ENFOCUS



PITSTOP PRO 2022

Action Manual

10 - 2022

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1. What's new?

This section lists which Actions have been changed or added in the latest PitStop releases.

1.1. New and changed Actions in PitStop 2022

This release includes the following changes related to Actions:

New Actions

- *Change annotation flags*
- *Change halftone origin*
- *Change Requirements*
- *Check black point compensation*
- *Check document information dictionary compliance*
- *Check DPart metadata*
- *Check enforced viewer preferences*
- *Check for associated files*
- *Check for inconsistent Type 3 font width information*
- *Check halftone origin*
- *Check if Output Intents are used*
- *Check if Requirements are used*
- *Check inline image syntax*
- *Check Mixing Hints in Output Intent*
- *Check Output Intents for DotGain*
- *Check PDF text string encoding*
- *Check Spectral Data in Output Intent*
- *Check usage of device color spaces for PDF/X*
- *Check version compatibility with PDF/A-2*
- *Check version compatibility with PDF/X*
- *Fix inconsistent Type 3 font width information*
- *Fix version compatibility with PDF/A-2*
- *Fix version compatibility with PDF/X-6*
- *Remove additional actions*

- *Remove alternate presentations*
- *Remove alternative blend modes*
- *Remove associated files*
- *Remove black point compensation*
- *Remove CharSet or CIDSet*
- *Remove DPart metadata*
- *Remove enforcements on viewer preferences*
- *Remove file specification keys*
- *Remove name from XObjects*
- *Remove Output Intents*
- *Remove specific Output Intent keys*
- *Remove sub-page navigation*
- *Reverse path*
- *Select black point compensation*
- *Select by halftone origin*
- *Select by inconsistent Type 3 font width information*
- *Select inline image syntax*
- *Select rotated objects*
- *Set black point compensation*
- *Set default halftone origin*
- *Use flags to select annotation*

Improved Actions

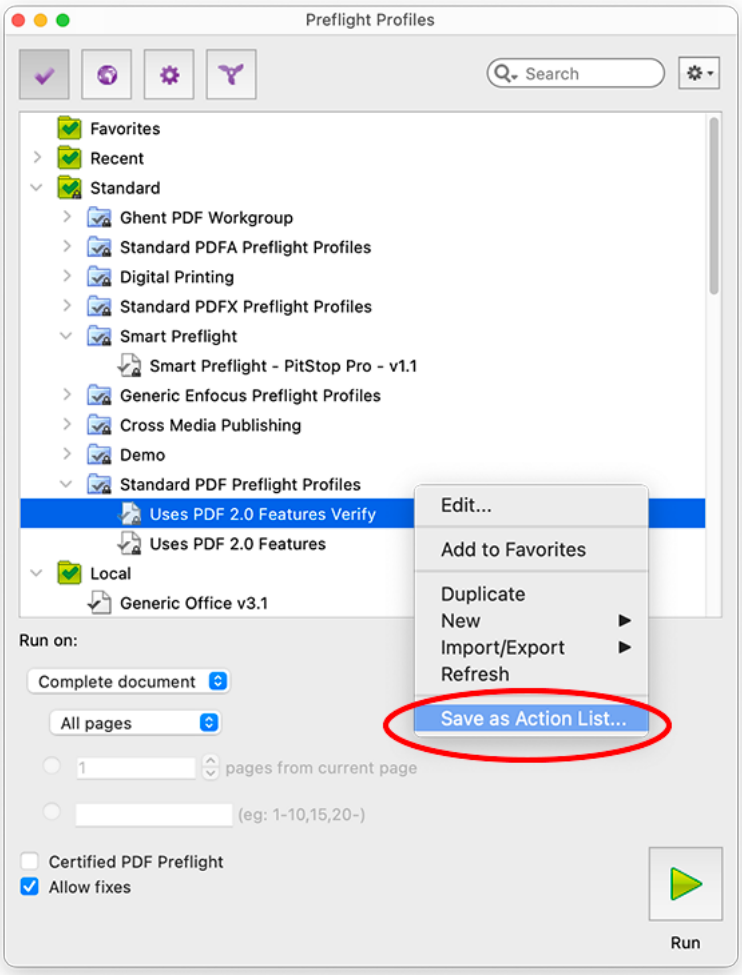
- *Check for action dictionaries* has been extended with 3 extra action types (GoToDPart, RichMediaExecute, GoToE) that are not supported by PDF 2.0. Hence, this Action can now be used as part of a PDF 2.0 compliance check.
- *Check Output Intent* and *Change Output intent* can now be used to find and/or change page level Output Intents (before, only the Output Intent on document level was checked or changed). In addition, it's now also possible to check if a document is compliant with PDF/X-6 or PDF/X-6p. This is also the case for *Select non-compliant Output Intent*.
- *Check document security* was updated with new security version options (for example PDF 2.0).
- *Check for rotated objects* has been improved. You can now quickly find slightly rotated objects.
- *Check if ICC profile differs from ICC profile in PDF/X Output intent* now takes into account page level Output Intents. It's also possible to only check the stroke or only the fill ICC profile as required.

- *Check for transparent objects*, *Change transparency* and *Remove transparency* now also work for transparent annotations.
- *Check Trapnets for PDF/X* and *Check if compression filters are PDF/X compliant* were adjusted to include a check for PDF/X-6 and PDF/X-6p.
- *Check file specification keys* now has an extra option to search for the PDF 2.0 specific keys.
- *Check page box layout* and *Change page box layout* now have options for PDF/X-4(p) and PDF/X-6(p).
- *Check appearances of annotations and interactive form fields* was updated to check for compliance with particular PDF/X versions.
- *Check if document has enough high-ASCII bytes in the PDF header* has been redesigned and extended with extra checks for PDF/A and PDF/X compliance.
- *Check corrupt font widths* and *Select corrupt font widths* now also work on vertical writing and allow you to specify a threshold or tolerance.
- *Check PDF/X viewer preferences* and *Make viewer preferences PDF/X compliant* were extended with support for other PDF/X versions and the latter has extra options to remove the preferences as required.
- *Check for PDF/A file structure problems* was extended with support for PDF/X-6, and therefore renamed "Check for file structure problems".
- *Check for deprecated attributes in XMP metadata* has been updated to comply with the latest PDF specifications.
- *Check if JPEG2000 compressed images are PDF/X compliant* has been adjusted for PDF/X-6. The Action now has two options: PDF/X-4 and PDF/X-6.
- *Check if TrueType fonts are PDF/X-4 or PDF/X-4p compliant* has been adjusted for PDF/X-6. The Action has been renamed "Check if TrueType fonts are PDF/X" compliant.
- *Add default color spaces for color spaces that are not compliant to the Output Intent* now supports PDF/X-6 and PDF/X-6p.
- *Select non-PDF/X-4 compliant TrueType fonts* has been renamed "Select non-PDF/X or PDF/A compliant TrueType fonts". This Action can now also be used to select PDF/A-1 or PDF/A-2 and PDF/X-6.
- *Select by color space in PDF/X Output Intent* now allows you to indicate which Output Intents should be taken into account.
- *Check access control* now has a user interface, so you have more control over what exactly should be checked.
- *Check if font contains all glyphs and metrics for all characters used* now also fixes metrics for vertical writing.
- *Remap color* now has an extra option to map Gray to CMYK with color management disabled.
- *Open path*, *Close path* and *Combine subpaths* have been adjusted to not only work on parent paths, but also on subpaths. That is needed because these Actions are typically used with Actions that only select the parent path, for example *Select by fill color*.
- *Add bleed* now correctly extends line art.

- *Add bleed around contour* is improved; whereas in PitStop 2021 only line art with a uniform color space was extended, now all color spaces are supported. This Action now also works on clip masks.
- *Check page bleed box* now has extra options. You can for example determine which sides should be checked and if page binding should be taken into account.
- *Change inline image syntax* on page 114 now has an option to fix the L key if needed.

Other changes

- In the **Action Editor**, a new category, *PDF 2.0*, was added, which contains all Actions that can be used to check, change and fix files for PDF 2.0.
- In the **Action Lists** dialog, a new subcategory of the Standard category was created: *PDF 2.0*. It contains a number of useful, pre-defined Action Lists.
- It is now possible to save a Preflight Profile as an Action List through a new option in the context menu of the Preflight Profiles dialog (see image below).



Improvements in PitStop 2022 update 1

- New Action Lists were added that support the Ghent Workgroup 2022 Specification. They can be found in the ISO processing steps folder.

- *Select inside or outside contour* was updated to apply with the latest PDF specifications.
- *Check for empty pages*,*select empty pages*, *remove empty page* now have an extra checkbox, allowing you to ignore visually empty pages.
- *Check barcode* is now able to detect DataBar, DataBar Expanded, Code 93 and Maxicode barcode types. There is also extended support for Esko barcode Code93, GS1 QR, Bobst, Kurant, Kiebrand, CIP-39, Eberle, and Aztec types.
- With *Check color type* you can now, in case of ICC Profile colors, check for a particular ICC space (ICC based gray, RGB, CMYK or Lab).
- *Check for solids and tints* now has an extra option to ignore tints that only cover a very small area of the surface.
- *Check spot color suffix* , *Select by spot color suffix* and *Change spot color suffix* have been improved and new color suffixes have been added to the list to comply with the requirements from the GWG 2022 specification.
- In case of a file not found, *Overlay PDF* now reports the name of the expected PDF file.

2. Automating tasks with Action Lists

Read this chapter if you want to know what Actions and Action Lists are, and how you can use them to automate your work.

2.1. About Actions and Action Lists

One of the main reasons for using Switch is editing PDF documents. For example, you may want to change text (or its formatting) or objects, or you may want to change the page layout or to prepare your document for either print or screen viewing,...

You can make these changes manually, one by one, but if you have to perform these tasks a number of times, either within a single PDF document or in multiple PDF documents, it may be preferable to **automate** them, **using Actions and Action Lists**.

Actions

Actions are *pre-defined tasks* provided to you by Switch. You can use them as they are, or you can adjust them to your needs (by changing the attributes) or you can even record your own Actions and re-use them later on.

Some examples:

- Change font color
- Normalize line weight
- Add background

The listed Actions are examples of Actions that allow you to change and edit a PDF, but you can also use Actions for making selections, gathering information and checking if a PDF conforms to certain standards.

