in the pop-up asking to remove your previous Esko Proof Server version.

If you are instructed to restart your computer, do so and then relaunch the installation.



Note:

This also installs/updates the Esko EPL linearization files for the proofing devices tested and supported by Esko.

An EPL linearization file adjusts how your proofer prints to get best results on a certain substrate (it adapts the quantities of inks used so that your proofer can achieve maximum color density without hue shifts).

Esko provides you with a number of EPL files made in controlled conditions for different proofer models and substrate types. We strongly recommend you use the one made for your proofer and substrate combination (before profiling your proofer). This will improve the color accuracy of your proofs. Please see [this knowledge base article](#) to know how to use and evaluate the EPL file(s) made for your proofer series.

3. After restarting your computer, the **Esko Server Control** application pops up.

Esko Server Control starts the Esko Proof Server automatically.

4. If you want to upgrade the Esko Proof Client to **Fiery Command WorkStation** (the new name of the Esko Proof Server's client application) on this same server:

- a) If your computer has the Network License Manager installed, stop the Esko Network License Services before installing **Fiery Command WorkStation**.

If needed, contact Esko AfterCare for assistance.

- b) Relaunch the installation.
- c) Select your language and click **Proceed to the installation** to go back to the **Esko Pack Proof 24 Installer** page.
- d) Under **Install or upgrade the Esko Proof Server component**, click the **Install or upgrade the Fiery Command WorkStation component** link.
- e) Click **Yes** in the pop-up asking whether you want to install the Fiery Command WorkStation component.
- f) The **Fiery Command WorkStation Package** wizard installs Fiery Command WorkStation.
The installation wizard may take a long time (up to one hour on some systems).
- g) At the end of the wizard, select **Yes, I want to restart my computer now** before clicking **Finish**.

Alternatively, you can upgrade it on another machine using this same DVD.

5. If you want to upgrade the Verification tool to **Fiery Verify** (the new name of the Esko Proof Server's proof verification application) on this same server:
 - a) Relaunch the installation.
 - b) Select your language and click **Proceed to the installation** to go back to the **Esko Pack Proof 24 Installer** page.
 - c) Under **Install or upgrade the Esko Proof Server component**, click the **Install or upgrade the Fiery Verify component** link.
 - d) Click **Yes** in the pop-up asking whether you want to install the Fiery Verify component.
 - e) The **Fiery Verify** wizard installs Fiery Verify.
 - f) Click **Exit** at the end of the installation.

Alternatively, you can upgrade it on another machine using this same DVD.

6. Restore the Esko Proof Server data you backed up.
Please see the Esko Proof Server documentation on the [Pack Proof documentation page](#) for details.

3.3. Configuration in the Automation Engine Pilot

After installing all the software components required for Pack Proof, you need to launch the Automation Engine Pilot and perform some configuration:

1. Configure the basic version of Imaging Engine that comes with Pack Proof, and that is used for RIP'ing your files.
See [Imaging Engine Configuration for Pack Proof](#) on page 43.
2. Configure Pack Proof itself.
 - See [Pack Proof Configuration](#) on page 45.
 - See [Pack Proof Configuration for using in AE SaaS](#) on page 46

3.3.1. Imaging Engine Configuration for Pack Proof

Pack Proof comes with a basic version of [Imaging Engine](#) for [RIP'ing](#) the files that you want to proof. You need to configure it the following way:

1. In the Automation Engine Pilot, go to **Tools > Configure**.

2. Select **Imaging Engines** in the left pane.
3. Go to **File > New** or press the **Insert** key (on PC).

This creates an **Imaging1** entry under **Imaging Engines** and shows settings in the right pane.

4. In the right pane's **General** tab:

- a) In **Host Name**, enter the name of the server running your Imaging Engine and press **Enter** or **Tab** (or click the **Connect** button next to **Imaging Engine**).
- b) Check that you see a green dot  with the message **Imaging Engine is up and running**.

| If you see... | it means that... |
|--|---|
| a grey dot  with the message Imaging Engine is starting up on host | you need to wait a few minutes before you can use Imaging Engine. |
| a red dot  with the message No license for Imaging Engine on host | your Imaging Engine license is missing. Please check your licenses. |
| a red dot  with the message No Imaging Engine available on host | the server you have entered doesn't have Imaging Engine or even Automation Engine installed. Please check if you have entered the server name wrong. |

You may see other error messages in some cases, but you will always get some advice as to what you need to do (for example with the  **Missing resource for Imaging Engine on host** message, you will get advised to `Please reinstall the Imaging Engine`).



Note: You can **Stop** and **Start** Imaging Engine from here for troubleshooting purposes, but this is generally not necessary, as Imaging Engine starts automatically, and will restart automatically in case of a crash or after being force quitted.

- c) Set the **Number of Workers**. This is the number of parallel processes used to work on multiple pages of a file, or multiple files at the same time.



Note:

The maximum number of workers you can set depends on your license and on the number of cores on your server.

Please see the [system requirements page](#) for details.

- d) The **Maximum Memory Limit** is the maximum amount of memory a worker can use to process a file. In most cases, you should keep the default **Maximum Memory Limit** as it is. However:
 - If you need to process some really complex files and/or you had issues with Imaging Engine running out of memory when processing some of your files in the past, you can raise that limit.


Attention:

The **Maximum Memory Limit** cannot be larger than the **Available Physical Memory** (indicated above) divided by the **Number of Workers**.

If you enter a value that is too large, it will be automatically changed to the maximum value possible.

- If you are only processing simple files that don't require a lot of memory, you can lower that limit.


Attention:

If you try to process a file that needs more than the **Maximum Memory Limit** that you have allocated, the processing can fail.

You cannot lower the limit to less than 1 GB/1024 MB. If you enter a value that is too small, it will be automatically changed to the minimum value possible.

You can enter your desired value in gigabytes (GB) or megabytes (MB), or without a unit. When using GB, your value will be converted to MB, and when not using a unit, it will be taken as MB.

You will see a warning when trying to change the **Maximum Memory Limit**.

5. If you are only using Imaging Engine for Pack Proof (you don't have a fully-fledged Imaging Engine to output RIP'ed files), you don't need to configure the **Settings** tab, or the **Queue** tab.
6. In the left pane, select the **Imaging1** entry, go to **File > Rename** and give it a meaningful name.
You can also select it and press **F2** (on PC).
7. Go to **File > Save** or use **Ctrl+S** (on PC) to save your configuration.

If you changed the configuration while Imaging Engine was running (but not processing files), it will restart with the updated configuration.

3.3.2. Pack Proof Configuration

This configuration will connect your **Automation Engine** server (and Pack Proof) to your **Esko Proof Server**, so that Pack Proof can send files to the Proof Server, for proofing on your device.

For more flexibility, you can connect to several Proof Servers, and have access to all the workflows configured on these Proof Servers. When sending files through the **Proof for Contract Approval** task, you can then select which workflow of which Proof Server you want to use.



Important: You need to perform this configuration before you can use Pack Proof.

1. In the Automation Engine Pilot, go to **Tools > Configure**.
2. Select **Proof Servers** in the left pane.
3. For each Proof Server that you want to connect to:
 - a) Click on the **Add** or **+** button at the bottom of the right pane.
 - b) In the **New Proof Server** pop-up, enter the name of the server on which your Proof Server is running, and click **Add**.


Note:

If you get an error message like `The shared folder "ProofFolder" on the host is not writable for the user BGSYSTEM`, it means that Automation Engine cannot access the Proof Server share (where it needs to send files to proof).

In this case, follow the steps in [Giving Automation Engine Access to the Esko Proof Server Share](#) on page 35.

c) In the **Status** column, check that your Proof Server is **Running**.

You also can **Remove** the connection to a Proof Server if needed by clicking on the **Remove** or - button on the right pane.

4. Go to **File > Save** or use **Ctrl+S** (on PC) to save your configuration.

3.3.3. Pack Proof Configuration for using in AE SaaS

If you're working with an AE SaaS setup, this configuration will connect your **Automation Engine** (and Pack Proof) to your **Esko Proof Server**, so that Pack Proof can send files to the Proof Server, for proofing on your device.

For more flexibility, you can connect to several Proof Servers, and have access to all the workflows configured on these Proof Servers. When sending files through the **Proof for Contract Approval** task, you can then select which workflow of which Proof Server you want to use.



Important: You need to perform this configuration before you can use Pack Proof.



Important: To use a Proof Server with AE SaaS, you need to have Automation Engine Agent installed on the local network and connected to AE SaaS. See the **Agent Installation** section in the [Automation Engine User Guide](#) for more information.

1. In the Automation Engine Pilot, go to **Tools > Configure**.

2. Select **Proof Servers** in the left pane.

3. For each Proof Server that you want to connect to:

a) Click on the **Add** or **+** button at the bottom of the right pane.

b) In the **New Proof Server** pop-up, enter the name of the server on which your Proof Server is running (**Host Name**), the name of the Automation Engine Agent (**Agent Name**) and click **Add**.


Note:

If you get an error message like `The shared folder "ProofFolder" on the host is not writable for the user BGSYSTEM`, it means that Automation Engine cannot access the Proof Server share (where it needs to send files to proof).

In this case, follow the steps in [Giving Automation Engine Access to the Esko Proof Server Share](#) on page 35.

c) In the **Status** column, check that your Proof Server is **Running**.

You also can **Remove** the connection to a Proof Server if needed by clicking on the **Remove** or - button on the right pane.