Action Lists

Actions are always included in **Action Lists**. Action Lists are *sequences of one or more tasks*. As most of the time, several tasks have to be performed one after the other, and often in a fixed order, these Action Lists allow you to perform complex operations on PDF files.

For example, if you change the layout of the text in your document, you will probably carry out 4 different tasks (4 "Actions"): first you'll select the text, and then you'll change the font, the font size, and the font color as required. You can group them into one Action List, and run this Action List only once. If you later have to do the same, for example in another PDF, you can simply re-use the Action List.

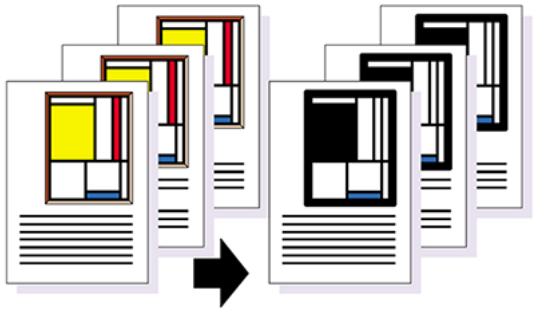
Note that you can use Action Lists in other Enfocus products as well, for example in a PDF Queue in Enfocus Instant PDF, in a Connector in Enfocus Connect and in a hot folder in Enfocus PitStop Server.

2.1.1. Actions and Action Lists: An example

About the job

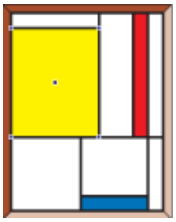
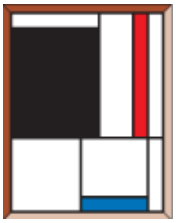
Suppose you have a line art object in several PDF documents. In all these PDF documents, you want to:

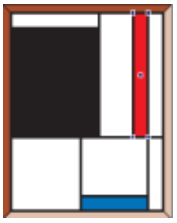
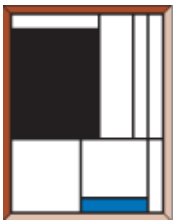
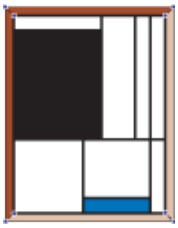
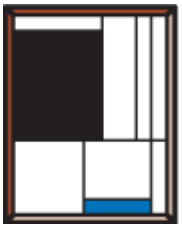
- Change the fill colors of a number of areas of this object.
- Change the line weight of all lines in the object that are thinner than a given line weight.



Automating the job using an Action List

This job consists of a number of sequential tasks or "Actions" (as shown in the table below). These individual tasks can be grouped into one Action List "Changing the properties of line art", which can then be applied to a range of pages in one or more PDF documents or to complete PDF documents.

Step	Action	Illustration
1	Select the fill color of an object.	
2	Change the selected fill color of an object.	

Step	Action	Illustration
3	Select another fill color of the object.	
4	Remove the selected fill color of the object.	
5	Select lines of an object with a given line weight.	
6	Change the selected line weight.	

2.2. Where to find Actions and Action Lists

Actions and Action Lists can be accessed via the **Action Lists** dialog in Switch. Its location depends on your Acrobat version.

The following table explains how you can open the Action Lists dialog.

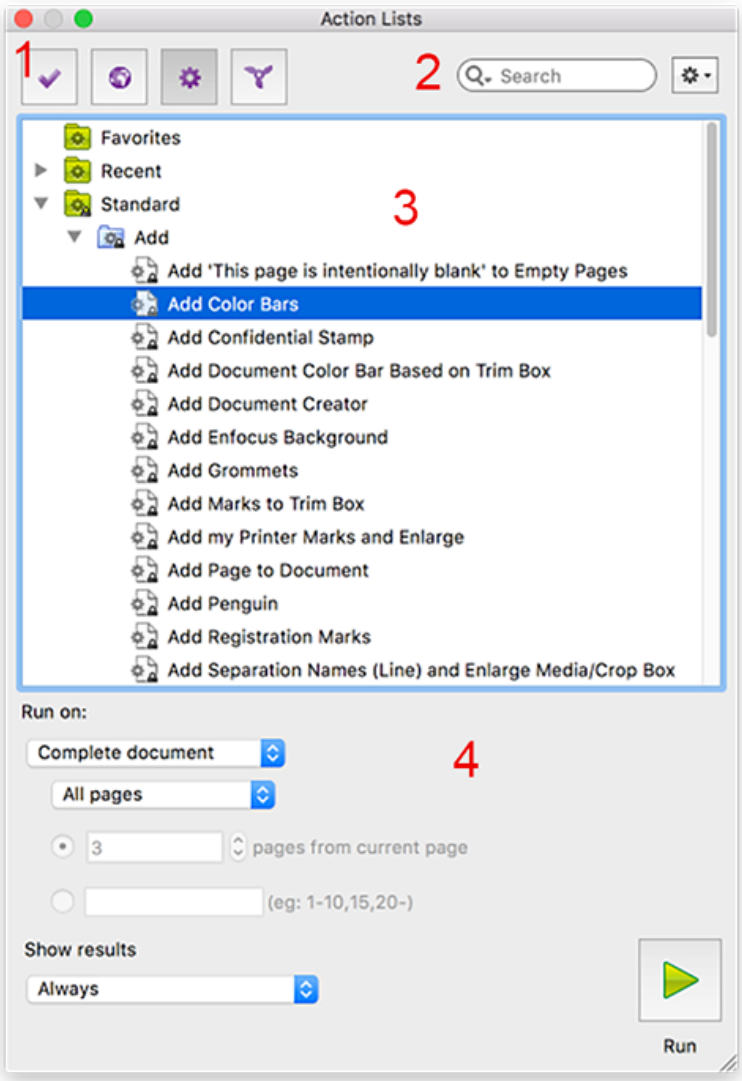
OS/Acrobat	Do one of the following
Acrobat	• In the menu bar, click **Switch** > **Action Lists**. • In the **Tools** pane, click **PitStop Process** >  **Action Lists**.
Windows shortcut	Press Alt+Ctrl+A.

OS/Acrobat	Do one of the following
Mac shortcut	Press ⌥ ⌘ A.

2.2.1. The Action Lists dialog

The **Action Lists** dialog allows you to organize, access and run Action Lists:

- You can open an existing Action List or a blank Action List (to create a new one).
- You can import, export, duplicate, and group Action Lists
- You can run Action Lists, i.e. apply them to one or more pages of the PDF you're editing.



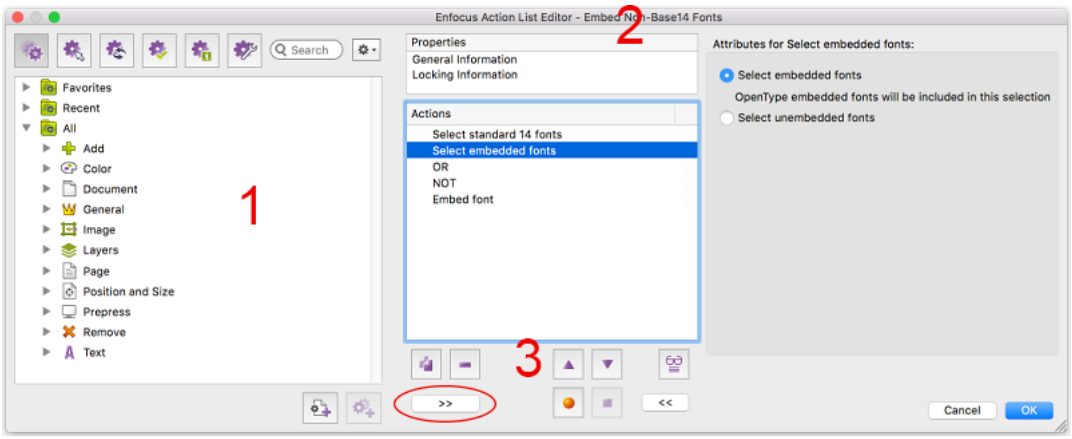
The **Action Lists** dialog consists of the following screen parts:

#	Description
1	Buttons to switch between Action Lists () and other "presets" (Preflight Profiles , Global Changes  and QuickRuns ).
2	A search field (allowing you to search for a particular Action List) and an Action menu  (allowing you to organize the Action Lists).
3	A workspace, which displays the available Action Lists. The Action Lists are organized in folders, called "databases". By default, the following folders can be found: • **Favorites**: Action Lists marked as your favorites. This provides you fast access to the Action Lists you need often. • **Recent**: The 10 most recently used Action Lists. • **Standard**: The default Action Lists installed with Switch (grouped in subfolders, such as Color, Fonts, Image,...).  **Tip:** To learn what an Action List can do, double-click it, and check the content (the Actions it contains) and the description. • **Local**: Action Lists edited and created by you, and saved locally.
4	The bottom part of the dialog allows you to *run the Action List selected in the upper part of the dialog*. You must indicate on which page(s) the Action List should run and whether or not the results should be shown in *The Enfocus Navigator* on page 41.

2.2.2. The Action List Editor

The **Action List Editor** is accessible from within the Action List dialog: when double-clicking an Action (or selecting **New** > **New** from the contex menu), this dialog appears. It allows you to change the *content of an Action List*:

- You can change the description of the Action List or protect the Action List with a password.
- You can add Actions to the Action List or remove them.
- You can organize the Actions within the Action List (e.g. group them or change the sequence).
- You can change the attributes of each of the Actions within the Action List.



The **Action List Editor** consists of the following screen parts:

#	Description
1	A list of available Actions. This list is collapsed by default, but can be easily expanded by clicking the Show Actions button. << All these Actions can be used in your Action List.
2	The center and right part of the dialog apply to the selected (or new) Action List. It contains: • **General information**, for example the name of the Action List and a description • **Locking information**, indicating whether or not the Action List is password protected • An overview of the **Actions** included in the Action List. **Note:** Clicking an item under **Properties** or **Actions**, displays the corresponding information at the right side of the dialog. In the example above, the right-hand pane shows the attributes of the selected Action ("Select embedded fonts").
3	A number of buttons allowing you to manipulate the content of the Action List. The meaning of these buttons is explained in the table below.