4. Go to **File > Save** or use **Ctrl+S** (on PC) to save your configuration.

4. The Proof for Contract Approval Task

In your [Pack Proof workflow](#), you can use the **Proof for Contract Approval task** to:

- Perform general **file transformations** to make sure the output is as expected (select the right page box, rotate/invert/mirror/scale the file as needed...).
- **Color manage** your file so that your proof accurately reflects what your press output will look like (using color management settings from Color Pilot).

See [Color Management](#) on page 7.

- **Rasterize** the vector graphics to continuous tone bitmaps (using Imaging Engine's RIP'ing capabilities).

See [Rendering](#) on page 13.

- Set **verification** options to later verify your proof's color accuracy using the Fiery Verify tool.

See [Verification](#) on page 17.

For more information about Fiery Verify, please see the Esko Proof Server documentation on the [Pack Proof page](#).

The **Proof for Contract Approval task** sends the ready-to-proof files to the **workflow** of your choice on the **Esko Proof Server**, who then proofs it on the proofer connected to that workflow. This proofer can be one of many types of proofing devices supported by the Esko Proof Server.



Note:

To use this task, you need to have created a printer, workflow and media in Fiery Command WorkStation (the client application of the Esko Proof Server). Make sure that the correct media is selected in the **Media Associated** option in the **Print Settings** tab of the workflow.

For information about creating a Proof Server workflow, please see the Esko Proof Server documentation, available from the [Pack Proof documentation page](#).



Attention:

You can use several Proof Servers, but in this case, make sure that every workflow has a unique name, even across Proof Servers.

If there are workflows with the same name on several Esko Proof Servers, you will not be able to send files to those workflows through Pack Proof.

Task Parameters

In the **Device** field, select the imaging device [that you configured](#).

Then use the tabs at left to show more settings to fill in. See:

- [General](#) on page 49,
- [Proofer](#) on page 51,
- [Transformations](#) on page 52,
- [PDF Objects](#) on page 54,
- [Inks](#) on page 60,
- [Color Management](#) on page 68,
- [Output](#) on page 74,
- [Verification](#) on page 79,

- [Summary](#) on page 83.

Using the Esko Proof Server Workflow Parameters

If you are using a **Proof Server workflow** that already has proofing parameters defined (for example the number of copies to print, or the rotation or scaling to apply to your file), those parameters will be filled in by default in the **Proof for Contract Approval** task, so that you don't have to go check them in the Proof Server workflow and copy them into the task.



Note: This is not the case if you are using a SmartName or a public parameter to select your Proof Server workflow.

You can of course change those parameters as desired in the **Proof for Contract Approval** task.

Making a Contract Proof on an Epson SureColor Proofer

- To make a contract proof on an Epson SureColor P50x0, P70x0 or P90x0 with the HT driver, see [this knowledge base article](#).
- To make a contract proof on an Epson SureColor P75x0 or P95x0 with the CT driver, see [this knowledge base article](#).

4.1. General

1. Define what **Page Box** of the input PDF you want to proof.

You can either select **Media Box**, **Trim Box**, or insert a SmartName that must resolve to either `media` or `trim`.

After selecting your file's page box you will see its dimensions under the **Page Box** option.

2. If your input file is a multi-page PDF, select which **Pages** you want to proof:

- a) First select **All pages**, **Odd pages only** or **Even pages only** in the **Pages** option.

You can also insert a SmartName resolving to either `All`, `Even` or `Odd`.

- b) Then you can refine your selection by entering page numbers or a **Page Range**.

You can separate page numbers by a comma, or use a dash to indicate a page range (for example `3, 6-9`). You can also use a SmartName resolving to page numbers and/or page ranges using this same format.



Note:

- Page numbers are always physical pages. If your document starts with page 5, you should not use 5 but 1 to get the first page.
- If you enter page numbers that are not part of your document, they will be excluded from the output (all the other valid pages will be proofed).
- If you enter the same page(s) more than once (for example `1, 1-2`), it/they will only be output once.
- Pages are proofed in the order of the document (entering `5-1` will be automatically changed to `1-5`).

3. If you want to invert your output so it is compatible with the output device or software system that will process it, click .

You can also click  or **Edit...** to insert a SmartName that must resolve to `1` or `true` (to invert the output), or to `0` or `false` (to leave the output as it is).



Tip: If that setting is already defined in your *Proof Server workflow*, it will be filled in by default. You can of course change it as desired.

4. If you want to mirror your output so it is compatible with the output device or software system that will process it, click .

You can also click  or **Edit...** to insert a SmartName that must resolve to `1` or `true` (to mirror the output), or to `0` or `false` (to leave the output as it is).

If that setting is already defined in your Proof Server workflow, it will be filled in by default. You can of course change it as desired.

5. If you want to add **SmartMarks (Classic)** or **Dynamic Marks** in your output file(s), select the **Type of Marks** you want to add and then select the specific **Mark Set** you want to use.

SmartMarks (Classic) or **Dynamic Marks** are marks whose content is variable, so you can make them display information about that specific job and use them as a production control. For example, you can include some of the parameters used during RIP'ing in your output file(s) by using SmartMarks (Classic) or Dynamic Marks.

You need to:

- a) First create the SmartMarks (Classic) you want to use in **PackEdge** or **Plato** and the Dynamic Marks in **ArtPro+** (see the PackEdge, Plato and Arpro+ manuals for more details).

You can create either:

- a general SmartMark (Classic) or Dynamic Mark (for example a corner mark or split mark),
- a Text Mark with Smart Text, that will display the information included in your input file,
- a Pack Proof-specific Text Mark with Smart Text, that will display the parameters that you set in the ticket).

To do this, select **Output Parameter** in the **Smart Text** pop-up in the PackEdge/ArtPro+ application. Make sure you use the SmartMark attributes from the **Output Parameter** category, and not those from the **Ink/Color** category.

If your PackEdge, Plato or ArtPro+ application is linked to your Automation Engine server, your SmartMark (Classic) or Dynamic Mark will automatically be saved in the correct location and will be available in Pack Proof.



Note: You can also use one of the pre-installed **Packproof SmartMarks**. You can find these SmartMarks (Classic) listed in the SmartMarks dropdown list. These SmartMarks (Classic) will have names starting with **Packproof**, for example **PackProof_ISO 12647-7_2007_Epson SureColor P7000V**.

- b) Then select that SmartMark (Classic) or Dynamic Mark in your **Proof for Contract Approval** task.

You can also click  to insert a SmartName.

The SmartMarks (Classic) or Dynamic Marks will be added to each proof generated from your input file.


Note:

- SmartMarks(Classic) will be automatically selected when using Normalised PDFs as Dynamic Marks are only supported in native PDF files. If Dynamic Marks is selected through a SmartName or Public Parameter for a Normalised PDF file, the task will end in error.
- When SmartName or Public Parameter is used to select the **Type of Marks**, both SmartMarks and Dynamic Marks related to it will be listed under the **Mark Set** option. SmartMarks will have a "Classic" suffix added to them.

4.2. Proofer

This is where you select the [Esko Proof Server workflow](#) to which the task sends your RIP'ed output.

1. In the **Proof Server Workflow** list, you can see all of the valid workflows found on the Proof Server(s) [you are connected to](#).

You can:

- select a workflow from the list,
- use SmartNames (that must resolve to the name of a valid Proof Server workflow),
- set the workflow using public parameters.


Tip:

If you select a workflow from the list, its proofing parameters (number of copies to print, rotation or scaling to apply to your file...), will be filled in by default in the **Proof for Contract Approval** task, so that you don't have to go check them in the Proof Server workflow and copy them into the task.

You can of course change those parameters as desired in the **Proof for Contract Approval** task.


Note:

For information about creating a Proof Server workflow, please see the Esko Proof Server documentation, available from the [Pack Proof documentation page](#).

Pack Proof checks whether the Proof Server and the selected workflow are available when defining ticket settings and when (re-)launching the task.

The task will end in error if it can't access the Proof Server workflow or if the workflow is invalid.


Attention:

If you are connected to several Proof Servers, make sure that every workflow has a unique name, even across Proof Servers.

If there are workflows with the same name on several Proof Servers, you will not be able to select any of those workflows here (the name will be greyed out).

2. In **Submit Method**, choose how you want to submit your print jobs to your Proof Server workflow.

You can either have the Esko Proof Server print them directly, or keep them in the "held" queue, so that you can make changes in Fiery Command WorkStation (for example, add them to a manual nesting).

- Choose **Default from Proof Workflow** to use the setting defined in the Proof Server workflow.


Tip:

You can find this setting in Fiery Command WorkStation's **Server Manager** view: select your proofer and workflow, then go to **File > Job Detection**.

If **Put all incoming jobs on hold** is selected, print jobs will stay in the "held" queue until you print them manually from Command WorkStation. They will be shown as **Spoiled** in Command WorkStation's **Job Center** list.

If **Put all incoming jobs on hold** is deselected, they will be printed automatically as they arrive.

For more information, see the Esko Proof Server documentation, available from the [Pack Proof documentation page](#).

- Choose **Hold in Proof queue** if you want to disregard the **Put all incoming jobs on hold** setting in Command WorkStation, and always keep jobs (launched with this ticket) on hold in Command WorkStation's **Job Center** list (shown as **Spoiled**).

In Automation Engine's **Tasks** view, the task is in the waiting state  until the job is printed in Command WorkStation.

- Choose **Print** if you want to disregard the **Put all incoming jobs on hold** setting in Command WorkStation, and have the Esko Proof Server always automatically print jobs (launched with this ticket).