Buttons

Button	Click to
<<	Display the list of Actions that can be added to the current Action List. See *Actions overview* on page 25.
	Import a complete Action List into the current Action List. See *Using operators in Action Lists* on page 33.
	Add an Action (selected in the list of available Actions) to the Action List.
	Duplicate an Action selected in the Action List.

Button	Click to
	Remove a selected Action from the Action List.
	Move the selected Action **up** in the Action List.
	Move the selected Action **down** in the Action List.
	Start recording.
	Stop recording.
	Start the Action List Visualizer. See *Troubleshooting Action Lists using the Action List Visualizer* on page 50.



Note: Most of these manipulations can also be performed using the context menu (e.g. duplicating Actions, or moving Actions up or down).

2.2.3. Actions overview

All Actions that can be used in Action Lists are listed in the left panel of the Action List Editor. As there are more than 500 different Actions, and to make it easier to find the Action(s) you need, Actions are *sorted by type and category*.

Action types



Tip: You can use the buttons at the top of the dialog to switch between the different Action types. The first button displays *all* Action types.



-  **Selections**

  Before you can change something in a PDF document, you evidently have to select it. All Actions that allow you to select something in a PDF document are listed in the **Selections** category, together with the logical operators (“AND”, “NOT, “OR”, ...).

-  **Changes**

  A lot of Actions allow you to make changes. The list of changes includes almost anything which professional PDF editing tools like Switch can do, including:

  - Adding objects, or page numbers
  - Changing a wide variety of properties, including page boxes
  - Color conversions
  - Removing objects
  - Rotating and scaling page content
  - Font- and color-related changes

Note: For each "change" Action; you can decide whether or not to log the changes in a Report.

- **Checks**

  Action Lists do not necessarily have to change PDF documents. You can also create them to check various properties in PDF documents or detect specific objects or elements. For example, an Action List can check font-related properties or detect empty pages in a PDF document.

  Note: For each “check” Action, you can decide whether or not to log it in a Report, and if you log it, you can assign it a status (“Warning”, “Sign-Off Error” or “Error”). For more information, refer to *The Enfocus Navigator* on page 41.

- **Informs**

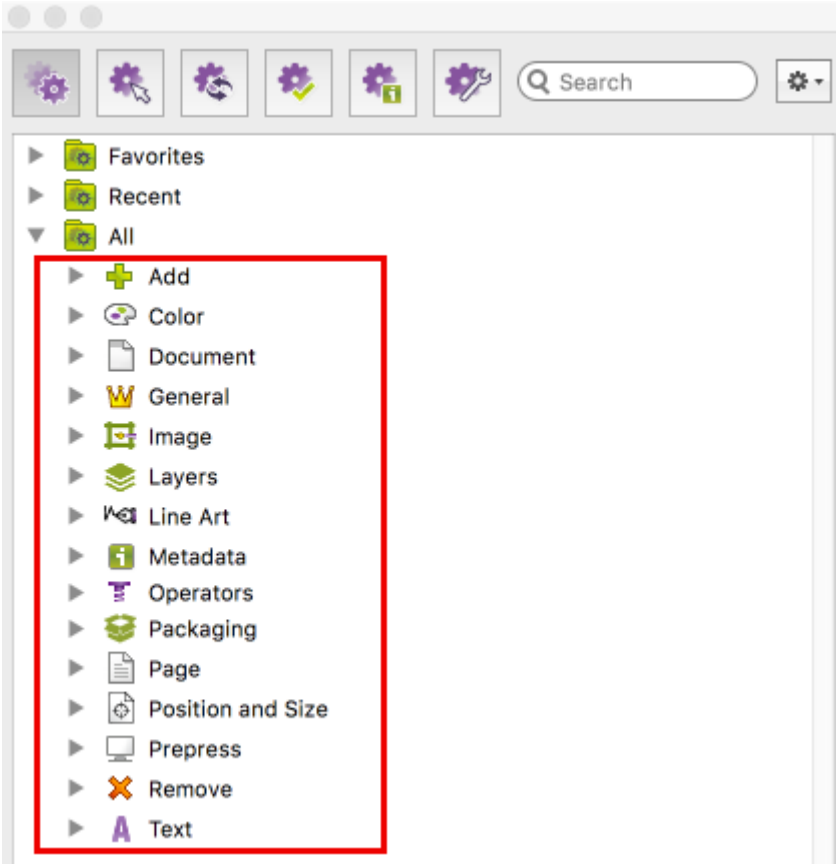
  Action Lists can also gather information from PDF documents. This can be information about fonts, colors, OPI, etc. This information will be presented in a Report, available via the Enfocus Navigator. Refer to *The Enfocus Navigator* on page 41.

- **Settings**

  Action Lists can also be used to change certain default Switch settings like the image recompression, page box, and color management settings, or the number of decimal places that is taken into account when checking values.

Action Categories

The Actions are further grouped into different Categories, referring to the domain they apply to (e.g. Color, Page, Prepress).



Search field

To find the Actions you need, you can can type a key word in the Search field at the top of the pane. Note that the search is limited to the selected Action Type; for example, if you've clicked the "Checks" icon at the top of the pane, Switch will only search for the entered keywords in the list of "check" Actions.

If you don't want to limit your search to a specific Action type, make sure to switch to the *All Actions* view ( ).

2.3. Working with Action Lists

This chapter explains everything you should know to be able to edit, create and run Action Lists.

2.3.1. Working with Action Lists - how to proceed

Working with Action Lists includes the following steps:

1. First you have to create a new or edit an existing Action List. See *Creating and editing an Action List* on page 28.

This means that you have to select an existing Action List or open a new, blank one and adapt it to your needs. You will hardly ever be able to use an Action List without having to change anything.

Next, you have to design your Action List:

- Add or remove any Actions as required. Alternatively you can record Actions or import an other Action List. You can organize the Actions inside your Action List as required (e.g. by grouping them).
- Make sure to use the correct operators (AND, OR, NOT).
- Set the attributes of each of the Actions in your Action List:
  - Enter the required values, optionally using variables or regular expressions; in some cases you can "grab" values from the document you're editing.
  - Enter the required log level ("check" Actions only) or indicate whether or not the changes should be logged ('change' Actions).

2. Once the Action List is ready, you can save and run it, to see if it works as expected. See *Running an Action List* on page 40.



Tip: In case of complex Action Lists, you may want to use the Action List Visualizer to debug your Action List.

3. Next, you can check the results of your Action List, using the Enfocus Navigator, and export a Report as required. See *Checking the results of an Action List* on page 41.
4. If applicable, you can fix the problems that were reported by the Enfocus Navigator or in the Preflight Report. *Fixing problems* on page 46

Remark

Most Action Lists start with a *selection* (e.g. the Action "Select all") followed by on or more *checks* or *changes* (e.g. check the colors of the selected objects, change the font of the selected text, ...).

By default, when selecting objects, objects that are completely clipped away (hence are invisible) are selected as well. If you don't want this, we recommend removing them first. You can use the Actions "Select objects that are completely clipped away" and "Remove selection" to do so.

2.3.2. Creating and editing an Action List

Why edit an Action List

Most of the time, you will not be able to use the pre-defined Action Lists without adapting them to your needs. For example, you probably don't want to add an *Enfocus* background to your PDFs (using the "Add Enfocus Background" Action List), but your own company background. The easiest way to do so, is by editing the existing "Add Enfocus Background" Action List and replacing the Enfocus background image with your own background image.

Why create a new Action List

Although Switch provides a lot of default Action Lists, there are so many things you can do with a PDF, that you'll probably need other combinations and sequences of tasks than the ones that are predefined.

Ways to create Action Lists

You can create an Action List in different ways:

- "Manually", from scratch or based on an existing Action; either by adding/removing Actions (selections, changes and operators) to your Action List or by changing them one by one. See *Creating an Action List* on page 30.
- By Recording. This is a very intuitive way of creating an Action List. Just open a PDF document, perform a number of tasks and record these tasks. As soon as you stop recording, the Actions will be added to your Action List.
- By downloading examples from the Enfocus Action List Library on the Enfocus website (*www.enfocus.com*) and importing them into your copy of Switch. You can then edit and change them, just like the Actions provided by default with Switch.
- By saving a Global Change as an Action List. For more information, refer to Global Changes Manual available on the *Enfocus website*.

The Action List Editor

Action Lists can be created and edited via the **Action List Editor**. You can open this dialog in different ways:

- To open a **new** Action List, in the Action List dialog, click  > **New** > **New**.
- To open an **existing** Action List, just double-click it in the Action List dialog.

2.3.2.1. Editing an Action List

Often you can use an existing Action List and only make minor changes, for example change the predefined values.

To edit an existing Action List

1. Open the **Action Lists** dialog.
   Refer to *Where to find Actions and Action Lists* on page 21.
2. Double-click the Action List concerned.

   Note: Alternatively, select the Action List you want to edit and click  > **Edit**.

   If the Action List is fully locked, you will be asked to enter a password before you can see the content of the Action List.

   If it is partially locked, you will be able to view the content of the Action List, but you'll have to click the Lock icon  and enter the password, before you can make any changes. Refer to *Locking an Action List* on page 49.
3. Fill in the **Properties** section as required:
   - Select **General Information** and set the Action List name, your name and company and a description of the Action List.
   - Select **Locking Information** and choose the appropriate options. Refer to *Locking an Action List* on page 49.
4. Design your Action List, i.e. add or remove Actions or change the attributes of an Action as required.
   Refer to *Designing an Action List* on page 30.

5. If you have made all required changes, click **OK**.



Note: If you want to change the attributes of *multiple* Actions, do not click **OK** until you have changed them all. Clicking **OK** will close the Action List Editor!

The changed Action List will be saved in the Local database (folder).

You can now run the Action List.

2.3.2.2. Creating an Action List

To create a new Action List

1. Open the **Action Lists** dialog.
   Refer to *Where to find Actions and Action Lists* on page 21.
2. Open the **Action List Editor**:
   - To create a new Action List based on an existing one, click  > **New** > **New From/New from File** and select the Action List you want to start from.
     The option **New from** allows you to select an existing Action List from the Standard database; **New from file** allows you to select a file (*.eal) from your computer.
   - To create a new Action List from scratch, click  > **New** > **New**.
3. Fill in the **Properties** section as required:
   - Select **General Information** and set the Action List name, your name and company and a description of the Action List.
   - Select **Locking Information** and choose the appropriate options. Refer to *Locking an Action List* on page 49.
4. Design your Action List, i.e. add or remove Actions or change the attributes of an Action as required.
   Refer to *Designing an Action List* on page 30.
5. If you have made all required changes, click **OK**.