4.3. Transformations

Use the **Transformations** settings to scale or rotate your output relative to your input file.


Tip:

If you are using a [Proof Server workflow](#) that already has scaling and/or rotation parameters defined, those parameters will be filled in by default, so that you don't have to go check them in the Proof Server workflow and copy them into the task.

You can of course change those parameters as desired.

1. If you want to **Scale** your input file's contents, select either:

- **Scale by percent** and enter the vertical  and horizontal  scaling percentages to use (they must be between 10% and 1000%).



Note:

By default, you enter the vertical scaling percentage and the horizontal one is calculated automatically to keep the proportions.

If you want to enter the horizontal scaling percentage manually, click  to unlink it from the vertical one first.

However, if you do this then link the percentages again, the last percentage you entered will be kept, and the other one will be recalculated automatically to keep the proportions.

- **Fit to page size** to fit your output to the substrate defined in your [Proof Server workflow](#), while keeping the proportions (this will fit it to either the width or the height of the substrate, while making sure everything is on the substrate).
- **Fit to page width** to fit it to the width of the substrate defined in your Proof Server workflow, while keeping the proportions.

If you [added SmartMarks](#) to your output, they will be taken into account when fitting the proof to the substrate's width or size.



Note:

If you have chosen to print borderless in your Proof Server workflow, Pack Proof will take this into account when fitting your output to the substrate, and make your output slightly larger to cover the whole substrate width or height.

You can only print borderless if your proofing device supports it. Please check the Esko Proof Server documentation on the [Pack Proof page](#) and your proofing device documentation for more information about borderless printing.

If you don't want to scale your file's contents, leave **Do not scale** selected.

You can use SmartNames resolving to `not` (**Do not scale**), `ByPercent` (**Scale by percent**), `FitSize` (**Fit to page size**) or `FitWidth` (**Fit to page width**).

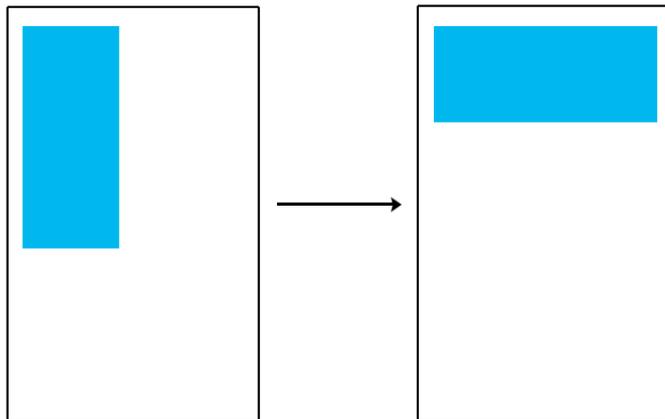
When entering SmartNames for vertical and horizontal scaling percentages, they must resolve to the numerical value (without the % sign).

2. If you want to rotate your file, select the **Rotation** you want to apply here.

You can choose to either:

- use a fixed rotation (this can be **0°**, **90° Counter Clockwise**, **90° Clockwise** or **180°**; any other value will give an error),
- rotate your file if necessary to fit, or fit better, on the substrate (select **Minimal Media Consumption**). This can be useful when using narrow rolls of substrate for example.

If it did fit on the substrate already, this option makes sure that the largest dimension of the file will be placed in the substrate width, to use less substrate material when cutting.


Note:

- If you have chosen to print borderless in your Proof Server workflow, the task will take the extra space into account when rotating your file to fit (or fit better) on the substrate.
- You can use a SmartName that resolves to 0, 90 (for **90° Counter Clockwise**), 180, 270 (for **90° Clockwise**), or `minimal`.
- When using a fixed rotation, you need to use a numerical value (`ninety` will not work).
- This is a public parameter, that you can fill in when submitting files through Shuttle.

4.4. PDF Objects

Use the **PDF Objects** settings to define:

- how to color manage RGB objects in your input file,
- what dot gain compensation to apply to your input file's images.

All parameters in this tab are public parameters, that you can fill in when submitting files through Shuttle.

1. In **Default RGB Profile**, specify the profile to use if no profile is specified for a certain RGB object in the input file. The default is `srgb.icc`.

You can use a SmartName that resolves to the full profile name.

2. Select **Use PDF transfer curves** if you want to use:
 - the dot gain compensation curves attached to the images in your input PDF. These curves compensate for the unwanted characteristics of the device that created the images (scanner, digital camera...). See the [Imaging Engine documentation](#) for more information.
 - the color correction curves added by ArtPro+ version 20 or higher. These curves allow you to correct individual separations for color deviations on proof from the reference proof. The correction will be applied on both the proof and the production files. See the [ArtPro+ documentation](#) for more information.



Note: You can only use the correction curves if the **Color Correction Curves** option is enabled in the global Imaging Engine configuration. Please contact Esko Support for assistance.

You can use a SmartName that resolves to `true` (to use the input file's curves) or `false` (to not use them).

3. If you experience issues with a font that doesn't look smooth enough at your selected resolution, your font may have **font hinting errors**.

Font hinting is the rendering of the outline (vectorized) font to pixels. For certain fonts, this rendering sometimes doesn't give a visually pleasing result, especially at low resolutions. In the image below, the top font has font hinting errors, the bottom font doesn't.

Label Pack
Label Pack

Choose how to handle files containing font hinting errors:

- Leave **Task ends in error when the job contains font hinting errors** selected if you want the task to end in error when encountering font hinting errors. You can also use a SmartName resolving to `true`.
- Deselect **Task ends in error when the job contains font hinting errors** if you want to output your file anyway, whether it has font hinting errors or not (your task will end with a warning). You can also use a SmartName resolving to `false`.

This may lead to reduced quality rendering of the text, but it will not generate incorrect characters in your output file.

4. If your PDF+ input file has linked artwork and the external reference files have been modified, the changes do not get updated automatically in the PDF+ file. This will result in outdated data in the input as well as output files.

Choose how to handle files containing **outdated linked artwork**:

- Select **Task ends in error when linked artwork is not up to date** if you want the task to end in error if the input file contains outdated external references. You can also use a SmartName resolving to `true`.
- Deselect **Task ends in error when linked artwork is not up to date** if you want to output the file anyway, whether the references are outdated or not (your task will end with a warning). You can also use a SmartName resolving to `false`. This is the default option.

4.5. Processing Steps

What is a Processing Step?

PDF input files typically contain different types of objects, used at different stages of the production process: not only printable objects (that make up the design), but also other objects containing **post-processing data** (for example a cut path or crease lines).

Your production workflow needs to handle these object types accordingly.

If your customers, suppliers, etc. all define their post-processing data in their own way (for example a die cut path could be in a separation called "die" or "cut"), it can lead to:

- needing to make the production workflow more complex to catch all possibilities,
- loss of time,
- mistakes (possibly wasting plates or having a wrong print).

Imaging Engine and Pack Proof support the [ISO 19593 standard](#), that defines "**processing steps**" corresponding to different types of post-processing data. With input files that use these processing steps, you can work in a more uniform way, increasing efficiency and decreasing mistakes.

4.5.1. Processing Step Groups

The **ISO 19593 standard** groups the different processing steps as follows:

Structural Data

Contours indicating how the printed product will be processed to make a 3D end product.

These include for example cutting, creasing and folding lines, and correspond to operations performed by finishing devices like die cutters, folder-glueers, etc.

Braille

Contours of objects representing braille content. The braille characters are made after printing, typically by a die cutter or inkjet device.

Legend

PDF objects outside the boundaries of the actual printed product (for example solid patches of the inks used in the design). They can contain job related data used in review, approval, and manual production steps.

Dimensions

These are also outside the printed area, and indicate the physical size of certain items in the design (using arrows, numbers and units).

Positions

Contours giving the position of certain graphic elements (for example where a barcode should be, or which area of a folding carton flap can be printed). They can also be used to indicate areas where graphic elements shouldn't be printed.

White

PDF objects indicating where the white backing ink (the opaque white ink used for white underprint on transparent or metallic substrates) will be on the design.

Varnish

PDF objects indicating where the varnish will go after printing.

Imaging Engine and Pack Proof also include the following custom processing steps groups by default:

Esko_PlateCutting

Contours indicating how a flexo plate needs to be cut.

Esko_PlateID

PDF objects containing information to identify the plate.



Note:

See [Structural Data Processing Steps](#) on page 57 and [Positions Processing Steps](#) on page 58 for a more detailed list of the processing steps in these groups.

The **Esko_PlateID** is only used in Imaging Engine's **Image to Screened Separations** task. See [the Imaging Engine documentation](#) for details.

Structural Data Processing Steps

Structural data processing steps are contours indicating how the printed product will be processed to make a 3D end product.