Note: If you want to change the attributes of *multiple* Actions, do not click **OK** until you have changed them all. Clicking **OK** will close the Action List Editor!

You can now run the Action List.

2.3.2.3. Designing an Action List

You can adjust an existing or a new, blank Action List to your needs:

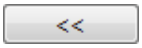
- You can add or remove Actions as required.
- You can group them, change the order or use operators.
- You can change the attributes, i.e. using variables or regular expressions.

Adding Actions to an Action List

There are three ways to add Actions to an Action List:

- You can manually add them, by selecting them from the list of available Actions (left part of the Action List Editor).
- You can record them while performing them (once) one in a sample PDF document. In that case, you should have opened a (sample) PDF document in which you can do the Actions you wish to record.
- You can import an existing Action List that contains some of the Actions you want to perform with the new Action List.

This topic assumes you have opened an Action List in the Action List Editor.

1. To manually add Actions
   a. To view all available Actions, click the **Expand** button  as required.
   b. Search and select the appropriate Action.
   c. Double-click the Action you want to add.

      Alternatively, you can click  or drag the Action onto the Action List.
   d. Do this for all Actions you need.

   Note:

   - Remember that operators (AND, OR, NOT, available under Selections) must be entered *after* the selections. Refer to *Using operators in Action Lists* on page 33.
   - You can use the buttons at the bottom of the pane to remove or duplicate Actions, or to change the order of the Actions in the Action List. Alternatively, you can drag the Actions to a new position. Be careful, because changing the order may produce a different result.

2. To record the Actions for your Action List
   a. Click the **Start Recording** button .

      The **Start Recording** button is grayed out and the **Stop Recording** button  becomes available. From now on, all Actions you perform using the Switch tools will be recorded.

      Note: Make sure that you only use Switch tools and commands to perform Actions. All operations you do using Adobe Acrobat tools or other plug-ins will not be recorded!
   b. Choose the commands, and perform the Actions you want to record.
   c. To stop recording, click the **Stop Recording** button .
      The Actions you performed are now added to the section under **Actions**. You can still change the attributes of these Actions if necessary.

3. To import an Action List, i.e. to add the Actions of this Action List to your Action List

a. Click .

b. Select an Action List **From database** (i.e. from the Action List dialog) or **From file**, i.e. a file on your computer.

c. Click **OK**.

When importing an Action List that is locked, you need to enter the password when importing it. This will unlock the Action List.

The Action List is imported *as a group* (using the name of the imported Action List) preceded by an icon . Once imported, you can change these Actions as any other group or Action in the Action List.

Removing Actions from an Action List

If you want to remove Actions that were added by accident, or Actions you don't need after all, you can simply remove them from the Action List.

To remove an Action

1. In the Action List Editor, select the Action(s) you want to remove.
2. Do one of the following
   - Right-click and select **Remove**.
   - Click .

   The Action is removed from the Action List.



Note: Remember that you can put the Action back, by selecting it from the list of available Actions. However, if you had made any changes to the attributes, these haven't been saved, so you will have to set them again.

Organizing the Actions in an Action List

As the order of the Actions in an Action List is important, especially in elaborate Action Lists, we recommend proceeding as follows:

1. Add the Actions you need, preferably starting with the "select" Actions, e.g. Select All or Select Annotations, ...
2. Specify the logical operators (AND, NOT, OR, ...) if required. See *Using operators in Action Lists* on page 33.
3. Add the "change", "check",... Actions that should apply to the selections.



Note: Changes only apply to selections. Therefore, make sure that you make the proper selections in your Action List first. If you have made no selections, some changes will be applied to everything in your PDF document (for example fonts) or changes will not be applied at all.

4. Move the Actions up or down as required.
5. Try to group the Actions (as explained below).



Note: Grouping does not have any influence on the result of the Action List.

1. To move Actions up and down, do one of the following
   - Right-click the Action concerned and select **Move Up** or **Move Down**.
   - Select the Action concerned and click  or .
   - Select the Action concerned and drag and drop it to the desired location.
2. To group Actions that belong together
   a. Select the Actions concerned.
   b. Right-click and select **Make Group**.
   The selected Actions are moved to a folder called **Group Actions**.
   c. Select **Group Actions** and, in the right-hand pane, enter a name and a description for this Group.

   Alternatively, you can add the **Group Actions** Action to your Action List and drag the appropriate Actions to that Group. For more information, refer to the description of this Action in the Action Manual.

Using operators in Action Lists

About operators in Switch

Switch provides a number of operators, allowing you to combine several Actions in a logical way.

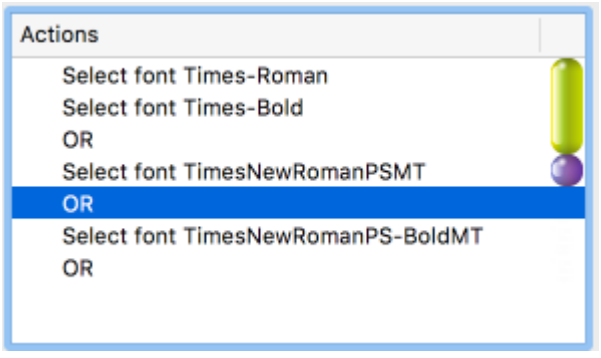
These operators can be found in the Action List Editor, under  **Selections** (in the folder Operators).

Currently, following operators are available:

- **AND**, **OR**, **NOT** - explained below.
- **Select all** - is added automatically to new Action Lists, to avoid that you forget to select anything.
- **Select last added objects** - allows you to use the result of a previous "add" Action.
- **Duplicate/Remove top of selection stack** - are mainly used internally by PitStop Server and should not be used when manually creating Action Lists.

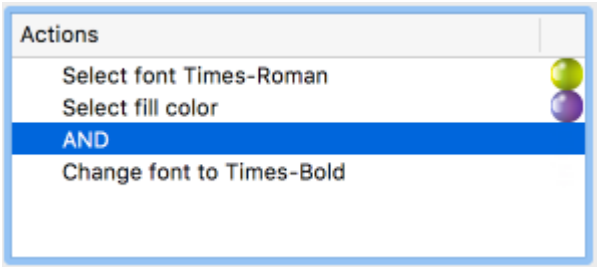
Rules of thumb

- The operators AND, NOT, OR) must not be entered **between** two or more selections, but **after** these selections (postfix notation)! These operators **apply to the preceding selections**.
- If an operator is selected in the Action List Editor, the Actions (or group of Actions) it affects, will be represented using a green and purple **indicator**.

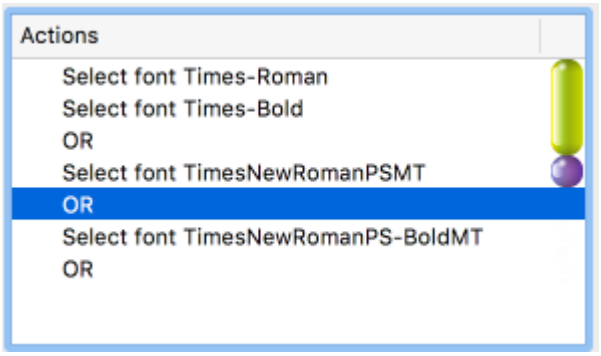


In the example above, the selected "OR" operator affects the "Select font Times New Roman" action (purple) and the combination of the first two lines and their "OR" operator (green).

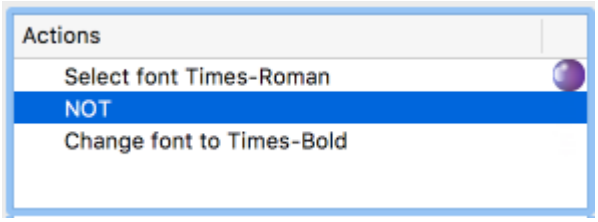
- The operators AND, NOT, and OR are **logical** operators, which means that they have to be used in a strictly logical way. For example, if you want to select the fonts Times-Roman (Adobe Type 1) **and** Times New Roman (TrueType), you should not use the AND operator, but the OR operator (a font cannot be both Times-Roman and Times New Roman at the same time). You could use the AND operator, for example, to select all text in Times-Roman **and** the color of which is blue. Your Action List would then look as follows:



- The OR and AND operators **only apply to two preceding selections**. Therefore, if you want to make more than two selections, you have to insert multiple operators at the appropriate places in the “stack” of selections. For example, if you want to select the fonts Times-Roman (Adobe Type 1), Times New Roman (TrueType) and their bold variants, your Action List should look as follows:



- The NOT operator **applies only to the preceding selection** and can be used to **exclude something from a selection**. Unlike the OR and AND operators, the NOT operator only requires one selection. For example, if you want to change all fonts but Times-Roman in a PDF document to Times-Bold, your Action List would look as follows:



In the above example, the Action List will change all fonts in PDF document to Times-Bold, but leave Times-Roman (regular) unchanged.

Setting the attributes of an Action

The attributes you can set depend on the selected Action. Some Actions do not require any attributes; for others you should enter the preferred values, for example a length or a version number, pick a color, select an option from a list, select a checkbox, ... Setting the attributes is in most cases quite obvious.



Note: If an attribute of an Action requires a unit, for example a length, the unit specified in the Switch Preferences (Units & Guides Category) is used. For example, if you're using the *Select size* Action, you have to determine minimum or maximum width or the height of the objects you want to select. If you have selected "cm" in the Switch Preferences, you will have to specify a value in "cm".

This topic explains the "special cases":

- How to use variables instead of fixed values.
- How to use regular expressions
- How to log "check" Actions
- How to use the **Use page rotation (and scaling factor)** checkbox (which is available in a number of Actions)

1. To use *variables instead of fixed values*:
   a. Click the **Actions** link and select **Enable Variable Names**.
   b. Click .
   c. Select the variable you want to use.
   d. Repeat steps b-c for each variable you want to use.
   e. Click **OK**.