These include for example cutting, creasing and folding lines, and correspond to operations performed by finishing devices like die cutters, folder-glueers, etc.

| This processing step type: | indicates: |
|--------------------------------|---|
| Cutting | where the printed artwork will be cut from the printed sheet (for example with a guillotine cutter or die cutting device) |
| PartialCutting | where the substrate will be cut partially (not entirely through the material) |
| ReversePartialCutting | where the substrate will be cut partially (not entirely through the material) on the back side of the substrate |
| Creasing | where the substrate will be creased to guide subsequent folding |
| ReverseCreasing | where the substrate will be creased on the back side of the substrate |
| CuttingCreasing | where the substrate will undergo alternating cutting and creasing |
| ReverseCuttingCreasing | where the substrate will undergo alternating cutting and creasing on the back side of the substrate |
| PartialCuttingCreasing | where the substrate will undergo alternating partial cutting and creasing |
| ReversePartial-CuttingCreasing | where the substrate will undergo alternating partial cutting and creasing on the back side of the substrate |
| Drilling | locations where the substrate will be drilled, and the intended size of the resulting hole |
| Gluing | an area where glue will be applied |

| This processing step type: | indicates: |
|----------------------------|---|
| FoilStamping | an area where foil will be applied through hot foil stamping |
| ColdFoilStamping | an area where foil will be applied through cold foil stamping (using glue) |
| Embossing | an area where embossing will be applied |
| Debossing | an area where debossing will be applied |
| Perforating | where the substrate will be perforated |
| Bleed | the intended bleed for print |
| VarnishFree | an area where it is not allowed to have varnish |
| InkFree | an area where it is not allowed to have printing ink |
| InkVarnishFree | an area where it is not allowed to have printing ink or varnish |
| Folding | where the substrate will be folded without prior creasing |
| Punching | where the substrate will be punched, and the size and shape of the resulting holes |
| Stapling | where the substrate will be stapled or stitched, and the size of the staples or stitches to be used |

Positions Processing Steps

Positions processing steps are contours giving the position of certain graphic elements (for example where a barcode should be, or which area of a folding carton flap can be printed). They can also be used to indicate areas where graphic elements shouldn't be printed.

| This processing step type: | indicates: |
|----------------------------|--|
| Hologram | the intended position of holograms |
| Barcode | the intended position of barcodes |
| ContentArea | areas where it is allowed to place text and other graphical elements |
| CodingMarking | <p>areas where additional information (not contained in the PDF) will be printed on the packaging at a post-press stage (such as on filling lines where the final products are being packed).</p> <p>These processing step objects are specific to packaging and can be used for lot numbers, production dates, best before dates, tracking codes...</p> |
| Imprinting | areas where additional information will be printed in a secondary print stage (after most of the graphical content is already printed). |

| This processing step type: | indicates: |
|----------------------------|---|
| | This can be used to indicate the position of variable data for example. |

4.5.2. Working with Processing Steps

The Processing Steps tab

Imaging Engine and Pack Proof display the processing steps associated with the layers in your input file (or files placed in it) in the **Processing Steps** tab.

The list of processing steps that you see depends on various factors like the number of jobs you select, the input file type, etc.

| | |
|---|---|
| If you select input files that are not PDF files | the Processing Steps tab will not be visible as processing steps are only applicable to PDF files For example, for Normalized PDF files, the Processing Steps tab will always be hidden. |
| If you select only one job | only the processing steps of your job's printable layers are listed in the Processing Steps tab |
| If you select multiple jobs or if you don't select any job | all the processing steps supported by Imaging Engine and Pack Proof are listed |
| If your input file contains no layers | the processing steps tab will display an empty table with the "No printable processing steps found" message |
| If your input file contains layers that do not have equivalent processing steps in Imaging Engine/ Pack Proof | those layers will not be listed under this tab |



Note: Adobe Illustrator layers can also be used as processing steps though they are not the same as PDF layers.

Handling Processing Steps Content

By default, all processing steps are selected. This means that the processing steps data will be treated as proofing content.

If you don't want to output some processing step data (for example a cut line), deselect that processing step. You can also select or deselect a group: for example, deselect **Structural** to deselect all processing steps from that group.

Inks only used by deselected or non-printable processing steps will not be displayed in the **Inks** tab.

Custom Processing Steps

You can add custom processing steps manually in the **Processing Steps** tab: use the **Add** button at the bottom of the tab (or the **Remove** button to remove a custom processing step).

This useful if you want to use the same ticket with different selected/deselected processing steps for different files.



Note: You cannot add the same custom processing step twice.

4.6. Inks

Selecting Which Separations to Proof

Use the **Inks** settings to select which separations of the input file(s) you want to proof.

For example, you can use these settings to exclude technical and/or varnish inks from your output.

You can choose to proof either:

- **All** separations.
- A number of separations you select **Manually**.
- A number of separations you select **by using selection criteria**.

Selection criteria are rules that you define to select separations automatically for you when the task is launched on a file.

Selecting separations manually is the easiest option, but you can only do it on a file by file basis (when you launch the task on a single input file).

Using selection criteria is more advanced but also more powerful than selecting separations manually, and you can do it anytime (when launching the task on one or more input files, when using the task in a workflow, when defining ticket settings...).

Therefore, we recommend that you first try selecting separations manually when running the task on individual files, then switch to using selection criteria to automate your workflow further.



Tip:

To get used to working with selection criteria, try the following on a few of your files:

1. select the separations you want to output manually,
2. then change **Select Inks** to **by using selection criteria** and see which rules have been created based on your manual selection.

For more information, see [Selecting Inks Manually](#) on page 61 and [Selecting Inks Using Selection Criteria](#) on page 62.



Tip: You can also make the ink selection parameter public so that an operator can set it [through Shuttle](#) as needed for each job. See [Selecting Inks though Shuttle](#) on page 65 for more information.

Handling Unregistered Inks

Unregistered inks are inks that are not present in your [color management database](#). Since there is no information about these inks apart from their RGB values in the input file, they cannot be color managed or proofed accurately.

Therefore, we recommend you exclude them from the output, especially for contract proofing.

Choose what to do in case some unregistered inks are still in the list of inks to be proofed:

- If you want the task to end with a warning, leave **Task ends in error when the job contains unregistered inks** deselected.

All the inks you chose to include in the output will be proofed, but the unregistered inks will not be color accurate.

- If you want the task to end in error, select **Task ends in error when the job contains unregistered inks**.

In both cases, you will also see a message in the log.



Note: If your file contains [PantoneLIVE inks](#) and you don't have a PantoneLIVE license, those inks will be treated as unregistered inks.

4.6.1. Selecting Inks Manually



Note: You can only select inks manually when you are launching the task on a (single) file, not when you are defining a generic ticket without an input file.

When choosing to **Select Inks Manually**, you will see a table containing all of your document's inks, showing each ink's:

| | |
|-----------------------|---|
| Ink Name | |
| Ink Book | If an ink book is not present in your color database, it will show here as <unregistered "">. |
| Ink Index | <p>The ink index is the order in which the file's inks will be printed (the ink with ink index 1 is at the bottom of the document and will be printed first).</p> <p>If your file has several of the same ink, they will have the same ink index, and the next ink will have the next one (for example two Cyans will both have ink index 1, then Magenta will have ink index 2).</p> <p>This means that when selecting inks for processing, both Cyans will be selected together and handled the same way.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  <p>Tip:</p> <p>To find the ink index of a file:</p> <ol style="list-style-type: none"> 1. select the file in the Automation Engine Pilot's Files view, 2. click , 3. in the Info dialog that opens, select Inks in the left panel. <p>The order of the inks at right is the ink index (the topmost ink has an index of 1, the second of 2, etc.).</p> <p>Note that if you reorder the inks by one of the columns (for example by ink name), they won't be ordered by ink index anymore. You will need to close that dialog and reopen it to see the ink index order again.</p> </div> |
| Spot Ink Index | The Spot Ink index is the order in which a spot ink will be printed (when counting only spot inks and not process inks). |

| | |
|------------------------|---|
| | <p>For example, if the first 4 inks of the document are CMYK, the first spot ink will have 5 as Ink Index but 1 as Spot Ink Index.</p> <p>As for the ink index, if your file has several of the same spot ink, they will have the same spot ink index, and will be handled together when you select them.</p> |
| Ink Type | This can be for example <i>Normal, Technical, Varnish...</i> |
| Printing Method | <p>If you have set a Printing Method for an ink it will be shown here (this can be for example <i>Offset, Gravure, Flexo...</i> or any custom printing method you configured).</p> <p>See the Automation Engine documentation for more information about printing methods.</p> |

Select the ink(s) you want to proof, or select the toggle in the table header to select/deselect all inks.

You will see a table listing the **Selected document inks**, and another table with the **Document inks that are not selected**.



Attention: If no ink is selected, you cannot launch the task.

4.6.2. Selecting Inks Using Selection Criteria

If you don't want to *select inks manually* every time, you can define some rules to automatically select certain inks in your input file(s).

You can do this:

- either when running the task on one or more files, or when creating a task ticket to use later,
- by choosing to **Select Inks by using selection criteria** in the **Document Inks** settings.

How Does it Work?

You select the inks to be output by checking a combination of criteria:

1. You define what to check. You can check any of the following ink characteristics in your criteria:

| | |
|------------------|---|
| Ink name | |
| Ink book | |
| Ink index | <p>The Ink index is the order in which the file's inks will be printed (the ink with ink index 1 is at the bottom of the document and will be printed first).</p> <p>To find the ink index of a file:</p> <ol style="list-style-type: none"> 1. select the file in the Automation Engine Pilot's Files view, 2. click , 3. in the Info dialog that opens, select Inks in the left panel. <p>The order of the inks at right is the ink index (the topmost ink has an index of 1, the second of 2, etc.).</p> |

| | |
|------------------------|---|
| | Note that if you reorder the inks by one of the columns (for example by Ink name), they won't be ordered by ink index anymore. You will need to close that dialog and reopen it to see the ink index order again. |
| Spot ink index | The Spot ink index is the order in which a spot ink will be printed (when counting only spot inks and not process inks). For example, if the first 4 inks of the document are CMYK, the first spot ink will have 5 as Ink index but 1 as Spot ink index . |
| Ink type | This can be for example Normal, Technical, Varnish... |
| Printing method | If you have set a Printing method for an ink it will be shown here (this can be for example Offset, Gravure, Flexo... or any custom printing method you configured). See the Automation Engine documentation for more information about printing methods. |

For example, you can check whether the **Ink book is** process, whether the **Ink name is** yellow...