   You must have defined a Variable Set. For more information, refer to the chapter about Smart Preflight and the topic Creating a Variable set in the Switch Reference Guide.

2. To use *regular expressions instead of fixed strings*:
   a. Enable the **Use regular expressions** checkbox.
   b. Create rules using regular expressions. The most commonly used symbols can be used.

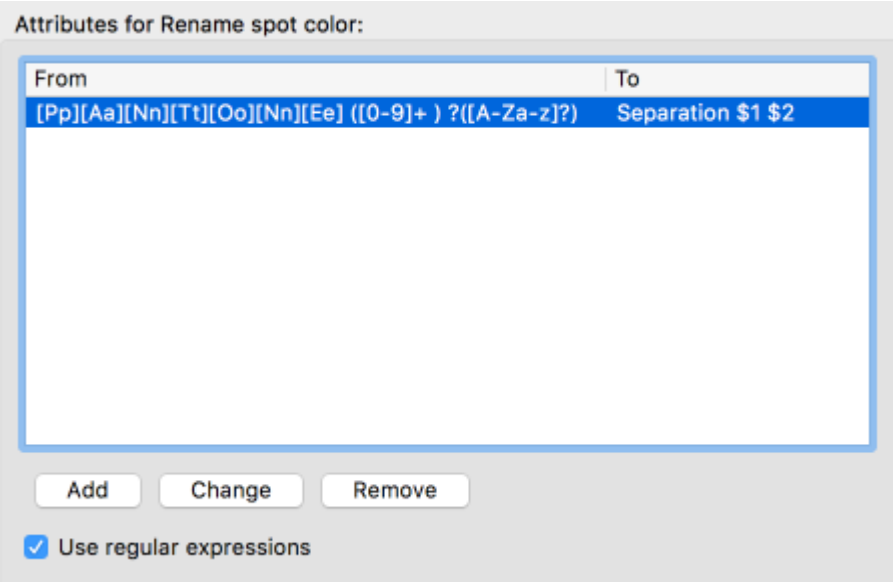
      Regular expressions provide a way to find patterns within a text. This is useful in many contexts, for example to check whether a piece of text meets certain criteria, or to find and/or replace strings with a particular pattern. In Switch, regular expressions are used to configure the attributes of certain Actions (but only available in combination with *equal/not equal* operators). For an overview of the Actions concerned, refer to the Action manual on the Enfocus website.

      PitStop supports Boost Regular Expressions. For more information, refer to *http://www.boost.org/doc/libs/1_47_0/libs/regex/doc/html/boost_regex/synt ax/perl_syntax.html*.

   Examples:

   Rename spot color is an Action that allows you to change the name of spot colors in a document.

- To rename variants of the same color, e.g. to rename “Varnish0”, “Varnish1”, “Varnish23” (i.e. "Varnish" followed by one or more digits) to “Varnish” (without any digits), you could create a rule that renames "Varnish([0-9])+" to "Varnish".
- To replace "Pantone" (regardless of the case) with "Separation" in all spot color names used in your document, create the following rule:



This rule will allow you to rename "Pantone 0123 U" to "Separation 0123 U", "PANTONE 9324 U" to "Separation 9324 U", ...

3. In case of Actions of the type "Check", you should determine if and how the result of the Action should be logged (in the Enfocus Navigator and in the Report).
   - **Don't Log**: Nothing will be logged.
   - **Log as warning**: If the check is positive, it will be logged as a warning ( ). This allows you distinguish between severe and less severe issues.
   - **Log as error and allow Sign-Off** ( ): If the check is positive, it will be logged as an error that can be "signed-off", i.e. can be "approved" or evaluated as a minor error which doesn't fail PDF certification. This is only relevant if you're running Actions in the context of Certified PDF.
   - **Log as error**( ): If the check is positive, it will be logged as an error. If you're running Actions in the context of Certified PDF, this kind of problems will prevent the file from being certified OK. The problem must be fixed, before the file can be certified.
4. If the Action you're configuring has the **Use page rotation** or the **Use page rotation and scaling factor** checkbox:
   - To take into account page rotation and/or scaling factor, select this checkbox. The Action will be applied to the actual position of the page content.
   - To ignore page rotation and/or scaling factor, clear this checkbox. The Action will be applied to the original position of the page content (i.e. BEFORE applying page rotation and/or scaling factor).

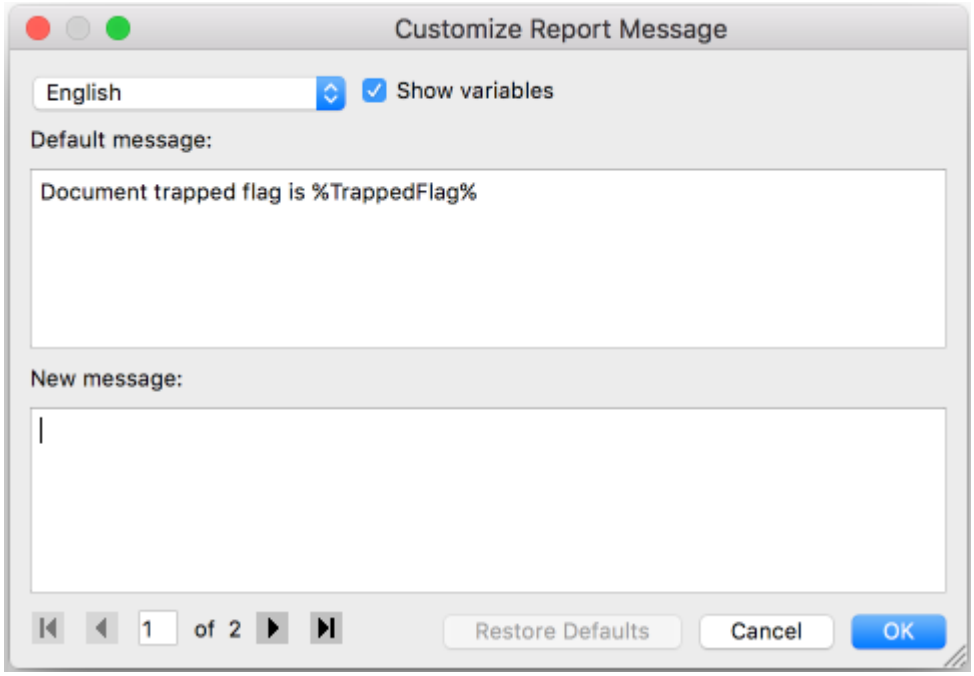
Customizing report messages

Messages resulting from "Check" or "Change" Actions and shown in the Preflight Report and the Enfocus Navigator can be customized in several ways. You can for example:

- Rephrase the default text to make it easier to understand for non-technical people
- Add extra information (e.g. what to do in case of problems)
- Add a link to a web page with more information

To do so, proceed as follows:

1. In the attributes of the Action concerned, click the **Actions** link.
2. From the menu, select **Customize report message**.
   The Customize Report Message dialog appears.



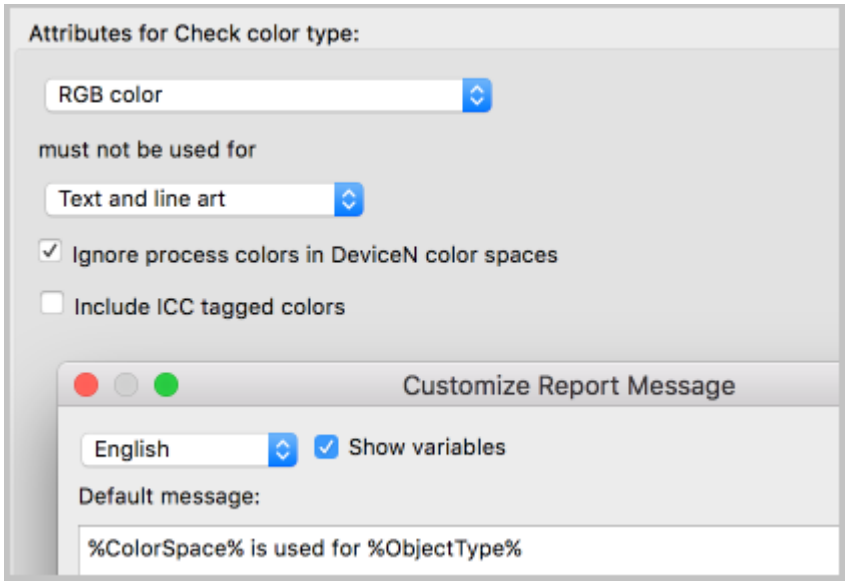
3. From the list at the top, select the language for which you want to change the message.
   Select **All** if you want to display a particular message regardless of the PitStop language.
   The default message is displayed in the first field. If the message contains variables, you can make them visible by selecting the **Show variables** checkbox: the variables are enclosed in % signs. To preview the end result (variables replaced with the actual values), you should clear the checkbox again.
4. Enter a new message in the second field.
   If you don't, the default message will be used.

Tip: We recommend copying the message from the first into the second field (making sure **Show variables** is selected). That way you're sure the variables are written

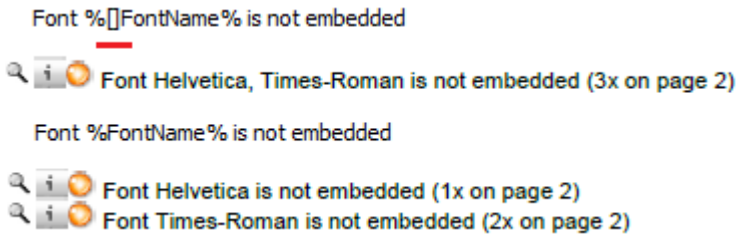
correctly. If a variable contains a typo, it will not be recognized as such and it will be considered a fixed string.

Special cases

- **Built-in configuration variables** refer to the options in the attributes of the Action. If you clear the **Show variables** checkbox, you can see what they refer to. In the example below, %ColorSpace% refers to the value chosen from the first list (RGB color), whereas %ObjectType% refers to the value chosen from the second list.