You can use as many criteria as you want.

2. You define how to combine your criteria into a rule. For example:

- If you want to output only process yellow, you should check for inks that match **both** of the criteria:

Ink book is process
Ink name is yellow

- If you want to output both all process inks and all yellow inks, you should check for inks that match **either** of the criteria:

Ink book is process
Ink name is yellow

- If you don't want to output any process inks or any yellow inks, you should check for inks that match **neither** of the criteria:

Ink book is process
Ink name is yellow

How Do I Build Rules?

Build your rules the following way:

1. Choose how to combine the criteria in your rule:

- Select **All of the following are true** if you want to only select the inks that match **all** of the criteria you define.
- Select **Any of the following are true** if you want to select all the inks that match **at least one** of the criteria you define.
- Select **None of the following are true** if you want to only select the inks that match **none** of the criteria you define.

2. Define your first selection criterion.

You can select an ink based on its:

- **Ink name:** you can define if it **contains/begins with/ends with/is** a piece of text (alphanumerical characters), or if it **is empty**.
- **Ink book:** you can define if it **contains/begins with/ends with/is** a piece of text (alphanumerical characters), or if it **is empty**.
- **Ink index:** you can define if it **equals/is less than/is greater than** the number you enter, or **is between** the two numbers you enter (in this case the ink indexes you enter as boundaries are also selected).
- **Spot ink index:** you can define if it **equals/is less than/is greater than** the number you enter, or **is between** the two numbers you enter (in this case the spot ink indexes you enter as boundaries are also selected).
- **Ink type:** you can define if it **is** a piece of text (alphanumerical characters).
- **Printing method:** you can define if it **is** a piece of text (alphanumerical characters).

| For example, you could use: | to: |
|---|--|
| All of the following are true Ink book is <code>designer</code> | select all inks from the "designer" ink book |
| None of the following are true Ink name is <code>crease</code> | exclude an ink called "crease" |
| None of the following are true Ink type is <code>Technical</code> Ink type is <code>Varnish</code> | exclude all technical and all varnish inks |



Tip:

- You can enter several values to check for: just use a semicolon (;) between them.
For example, to check for both inks called `Cyan` and inks called `Magenta`, choose **Ink name is** and enter `Cyan;Magenta`.
- When launching the task on a file, you can also click  to select one or more of the **Ink names/Ink books/Ink types/Printing methods** used in your input file(s).
A criterion will automatically be created based on your selection.

3. Click + to add more criteria and define them.

To remove a criterion, click - next to it.



Tip: If you are launching the task on a single input file, you will see a table listing the **Selected document inks**, and another table with the **Document inks that are not selected** under the rules you defined.



Attention: If no ink is selected, you cannot launch the task.

4.6.3. Switching How You Select Inks

You can switch between the two methods of selecting inks (*manually* and *using selection criteria*), and this will keep the same inks selected.

Switching from Selecting Inks Manually to Selecting Inks Using Selection Criteria

When switching from selecting inks manually to selecting inks using selection criteria, the task will translate your manual ink selection into rules, so that the same inks are selected (you can see them in the **Selected document inks** table).

The rules you get are based on the characteristics of the inks you selected.

For example, if you selected all the process colors but no spot color in your file, for an offset job, you will get the following rule:

All of the following are true

Ink name is Cyan;Magenta;Yellow;Black

Ink book is process

Ink type is Normal

Printing method is Offset



Note:

If you...

- first selected inks using selection criteria,
- then switched to manual selection without changing the selection,
- then switched back to selection criteria,

... then your rules will be kept.

If you did change the selection in manual mode, the task will automatically generate new rules.

Switching from Selecting Inks Using Selection Criteria to Selecting Inks Manually

When switching from selecting inks using selection criteria to selecting inks manually, all the inks selected by the rules you defined (the inks in the **Selected document inks** table) become selected manually.



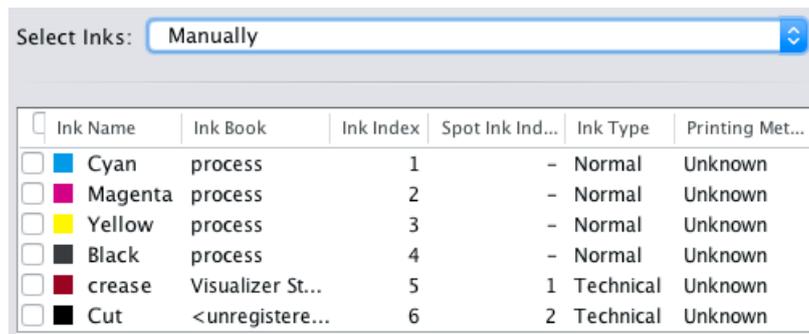
Note: You can only switch to selecting inks manually when you are launching the task on a (single) file.

4.6.4. Selecting Inks through Shuttle

If you want to be able to decide which inks to proof when submitting your input file *through Shuttle*, do the following:

In Your Pack Proof Ticket

- To make the ink selection a public parameter, you can either:
 - Right-click **Select Inks** and choose **Make Parameter Public**.
 - If you (are currently launching the ticket on a file and) have chosen to *select inks manually*, right-click the preview table under **Select Inks** and choose **Make Parameter Public**.



- If you have chosen to *use selection criteria*, right-click the rules builder under **Select Inks** and choose **Make Parameter Public**.



Note: You will not be able to create rules using Shuttle, you will only be able to select inks manually.

- Go to **Advanced > Manage Public Parameters...**, find the **Ink Selection** parameter at the bottom of the list, and drag it to the right hand side.



- By default, the public parameter that appears in Shuttle will be called **Ink Selection**. You can change its name by:

- right-clicking one of the elements mentioned above, selecting **Modify Public Parameter** and entering a new name,
 - if you are using the **Manage Public Parameters** window, entering the new name in **Prompt as**.
3. Make sure your ticket is also **Public**.

In Shuttle

The ink selection parameter may look a bit different depending on which Shuttle you are using (the Shuttle standalone application or a Shuttle plug-in in an Editor application).

- In the Shuttle standalone, the ink selection parameter will look like this:

Ink Selection: All inks

Inks:

| <input checked="" type="checkbox"/> | Ink Name | Ink Book | Ink Type | Printing Method |
|-------------------------------------|----------|----------|----------|-----------------|
| <input checked="" type="checkbox"/> | C | process | Normal | Unknown |
| <input checked="" type="checkbox"/> | M | process | Normal | Unknown |
| <input checked="" type="checkbox"/> | Y | process | Normal | Unknown |
| <input checked="" type="checkbox"/> | K | process | Normal | Unknown |

The table shows a preview of all inks in your input file, with their characteristics.

- To proof all inks from your input file, either leave all inks selected in the preview table, or select **All inks** at the top (this will hide the preview table).
 - To only proof certain inks, make sure **All inks** is not selected, and deselect the input inks that you don't want to proof.
- In ArtPro+ for example, the ink selection parameter will look like this:

Ink Selection:

Ink Name: Cyan

Ink Name: Magenta

Ink Name: Yellow

Ink Name: Black

By default, all the inks from your input file will be proofed, but you can remove any ink you don't want to proof using the  button.

4.7. Color Management

This is where you apply [color management](#) to your output file(s). To do this, you use a [color strategy](#) containing your color management settings.

You can apply two types of color management, depending on the type of proof you want to make:

Standard Proof

If you are making a standard proof, you are trying to reproduce your press' output on your proofer as accurately as possible.

In this case, you should use a color strategy containing your **press profile as source profile** and your **proofer profile as destination profile**.

See [Color Management for Standard Proof](#) on page 68.

Emulation Proof

If you are working with both a regular press and a digital press, and you want to be able to move jobs between presses, you need to make sure they have comparable output.

This can be useful if you want to use your digital press instead of your main press to reprint a few copies of a job, or to print short run jobs (with the same results as on the regular press) in general.

In this case, you should make an **emulation proof**, that takes both presses into account when proofing. It will:

- first simulate how your regular press prints on your digital press,
- then simulate that simulation on your proofer.

This will help you find out which colors can or cannot be reproduced on your digital press, as a digital press can have a narrower gamut than both a regular press and a proofer.

See [Color Management for Emulation Proof](#) on page 71.

4.7.1. Color Management for Standard Proof

If you are making a standard proof, you are trying to reproduce your press' output on your proofer as accurately as possible.

In this case, you should use a color strategy containing your **press profile as source profile** and your **proofer profile as destination profile**.

See [Color Strategies](#) on page 9 for more information about color strategies.

You can either select an existing color strategy (that you have created in Color Pilot), or create a new (basic) color strategy on-demand.

Note that when creating a basic color strategy on-demand, you will only be able to use it for the current task (you will not be able to store it, edit it later or reuse it).

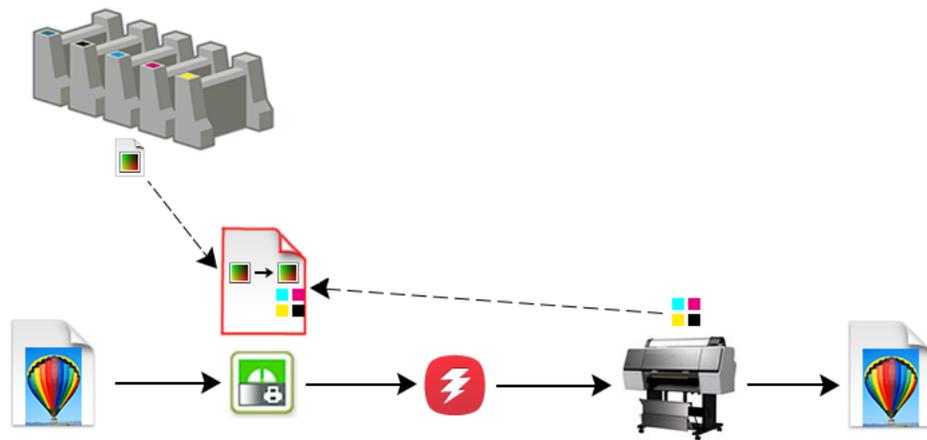
- If you have created a color strategy in Color Pilot, select it in the **Color Strategy** list.

To be available in this list, your color strategy must be stored in the color database defined for your Automation Engine server (if your Esko software is set up correctly, Color Pilot saved it in the right place automatically).

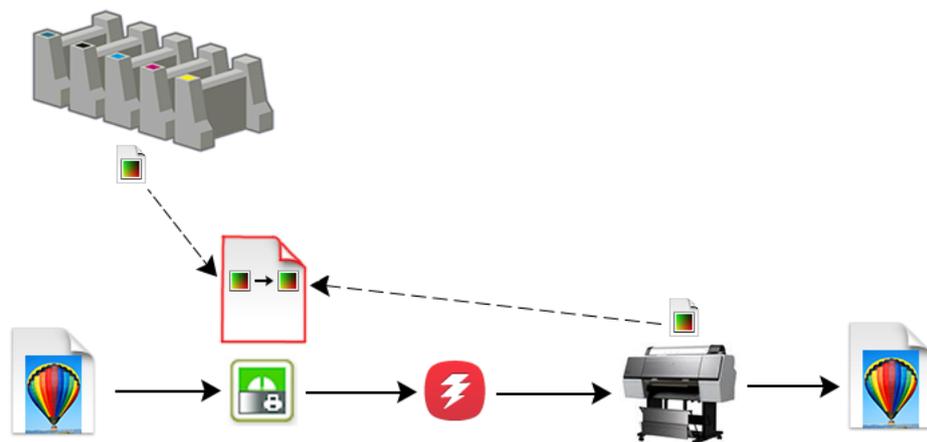
You can also select your desired color strategy through a public parameter, or using a SmartName. The SmartName for the color strategy must resolve to one of the available color strategies.

The color strategies you can select depend on your proofing device:

- If your proofing device (connected to the [Proof Server Workflow](#) you selected) doesn't have a profile  attached, you can select any color strategy  whose destination profile has the right ink set  for the proofer (as shown in red below).



- If your proofing device has a profile attached, you can only select a color strategy that has that profile as destination profile.




Note:

- To make a profile for your proofing device, attach it to your device, or check whether your device has a profile attached, you need to use Color Pilot. See the [Color Pilot documentation](#) for more information.
- We recommend you always use a proofer that has been profiled (for more accurate proofing, it should have been profiled or recalibrated within the last two weeks).
You can see when your proofer was last profiled, and manage your profiles, in Color Pilot's Proofers view.
- If your proofing device has a profile attached and there is a recalibration for this profile, that recalibration will be applied when proofing.
You perform a recalibration when your proofer output has drifted compared to what it was when you created the proofer profile.
To recalibrate the proofer, you print and measure a recalibration chart in Color Pilot. This creates a recalibration file that you can "apply" on your proofer profile to update it.
For more information about recalibration, please see the [Color Pilot documentation](#).


Tip:

If you are proofing files containing a white separation (for example for a white underprint) on an Epson Stylus Pro WT7900 proofer, and you want to color manage your white separation, make sure you select the color strategy you created for this purpose here. See [White Coloring](#) and [Color Managing your Proofer's White Ink](#) for more information.

- If you want to create a basic color strategy on demand:
 - a) Select **Create Custom Strategy...** in the **Color Strategy** list.
 - b) Select a **Source Profile** and a **Destination Profile**.


Note:

If your input file is a Normalized PDF that contains a document profile, and you want to use that as the source, select **Use document profile if available** (or use a SmartName resolving to `true`).

If the input file does not contain a document profile, the **Source Profile** you selected will be used instead.

PDF+ files don't contain document profiles (they use output intents instead).


Important:

- If your proofing device doesn't have a profile attached, you can use any destination profile that has the right ink set for the proofer.
- If your proofing device has a profile attached, you can only use that profile as destination profile.
- If your proofing device has a profile attached and there is a recalibration for this profile, that recalibration will be applied when proofing.

 c) Select a **Rendering Intent**.

See [Rendering Intents](#) on page 10 for details on how each rendering intent handles the conversion of *out-of-gamut* spot colors and of the background color, and which to use in which case.


Note:

- If you are working with Esko source and destination profiles, you can use the **Absolute Colorimetric** or **Relative Colorimetric** rendering intent.
- If you are working with ICC source and destination profiles, you can use any rendering intent.

 d) Click **OK**.

- If the **output intent** from the input file is different from the input profile of your proofing color strategy, it might result in wrong proofer output.

Choose what to do in that case:

- If you want the task to end in error, select **Task ends in error when the output intent is different from the source profile**. You can also use a SmartName resolving to `true`.
- If you want to output the file anyway, leave **Task ends in error when the output intent is different from the source profile** deselected (your task will end with a warning). You can also use a SmartName resolving to `false`. This is the default option.

In both cases, you will also see a message in the log.



Note: This option is only applicable to native PDF files and does not affect Normalized PDF files.

Once you have selected or created your desired color strategy, the task shows the **Source** and **Destination** profiles used in the strategy.

4.7.2. Color Management for Emulation Proof

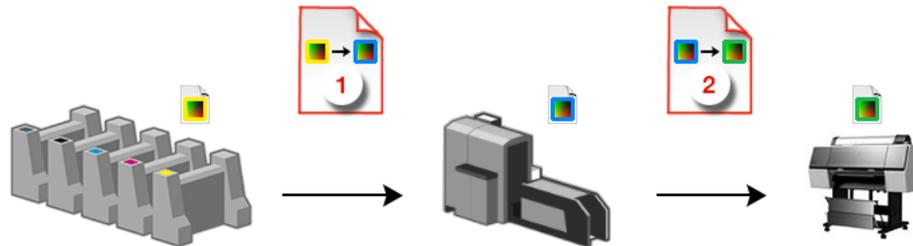
If you are working with both a regular press and a digital press, and you want to be able to move jobs between presses, you need to make sure they have comparable output.

This can be useful if you want to use your digital press instead of your main press to reprint a few copies of a job, or to print short run jobs (with the same results as on the regular press) in general.

In this case, you should make an **emulation proof**, that takes both presses into account when proofing. It will:

- first simulate how your regular press prints on your digital press,
- then simulate that simulation on your proofer.

This will help you find out which colors can or cannot be reproduced on your digital press, as a digital press can have a narrower gamut than both a regular press and a proofer.



1. Select **Emulation Proof** to display color management settings for an emulation proof.

2.

Under **Analog Press**, select your first color strategy .

This color strategy should have:

- your regular press profile  as **Source Profile** (or the profile for a printing standard you want to match, for example `ISOcoated_V2_eci.icc`),
- your digital press profile  as **destination profile (Emulation Profile)**.

To be available in this list, your color strategy must be stored in the color database defined for your Automation Engine server (if your Esko software is set up correctly, Color Pilot saved it in the right place automatically).

You can also select your desired color strategy through a public parameter, or using a SmartName. The SmartName for the color strategy must resolve to one of the available color strategies.



Note:

You will only be able to choose a color strategy with a destination profile  that is the same as the source profile of the *second color strategy*.

To choose a color strategy with a different destination profile, you need to first select a second color strategy that has that profile as source profile.

3.

Under **Digital Press**, select your second color strategy .

This color strategy should have:

- your digital press profile  as **Source Profile**,
- your proofer profile  as **Destination Profile**.

To be available in this list, your color strategy must be stored in the color database defined for your Automation Engine server (if your Esko software is set up correctly, Color Pilot saved it in the right place automatically).

You can also select your desired color strategy through a public parameter, or using a SmartName. The SmartName for the color strategy must resolve to one of the available color strategies.

The color strategies you can select depend on your proofing device:

- If your proofing device (connected to the [Proof Server Workflow](#) you selected) doesn't have a profile attached, you can select any color strategy whose destination profile has the right ink set for the proofer.
- If your proofing device has a profile attached, you can only select a color strategy that has that profile as destination profile.


Note:

- To make a profile for your proofing device, attach it to your device, or check whether your device has a profile attached, you need to use Color Pilot. See the [Color Pilot documentation](#) for more information.
- We recommend you always use a proofer that has been profiled (for more accurate proofing, it should have been profiled or recalibrated within the last two weeks).
You can see when your proofer was last profiled, and manage your profiles, in Color Pilot's Proofers view.
- If your proofing device has a profile attached and there is a recalibration for this profile, that recalibration will be applied when proofing.
You perform a recalibration when your proofer output has drifted compared to what it was when you created the proofer profile.
To recalibrate the proofer, you print and measure a recalibration chart in Color Pilot. This creates a recalibration file that you can "apply" on your proofer profile to update it.
For more information about recalibration, please see the [Color Pilot documentation](#).