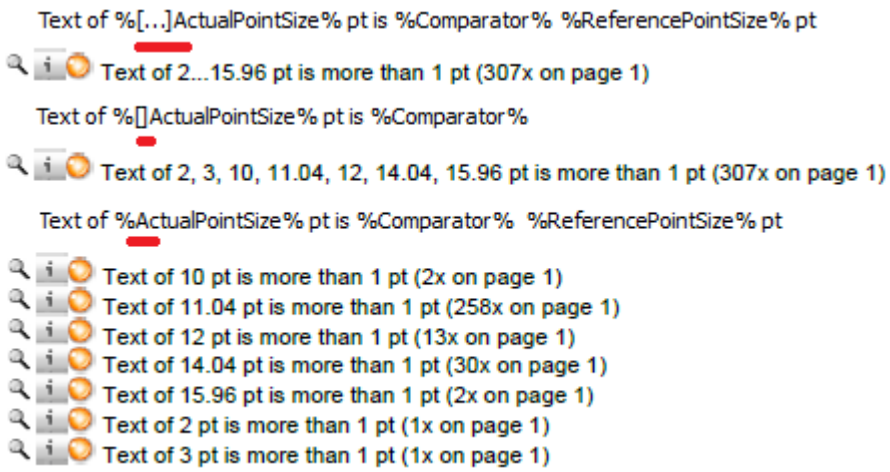


- **Square brackets such as "[]" inside a variable** indicate that the variable may be replaced with more than one value, depending on what's found in the PDF. For example, "%[]fontName%" means that more than one font name may be mentioned in the message. If written like this, the font names are listed, one after the other. If the square brackets are removed, you'll have a separate message on a separate line for each different font name. See the example below:



- **Square brackets enclosing 3 dots such as "[...]" inside a variable** refer to a range, e.g. %[...]ActualPointSize% means that the smallest and the largest point size found in the document will be mentioned in the message, separated by three dots. Values inbetween will not be mentioned. If you remove the three dots, all values found in the document will be mentioned (separated by a comma). Alternatively, you could remove the square

brackets, resulting in one separate message per point size value. See the examples below:



Note: Make sure to use the correct notation; if you omit one dot, or write 4 dots, this will not work!

- If you want to display **a link** in a report message, simply type the URL (e.g. http://www.enfocus.com). When users click this URL in the Preflight Report, the corresponding web page will be opened.

- Note that a **small number of messages cannot be customized**, because they result from Actions that use another mechanism and are generated "on the fly". For these messages, you'll see a warning "This Action has no customizable messages".

- There's one Action with a slightly different user interface: **Log Selection**. For this Action, no default report message is available. You should enter your custom report message directly in the Attributes section.

5. Click the navigation button(s) at the bottom of the dialog, to navigate to other messages originating from the same Action and configure them in the same way.

   This is the case if the Action has several distinct options, e.g. Check for alternate images allows you to detect either all images with alternates, or images that have an alternate that is default for printing. For each of these options, a separate message is available. Note that **Restore Defaults** resets all these messages (not only the one that is shown).

6. Click **OK**.

If you run the Action on a document, the new message instead of the default message will be displayed.

Note: If you ever want to return to the default message, in the attributes of the Action, click **Action** > **Clear customized report message**.

2.3.3. Running an Action List

This topic describes how to run an Action List. The procedure is identical, regardless of whether you have created the Action List yourself, or if you're using a standard Action List provided by Switch or an imported Action List.

To run an Action List

1. Open the **Action Lists** dialog.
   Refer to *Where to find Actions and Action Lists* on page 21.
2. Select the Action List you want to run.
3. Determine if you want to run the selected Action on the whole document, or on a page range:
   - **Complete document**: All pages in the document. You can further specify to run it on all pages, or only on even or odd pages.
   - **User selection**: The area or object(s) selected using the PitStop Select Object tool.
   - **Current page**: Only the page which is currently displayed.
   - **Pages**: All pages or a page range as specified.
4. Indicate if you want to view the results of the Action List in the Enfocus Navigator or in a Preflight Report, after you have run the Action List.
   It depends on your Switch Preferences if the Enfocus Navigator or the Preflight Report will be shown (See **Edit (Windows) or Adobe (Mac)** > **Switch Preferences** > **General**).
   The Enfocus Navigator is a dialog that gives an overview of the changes performed by the selected Action List and enables you to generate a (Preflight) Report. This Preflight Report is a PDF document that displays general file information as well. See *Checking the results of an Action List* on page 41.
   Select the appropriate option:
   - **Always**: The Enfocus Navigator dialog or the Report will always appear.
   - **Never**: The Enfocus Navigator dialog or the Report will never appear.
   - **On Error**: The Enfocus Navigator or the Preflight Report will only appear if an Error is detected.
     Errors can only be detected for Actions of the type "Check", if you have selected **Log as error** or **Log as error and allow Sign-off** (in the attributes of the "check" Action).
     If you have chosen an "inform" Action, the requested information will be included in the Report, so make sure to select **Always**.
5. Click  .

The Action List runs with the selected options. You can now check the results of the Action List in the Enfocus Navigator or the Preflight Report (if you have chosen to do so) or in the PDF itself.

2.3.4. Checking the results of an Action List

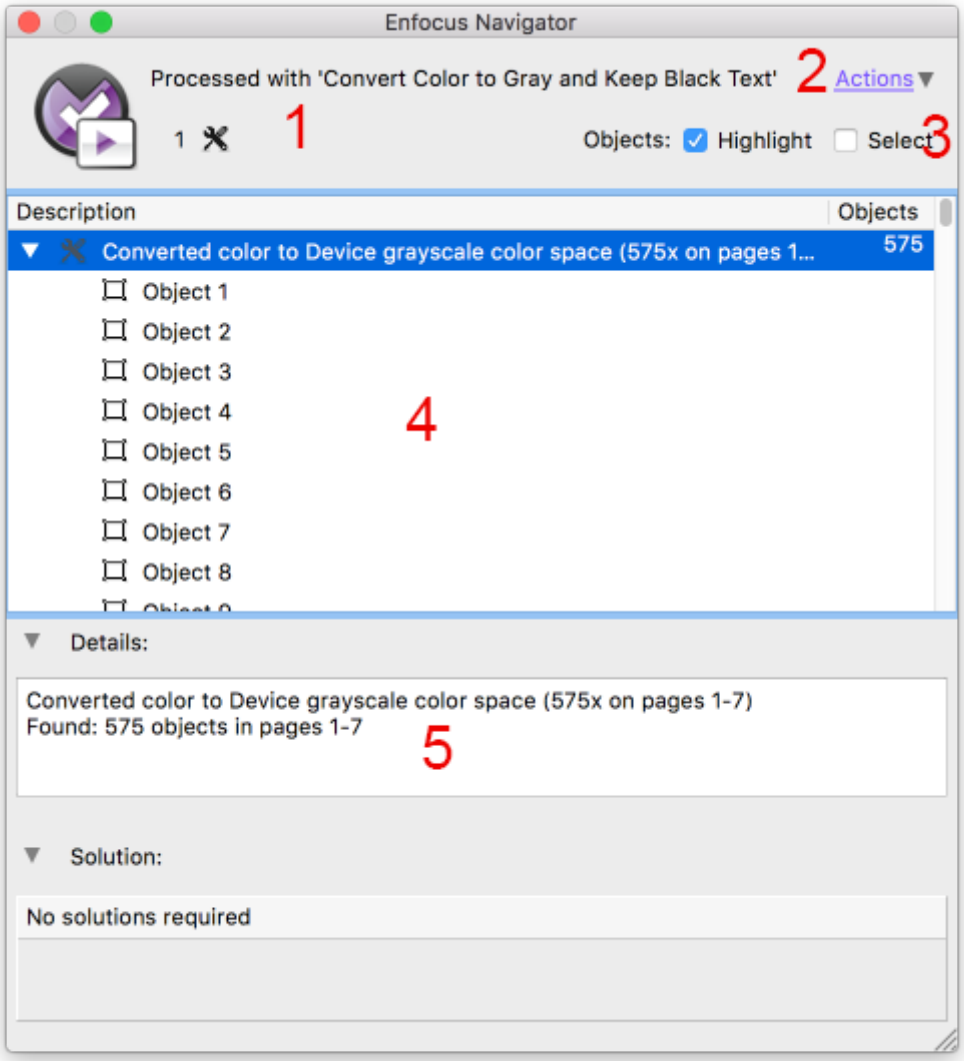
When you run an Action List, you may want to check what exactly has been changed or what the result of the Action is. This information is accessible via the Enfocus Navigator. You can also generate a Report with all this information.

Note: The Enfocus Navigator and the Report also show the results of Global Changes and Preflight Checks. For more information about Global Changes and preflighting of PDF documents, refer to the corresponding chapters in the Switch Reference Guide.

2.3.4.1. The Enfocus Navigator

The Enfocus Navigator allows you to check the results of the performed Action List, Global Change and/or Preflight check if applicable. Depending on your Switch preferences (under General), the Enfocus Navigator may pop up immediately after you have run an Action List, Global Change and/or Preflight Profile.

Tip: If it doesn't appear, you can open the Enfocus Navigator via **Tools** > **PitStop Process** > **Navigator** or **Switch** > **Navigator**.



The Enfocus Navigator consists of the following screen parts:

#	Description
1	Name of the Action List, Global Change or Preflight Profile and the number of changes. In the above example, only one change has been carried out. The icon indicates that the change was successful. In case of problems, you may see (Warning), (Error which can be signed-off) or (Error).
2	Click the **Actions** link and select **Show Report** to view a Report with information about the PDF being processed (e.g. document properties, security information, the performed Actions,...). **Note:** If you have used an Action of the type "informs", you should open the Report to find the information you wanted to collect with the Action List!

#	Description
3	Select the checkboxes if you want to highlight and/or select the objects that have been affected by the performed Actions, Global Change, or Preflight check.
4	The **Description** section indicates which objects have been changed. Select a line to see the corresponding details in the **Details** section below. This way you can browse through the results. **Note:** It may be handy to use this browser in combination with the Enfocus Inspector to see more details about a particular problem or to correct the problem immediately. For more information, refer to "Browsing throught the results" in the Switch Reference Guide.
5	The **Details** section provides information about the items selected under **Description**.
6	The Solution section allows you to fix problems, in case of warnings or errors. For example, if an Action of the type "Check" has detected a font problem, you will get the possibility to select an alternative font and change the font immediately.