4. If the **output intent** from the input file is different from the input profile of your proofing color strategy, it might result in the generation of wrong proofer output.

Choose what to do when the output intent profile from file is different from the input profile of the proofing color strategy:

- If you want the task to end in error, select **Task ends in error when the output intent is different from the source profile**. You can also use a SmartName resolving to `true`.
- If you want to output the file anyway, leave **Task ends in error when the output intent is different from the source profile** deselected (your task will end with a warning). You can also use a SmartName resolving to `false`. This is the default option.

In both cases, you will also see a message in the log.



Note: This option is only applicable to native PDF files and does not affect normalized PDF files.

4.8. Output

Use the **Output** settings to define how many copies of your proof you want, and whether to keep the files to proof them again later.

1. If you are proofing files containing a white separation (for example for a white underprint), and your chosen [Proof Server workflow](#) is connected to an Epson Stylus Pro WT7900 proofer, you can tweak how to proof the white objects in your file(s) with that proofer's white ink.

For example, you can use this to get a cooler or warmer white when printing on transparent or metallic foil.

To do this, select **White Coloring** and choose either:

- **No Coloring** if you just want to print the white objects using the proofer's white ink, without tweaking the white ink's color.
- **Custom Values** if you want to tweak the color of the proofer's white ink manually.
In this case, click **Set Custom Values...** and enter the CMYK values to add to the white ink.
- **Values From Color Management** if you want to use the color strategy you defined in the [Color Management settings](#) to tweak the proofer's white ink.



Note:

This color strategy must have a white **Extra Output Ink** (called `white`) and map the white separation in your file(s) to this white output ink.

See [Color Managing your Proofer's White Ink](#) on page 75 for information about how to create such a color strategy in Color Pilot.

You can also use a SmartName resolving to `NoColoring`, `CustomValues` or `FromColorManagement`.

2. Enter the number of **Copies** you want to print (at least 1).

You can use SmartNames and/or public parameters.



Tip:

If the number of copies to print is already defined in your [Proof Server workflow](#), that number will be filled in by default.

You can of course change it as desired.

3. Select **Keep job files for relaunch purposes** if you want to be able to proof jobs a second time without having to RIP them again.

In this case, the files created for proofing will not be automatically cleaned up. When you don't need to keep them anymore, you will have to delete them manually from the `\\[Esko Proof Server]\ProofFolder` share.

You can set this option with a SmartName resolving to `true` to keep the files, or `false` to discard them.


Note:

To re-proof files that you have kept using this option, do the following:

1. Double-click the **Send to Proof Server** sub-task that was run on the job you want to reuse.
2. This reopens the ticket with a limited number of settings. Change your desired setting as necessary (for example the number of **Copies**).
3. Click **Launch**.

If you didn't select the **Keep job files for relaunch purposes**, you will see The job cannot be reprinted as the files from the job were not kept when reopening the ticket.

4.8.1. Color Managing your Proofer's White Ink

If:

- you are proofing files containing a white separation (for example for a white underprint),
- your chosen [Proof Server workflow](#) is connected to an Epson Stylus Pro WT7900 proofer,

... you can color manage your proofer's white ink using a color strategy, for example to get a cooler or warmer white on your substrate.

To do this, open Color Pilot and do the following:

1. Add the white separation used in the file you want to proof (for example `cool white`) to the **designer** ink book.
2. Choose a generic white separation (that must be called `white`).

You can use the `white` ink from the `ClassicColors` ink book, or create a new ink called `white` in the **designer** ink book.

3. Create a color strategy that will color manage your file's white ink:
 - a) Add your generic `white` ink as an **Extra Output Ink** in your color strategy.
 - b) Map your file's white ink (`cool white`) to your generic `white` output ink.



Tip: If you need more details to perform these steps, please see the [Color Pilot documentation](#).

When using this color strategy in Pack Proof, your file's white objects will be color managed so that they are "cool white" on the proof from your Epson WT7900 proofer (and not simply white).

4.9. Rendering

Use the **Rendering** settings to define how to handle images that have a different resolution than the output resolution, and set [other rendering options](#) to optimize your output.


Note:

Pack Proof uses the output resolution defined in your [Proof Server workflow](#), where you need to decide whether quality or speed is more important to you.

- If you have chosen **High Quality** in your Proof Server workflow, Pack Proof will output your file(s) at the maximum resolution supported by your proofing device (you can check this resolution in Fiery Command WorkStation, the client application of the Esko Proof Server).
You would typically use this for your final output, where quality is much more important than speed.
- If you have chosen **Standard** in your Proof Server workflow, Pack Proof will output your file(s) at 50% of the maximum resolution supported by your proofing device.
- If you have chosen **Fast**, Pack Proof will output your file(s) at 25% of the maximum resolution supported by your proofing device.
You would typically use this for drafts, where you don't need high quality yet but want a fast result.

For more information, please see the Esko Proof Server documentation on the [Pack Proof page](#).

1. If your input file contains outlines, line art or contoured text, and you notice that they look too thick on print, we recommend you select the **Fine Line Rendering** option.

This will render objects with fine lines, for example Asian characters or barcodes, with a "thin fill".

You can set this option with a SmartName resolving to `true` to use **Fine Line Rendering** or `false` to use the standard rendering (also known as "fat fill").


Note:

If you have an older saved ticket (created in a version of Imaging Engine older than 22.11) with the outdated **Compensate for Outline Thickness** option selected, **Fine Line Rendering** will be used instead.

You will see a message about this:

- when opening the ticket,
- in the task details,
- in the log file.

When using this ticket, the task will end with a warning.

You can choose to not show this message again (in this case it won't be mentioned in the ticket, task details or log file, and the task won't end with a warning), but please note that this will apply to all users of that ticket.

2. If you experience problems with jagged edges, for example in small text, you can set an **Anti-aliasing** factor to smooth those edges.

See [Anti-Aliasing](#) on page 14 for more information.

You can adjust the amount of anti-aliasing applied by choosing a factor of either 2, 3 or 4 (note that using a higher anti-aliasing factor may slow down processing).

You can also set this with a SmartName resolving to `None` (if you don't need anti-aliasing), or to the anti-aliasing factor you want (for example 2).



Attention: Because anti-aliasing changes the output sampling to smooth the jagged edges, you cannot resample your images (with the **Image Resampling** option) if you use anti-aliasing.

3. If needed, you can [resample](#) your images.

This is typically needed when the images' pixels don't map exactly to output pixels, for example if:

- the images' resolution is different from your chosen [output resolution](#),
- scaling and rotation effects change the size and placement of the images' pixels.

In the **Image Resampling** option, choose the resampling method you want to use:

- Choose **Auto Resampling** to upsample the images to an automatically calculated resolution (generally half or a third of the output resolution) before smoothing them.

When using this, images are a lot less pixellated and fuzzy.

This method takes some time but gives images of a good quality, so it is recommended in most cases.

You can also use a SmartName resolving to `ResampleAuto`.

- Choose **Full Resampling** to upsample the images to the full output resolution.

This method is the slowest, but gives the highest quality images (not pixellated and only slightly fuzzy).

You can also use a SmartName resolving to `ResampleFull`.

Use this if **Auto Resampling** doesn't give you the results you want.



Attention:

Resampling to full resolution can require significant amounts of memory when the output resolution is high (especially from 4000 dpi).

If you want to do this, we recommend that you have at least 8GB of RAM available for each worker (see the installation documentation).

- Choose **None** if you don't want to resample your input file's images.



Note:

If you upgraded from a previous version of Imaging Engine, in some cases you may have saved a ticket with a less optimal resampling method (**From File** or **PDF Interpolation**) in your older version. These methods are deprecated from Imaging Engine 18.1.1.

When processing a file with such a ticket, Imaging Engine will use the **Auto Resampling** method instead. You will get a warning about this.

4. If your input file is a Step and Repeat file, choose whether you want **Identical One-Ups**.

This makes sure that on print, the details look the same in all your one-ups (see [Identical One-Ups](#) on page 16 for more information).

- Select **On** if you want all one-ups of your input Step and Repeat files to look identical on print.



Note:

You can do this for the following input file types:

- *Plato* files (.pdfpla files or Normalized PDFs from Plato),
- Step and Repeat files in the Native PDF format (made by ArtPro+ or 3rd party software),
- Step and Repeat files in the ArtPro Classic file format (.ap or .art), if they were previously Normalized.



Tip:

If you were previously using FlexRip in combination with Plato, and setting the **Reset for each external file** option for **Screen Registration** in Plato, select **On** here to get a comparable result with Imaging Engine.



- Select **Off** if:
 - it is not important for you to have identical one-ups when doing Step and Repeat,
 - you are not currently working with Step and Repeat files or files with repeated placed art,
 - if you are re-running a separation from an old job, and want your screens to match the previous run,
 - you were satisfied with the screened output of previous versions of Imaging Engine that did not have this option (22.07 and older).

Off is selected by default. We recommend you leave it like this if you don't need identical one-ups, as rendering the one-ups identically can in some cases slow down your output.

- Select **Use from file** to use the information in your input Step and Repeat files to decide whether your one-ups need to be identical or not.

This is only applicable to Plato files with the **Screen Registration** parameter filled in.



- If your input Plato file has the **Reset for each external file** option selected for the **Screen Registration** parameter, your one-ups will be aligned to the pixel grid to be made identical.
- If your input Plato file has the **Continuous** option selected for the **Screen Registration** parameter, your one-ups will be left as they are.