2.3.4.2. The Report

If you have run an Action List, a Global Change or a Preflight Profile, you have the possibility to create a report (in PDF format) with information about what has or has not changed. In case of Actions of the type "Informs", you need to generate such a report in order to see the information you asked for.

Note: If you want to generate a report, choose "Always show results", when running the Action List, Global Change or Preflight Profile. See also *Generating a Report* on page 45.

Content of a Report

A Report usually contains the following sections:

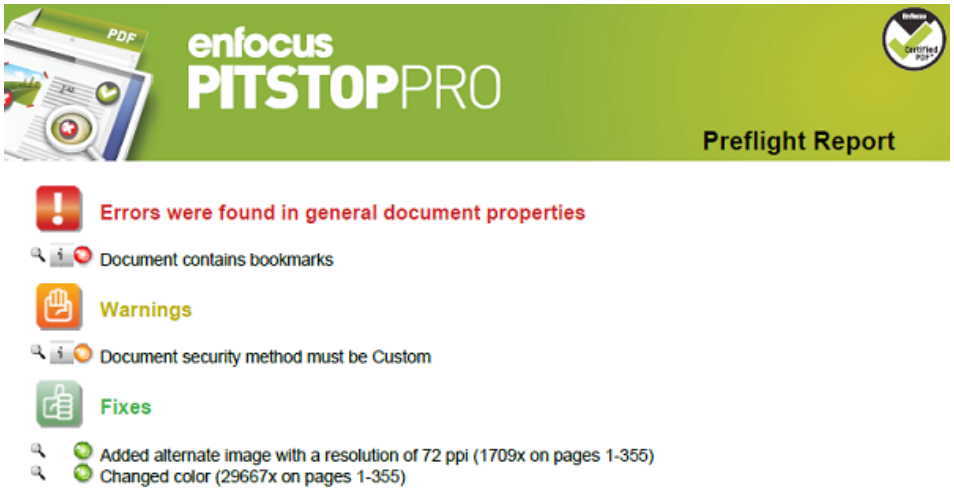
Section	Content
Errors, Warnings & Fixes	(Potential) problems and changes. It depends on the log level of the "check" Actions in the Action List whether or not something is tagged as an Error or Warning.
General File Information	Properties of the PDF document, such as PDF version, title, author, etc. and security information.
Font Information	All fonts used in the PDF document, along with their attributes (type of font, embedded or subset, etc.).
Image Information	All images in the PDF document, along with additional information (for example physical and effective resolution, page, angle, custom color functions, etc.).
OPI Information	OPI usage in the PDF document.
Color Information	All color spaces (RGB, CMYK, etc.) used in the PDF document, with additional information where required.

Section	Content
Ink Information	CMYK ink coverage calculated for the whole document and for each page separately.
Layer Information	Properties of the layers that are present in the document. A clickable tree view shows the sequence of the layers.

Fixes, warnings, and errors

The results of the Action List, Global Change or Preflight Check can be found in the Preflight Report section. Errors, warnings and fixes are grouped and preceded by a number of icons:

- A magnifying glass icon . Clicking this icon opens the Enfocus Navigator and allows you to browse through the list of affected objects.
- An information icon (in case of a warning or error) . Clicking this icon opens a Help topic with information about the problem concerned.
- A green, orange or red bullet, indicating the type of problem:
  - Green for a fix
  - Orange for a warning
  - Red for an error



Report styles

When generating a report, you can choose the report layout style that suits your needs.

There are four "annotated" reports (first four in the table below). An annotated report is a combination of the original document and the report. The report information is integrated in the original document as a number of notes and bookmarks, allowing to easily navigate to the errors and warnings, in Acrobat Reader or in a browser, without using any Enfocus software.

The three other report styles (Regular, Minimum, Continuous) do not include a copy of the original document.

Report style	Description
Annotated Report	Report with annotations. The report is a copy of the processed PDF; checks and changes are annotated.
Low Resolution Annotated Report	Report with annotations and with low resolution images, which reduces the file size of the report.
Secured Annotated Report	Report with annotations and protected with a password. Users are not allowed to edit the report. **Note:** When selecting this report style, you are asked to enter a password. With this password, you can still change the security settings of the report as required.
Scaled Low Resolution Annotated Report (max A4)	Report with annotations. The entire document is scaled and has a low resolution. The size of the pages in the report will not exceed the A4 size and the images are also compressed to a smaller size. **Note:** This may be useful if you want to send reports for large format documents through email.
Regular	Report which does NOT include the processed PDF. It contains general file information and an overview of the fixes, failures, warnings, and errors (if any).
Minimum	Regular report with minimal information.
Continuous	Regular report, but without page breaks between the topics (information about the fixes and general file information, font information, ...) as in the Regular Report. Printed in grayscale.

2.3.4.3. Generating a Report

This topic explains how to generate a Report using the Enfocus Navigator. If you have configured the Switch Preferences (under General) to always display the Preflight Report (with a chosen report style), you only must run the Action List, Global Change or Preflight Profile with the option **Show results: Always**.

To generate a Report which gives an overview of the results of your Action List, Global Change or Preflight Check

1. Run the Action List, Global Change or Preflight Check on your document.

   Make sure to select **Always** from the **Show results** list. Otherwise the Enfocus Navigator won't pop up. If you have forgotten to do so, you can open the Enfocus Navigator via **Tools** > **PitStop Process** > **Navigator** or **Switch** > **Navigator**.

   The Enfocus Navigator appears. Here you can already see the result of the Action List, Global Change or Preflight Check you performed. Refer to *The Enfocus Navigator* on page 41.

2. Click the **Actions** link (in the top right corner of the Enfocus Navigator).

3. From the list, select **Show Report**.

4. Select a Report style and click **Show Report**.

   For more information about the Report styles, refer to *The Report* on page 43.

   The Report appears and the errors, warnings and fixes are listed on the first page.

5. Using the Adobe Acrobat **Hand Tool** , you can now:

   - Click the magnifying glass  next to an error, warning or fix to select and highlight the corresponding object in the PDF document. Remember that you can browse through the affected objects in the Enfocus Navigator. It may be a good idea to open at the same time the Enfocus Inspector to see more details about a particular problem or to correct the problem immediately.

   - Click the information icon  next to an error, warning or fix to see a Help topic. A dialog box may appear, asking you where you wish to view the Help topic (Open Weblink). If so, select **In Web Browser**.

6. Click **File** > **Save** and save the file.

2.3.5. Fixing problems

If problems (warnings, errors) are reported, you may want to solve them.

- In some cases, you will find a solution in the **Enfocus Navigator**. You can use this fix for all problem instances in the file, or you can browse to a particular object and only fix that one. Note that it may be handy to use the Enfocus Inspector to learn more about the problem concerned.

- If no solution is recommended, you can generate a **Report** (see *Generating a Report* on page 45) and click the information icon  to find a solution for the problem concerned. In many cases, you can just run another Action List to fix the problem. For example:

  - Layer problems found with the "Check layers" Action can be solved with the "Fix layers" Action.
  - Font problems found with "Check corrupt font widths" can be solved with "Change corrupt font width", ...

2.3.5.1. Fixing problems - use case

This is an example of how you can fix problems reported by the Enfocus Navigator.

Problem: You have run an Action List which includes the Check resolution Action. You get an error saying that the resolution of some images in your PDF document is too high.

Solution: Check and resample the images as required.

To simulate this use case, proceed as follows

1. Open a PDF (with images) and create an Action List which contains the Check resolution Action. Make sure to set a resolution lower than the one in your PDF and select Log as Error.

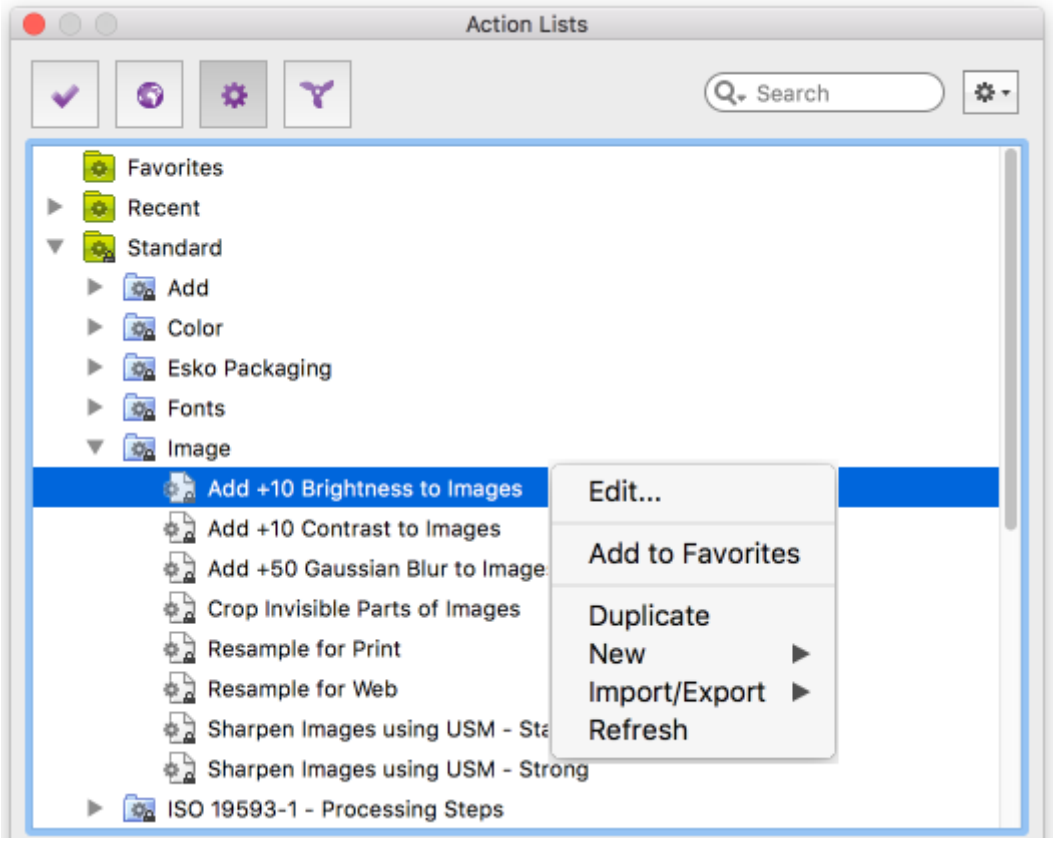
2. Run the Action List, with Show results set to **Always**.