4.10. Verification

If you want to [verify the colors on your proof](#) once you have color managed and proofed your file(s), you can add a [verification strip](#) and define your [color deviation tolerances](#) here.

Color verification is especially important for contract proofing, as it is a measure of the proof's quality that you can show your customers.



Note:

If you have recalibrated your proofing device, that recalibration will be applied to the verification strip too.

See [Color Management](#) on page 68 for more information about recalibration.

1. Select **Print verification strip** if you want to verify your proof.

The other settings become available once you have selected this.

2. Select the **Measuring Device** you will use to measure your strip.

This can be either an "offline" separate device, or an inline device (embedded in your proofer). See [Measuring with a Spectrophotometer](#) on page 24 for a list of supported inline and offline measuring devices.



Note: The Epson SpectroProofer ILS20 and ILS30 devices are not supported for measuring proofs with nesting or step and repeat.

3. Select the **Measurement Condition** set on the measuring device you will use to measure your strip.

Measurement conditions have been introduced by the printing industry to correct measurement variations caused by optical brightening agents in newer substrates.

Measuring a substrate containing optical brightening agents with a light source containing ultraviolet radiation causes fluorescence, making the substrate appear "whiter than white". The more UV is in the light source, the higher the fluorescence, and the whiter the substrate appears.

Different measurement conditions correspond to different amounts of UV, and will give different Lab values for the white point (which also affects printed inks).

You can choose either **Proof Server default, M0 - UV included, M1 - D50 UV included** or **M2 - UV cut**.

- **Proof Server default** is the measurement condition set in the Proof Server workflow you are using.



Note:

If you have an ILSx0 spectrophotometer connected to your Proof Server workflow, the measurement mode is taken from the measuring device settings in Fiery Command WorkStation (see the "Measuring device settings" page of the [Esko Proof Server documentation](#)).

If you have an i1x spectrophotometer connected to your Proof Server workflow, the measurement mode is always M1 (D50 UV included).

- **M0** represents an incandescent lamp close to CIE's (Commission Internationale de l'Eclairage) "Standard Illuminant A", with a color temperature of about 2856 K.

This is the measurement condition still used by most of the world's spectrophotometers and densitometers.

As M0 does not define how much UV is in the light source, it is not recommended to use it to measure substrates with optical brightening agents (that cause fluorescence), especially if you need to exchange measurement data between facilities (that may use different types of spectrophotometers).

- **M1** represents a light source matching CIE's "Illuminant D50", but with a controlled amount of UV radiation, and compensating for the fluorescence caused by that radiation. Note that this compensation is only valid for measuring optically brightened papers, but not for measuring fluorescent inks or toners.
- **M2** represents a light source that excludes UV radiation (like a UV filter), so that substrates with optical brightening agents can be measured without fluorescence under this measurement condition.



Note:

- If you are using a measuring device that doesn't support measurement conditions, the measurement condition you set here will be ignored.
- This option is not compatible with previous versions of the Esko Proof Server (prior to the Esko Proof Server 20, released with Pack Proof 21.07).

4. In **Strip Type, select the strip you want to print.**

The list automatically shows all strips that are available on the [Proof Server Workflow](#) you selected, and compatible with your **Measuring Device**.

See [Choosing a Verification Strip](#) on page 21 for more information about the verification strips.



Note: Pack Proof automatically uses the correct strip layout, based on the **Measuring Device** and **Strip Type** you selected.

5. Select **Apply color management to strip if you want to color manage your strip.**

Whether you color manage and/or verify your strip depends on what you want to achieve:

| If you want to... | Print your strip with... |
|---|--|
| verify your job's colors | both color management and verification |
| leave the verification for later | color management but no verification |
| <ul style="list-style-type: none"> • monitor the proofer's stability over time • compare the output of different proofers of the same model | no color management but verification |

| If you want to... | Print your strip with... |
|--|--------------------------|
|  <p>Note: In this case, you will have to manually enter the first proofer's values as reference in Fiery Verify when measuring the other proofer's output.</p> | |

 **Note:** If you selected an **Esko + Solid Colors Strip** or an **Esko Equinox Strip**, the strip is always color managed, and the *reference* always set to **Automatically load reference values from source profile**.

6. Select **Verify strip (with verification tool)** if you want to verify your strip. You also need to set the following parameters:

a) In the **Reference** list, choose what kind of reference values you are trying to match:

| If you are trying to match... | then select... | when your verification strip is... |
|---|--|---|
| <ul style="list-style-type: none"> a standard (for example Ugra/Fogra) another proofer of the same model a previous measurement from your proofer (for example measurements from a test chart) | <p>Manually load reference values</p>  <p>Note: You need to load the standard or measurements manually in Fiery Verify.</p> | either color managed or not color managed |
| an established profile that you are using for color management (for example ISOcoated_V2_eci.icc) | Automatically load reference values from source profile (this is the source profile from your <i>color strategy</i>) | color managed |
| <ul style="list-style-type: none"> the way your proofer prints as defined in its profile another proofer of the same model (with the same profile) | Automatically load reference values from destination profile (your proofer profile) | not color managed |

 **Note:** If you are using a **Ugra Fogra-MediaWedge V2.2** or **Ugra Fogra-MediaWedge V3.0** verification strip, additional reference values are available (**FOGRA11L_MCheck10**, **FOGRA12L_MCheck10...**). Those are also available when you set the **Strip Type** using a SmartName.

b) Choose the **Delta E Formula** to use when verifying your strip.

See [Difference Between Colors: Delta E](#) on page 19 for more information about Delta E and color differences.

- c) To set the color deviation tolerances to use when verifying your strip, click **Edit...** near **Tolerances**.

The verification will pass if the color differences are within the tolerances, or fail if they are bigger.

You can fill in:

| | |
|----------------------------------|--|
| General Tolerances | The Delta E tolerances for the color patches and the paper white. The Maximum for 95% of all patches tolerance excludes the worst 5% patches from the calculation. |
| Primary Colors Tolerances | The Delta E tolerances for the CMYK patches only. |
| Hue Tolerances | The Delta H tolerances for the CMYK, CMYKRGB and Gray patches. Delta H is the difference in hue between two colors. The generally accepted Delta H tolerances are a maximum of 1.5 for gray areas, and of 2.5 for primary colors. |
| Tone Tolerance | The Delta T tolerance for the CMYK patches. Delta T is the colorimetric dot gain for primary colors. The generally accepted Delta T tolerance is a -5% to +5% tone value difference. |
| Chromaticness Tolerance | The Delta CH tolerance for the color patches. Delta CH is the difference in saturation between two colors. |

See [Difference Between Colors: Delta E](#) on page 19 and [Difference Between Colors: Other Measures](#) on page 20 for more information.

- d) If you are using an inline measuring device (like an **Epson SpectroProofer** or an **HP DesignJet Zx100**), you can choose to print a verification report once your file is proofed and verified.

In **Print Inline Report**, select either:

- **Never** to never print any report,
- **Always** to print a report whether the verification succeeds or fails,
- **When verification passes** to only print a report when the verification succeeds.

The report will show information about the proof and verification (the printer used, the date and time, the verification strip used, the tolerances and whether they were met...).

After printing your proof, you can either verify it:

- offline, using Fiery Verify with a [separate spectrophotometer](#): see [Offline Verification](#) on page 83,
- inline, using the [inline spectrophotometer](#) embedded in your proofer: see [Inline Verification](#) on page 83.

4.10.1. Offline Verification

If you *have chosen* to verify your proof using an offline spectrophotometer (a separate device, not embedded in your proofer), you can verify your proof offline, using **Fiery Verify**  and this spectrophotometer.

1. Open **Fiery Command WorkStation** .
2. In the **Job Center** view, select the job you want to verify. It should have the **To Verify** status.
3. Open the **Job Summary** panel and click the **Verify** link.
This opens **Fiery Verify** .
4. Measure your proof's verification strip, following the instructions on screen.
5. When you are done, you will see the verification results, and whether your proof **Passed** or **Failed** verification.
The results include the *Lab values* of your measured sample versus your reference, and your *color deviation tolerance metrics*.
6. If desired, you can print a label and/or a report (on your default printer).
 - The label includes general information like the job name, tolerance set and measurement condition used, as well as a summary of your color deviation tolerance metrics (it includes all the criteria required to verify ISO 12647-7, 12647-8, G7, or Fogra PSD Print Check compliance).
 - The report includes the same information, plus more detailed measurement data (the Lab values of your measured sample versus your reference).
7. After closing **Fiery Verify**, your job's status is updated, both in **Fiery Command WorkStation** and in the Automation Engine **Tasks** view.



Tip: You can also see a summary of your verification results in Automation Engine (in the log file of the **Send to Proof Server** sub-task).

4.10.2. Inline Verification

If you *have chosen* to verify your proof using your proofer's inline (embedded) spectrophotometer, the verification happens automatically on your proofer.

- You can see your print job's status change from **To Verify** to **Verified** in **Fiery Command WorkStation's Job Center** view.
- You can see a summary of your verification results in Automation Engine (in the log file of the **Send to Proof Server** sub-task).
- If you chose to *print an inline report*, it will be printed automatically on your proofer.

4.11. Summary

This shows a summary of all the settings you defined in the ticket.

- To show the settings from a tab, click **+** (on PC) or **▶** (on Mac) beside the tab name in the right pane.

Click **Expand All** to show the settings from all tabs.

- To hide the settings from a tab, click - (on PC) or ▼ (on Mac) beside the tab name in the right pane.

Click **Collapse All** to hide the settings from all tabs.