3. Do one of the following, depending on what's shown after you have run the Action List (the Report or the Enfocus Navigator):
   - If the Report is displayed, click the icon preceding the warning "Resolution of color or grayscale image is more than x ppi (3x on pages y-z)"
   - If the Enfocus Navigator is displayed, select the warning "Resolution of color or grayscale image is more than x ppi (3x on pages y-z)".
4. In the Enfocus Navigator, to view and highlight the images in question, click icon preceding the message concerned.
   You now see a list of objects in question (in this example: images of which the resolution is too low).
5. Do one of the following:
   - To resample all images concerned in one go:
     1. In the Solution section, enter the appropriate values
     2. Click **Fix**.
   - To resample the images one by one:
     1. Click the object concerned.
     2. In the Solution section, enter the appropriate values.
     3. Click **Fix**.
   - To first check the resolution of the images concerned:
     1. Click the object concerned.
     2. See *Display the Enfocus Inspector.*
     3. In the Enfocus Inspector, click the **Image** > **Properties** category to see the actual resolution of the selected image.
     4. Click the **Resample** tab and decrease the resolution of the image to the required value.
     5. Click **Apply**.
6. Run the Action List again.
   If you have fixed all problems, the Enfocus Navigator and the Report will contain a message that no errors or warnings were found, and that no fixes are required.

2.4. Managing Action Lists

This chapter explains how to import, export, and lock Action Lists.

Note: Next to that, you can also duplicate and refresh the Action Lists in the Action Lists dialog, and add them to your favorites, using the context menu.



2.4.1. Exporting an Action List

You can export your Action Lists, for example to share them with other users, or to use them on another computer.

To export an Action List

1. Open the **Action Lists** dialog.

   Refer to *Where to find Actions and Action Lists* on page 21.

2. Click > **Import/Export** > **Export**.

   You may get a warning if the Action List is not protected with a password. If you would like to lock the Action List, refer to *Locking an Action List* on page 49.

3. Select a download location.

4. Click **Save**.

2.4.2. Importing an Action List

A lot of Action Lists can be downloaded from the Enfocus Action List Library on the Enfocus website (*www.enfocus.com*). Action Lists have file extension .eal.

To import an Action List

1. Open the **Action Lists** dialog.

   Refer to *Where to find Actions and Action Lists* on page 21.

2. Click > **Import/Export** > **Import**.

   If you want to import multiple Action Lists, you may want to group them into a folder and import this entire folder into the application. In that case, choose **Import Group** and select the appropiate folder on your system.

3. Select the appropriate Action List.

4. Click **Open**.

The imported Action List appears in the Local folder in the Action Lists dialog. You can run and/or edit this Action List as required.

2.4.3. Locking an Action List

You can secure your Action List with a password to prevent others from changing it. This may be convenient when the Action List is shared among multiple users. You can lock an Action List with a password when you create the Action List or you can add a password afterwards.

To lock an Action List

1. Open the **Action Lists** dialog.

   Refer to *Where to find Actions and Action Lists* on page 21.

2. Select an Action List and double-click it.

3. Under Properties, select **Locking Information**.

4. Select the appropriate option:

   - To allow everyone to *run, view, and edit* this Action List, select **Not locked**.
   - To allow everyone to *run* the Action List and *view* the Actions in the Action List, select **Partially locked**.

     Users will not be able to change the individual Actions and their respective attributes in the Action List. This is useful to give the users a precise idea of what the Action List will do.
   - To allow users to *run* the Action List only, select **Locked**.

     Users will not be able to see or change the Actions in the Action List without filling in the password first.

5. If you haven chosen to (partially) lock the Action List, fill in a password and confirm it.

   The password can include:

   - Uppercase and lowercase letters
   - Any character on the keyboard
   - Spaces

6. Click **Apply**.

2.5. Troubleshooting Action Lists using the Action List Visualizer

The Action List Visualizer is a very powerful tool that shows you what the various Actions in an Action List are actually doing in a document. This is helpful when you're creating complex Action Lists, and it helps you find out whether or not an Action (or a sequence of Actions) is doing what you expect it to do.

2.5.1. Troubleshooting Action Lists - How it works

The Action List Visualizer allows you to *see what each Action in an Action List is doing as it processes*. This means that each of the Actions is executed, one after the other, while the impact of each Action is shown in the document on the page that is currently open. A pointer moves from the top to the bottom, to show you where the focus is.

The Action List must be started explicitly. See *Starting the Action List Visualizer* on page 53.

There are two ways to go through an Action List:

- *Run mode*: The Action List is executed at a set speed, from the beginning to the end, and it will not stop, unless you click the Pause button or set breakpoints where the Action List should be paused.
- *Step mode*: The Action List is executed step by step, one Action at a time. You must click to continue to the next Action.

You can combine both methods, for example check the first x Actions of the Action List step by step and then the last part in Run mode, or vice versa.

The Action List is executed page by page. You can visualize the Action List on one single page only (the page of your choice) or on the whole document (to debug Action Lists with Actions like 'Split pages', 'Add pages', 'Reorder pages', etc.).

You can also make changes to the attributes of the Action List with the Action List Visualizer active, and immediately check the effect of your changes. See *Changing the Action List during visualization* on page 55.

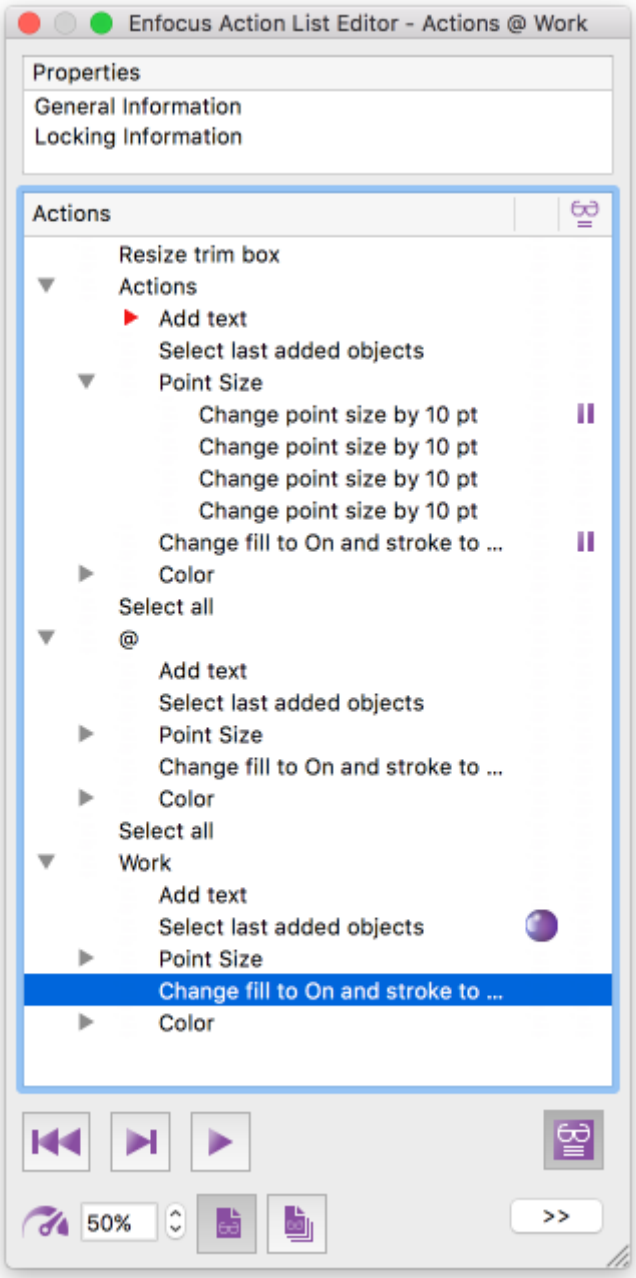
Tips:

- In case of complex Action Lists, it is handy to group your Action Lists and debug the Actions group by group. Once a group of Actions is OK, you can collapse the group and the Action List Visualizer will show the impact of the group as one step/change.
- The Enfocus Inspector can be used in combination with the Action List Visualizer. For example, if you're interested to see what your Action List does to a particular object, you can

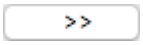
select this object using the PitStop selection tool and open the Enfocus Inspector to see the changing properties.

2.5.2. The Action List Visualizer User Interface

The **Action List Visualizer** is activated by clicking the **Start Action List Visualizer** button in the *Action List Editor*. Once activated, a new toolset becomes available, as shown below.



Buttons

Button	Click this button to...
	Quit the tool and return to the regular Action List Editor. This will bring back the buttons to add, remove, move, ... the Actions in the Action List.
	Restart the Action List Visualizer. This places the pointer ▶ again at the top of the Action List.
	Execute the current Action (=Action with the pointer) and move the pointer to the next Action.
	Run the Action List (starting from the Action with the pointer). The Action List will be executed and stop at a breakpoint (if there is any) or when you click the Pause button , otherwise it will run till the end.
	Pause the Action List (while it's running).
	Change the processing speed. 10% is very slow, 100% is very fast.
	Run the Action List on the current page only. The current page is the page that is currently displayed in Acrobat.
	Run the Action List on all pages of the document. All Actions will be executed one after the other, page after page, until the end of the document.
	Expand the details pane, which shows the attributes of the selected Action.

Icons

Icon	Meaning
	Pointer, indicating which Action will be executed next.
	Breakpoint. This is where processing will stop when the Action List is executed *in Run mode*.
	Column where you can click to add or remove a breakpoint.

Color indicators

Note that the green and purple indicators indicate which selection is involved in the selected Action, just like in normal working mode (see *Using operators in Action Lists* on page 33).
In the above example, "Change fill to ON..." applies to "last added objects". During Action List

visualization, when "select last added objects" is executed, it will be highlighted in purple in the document; purple because of the purple indicator. Other selections are marked in blue.

2.5.3. Starting the Action List Visualizer

To start or activate the Action List Visualizer

1. Open a sample PDF in Adobe Acrobat.
2. Open the Action List you want to visualize in the Action List Editor.
3. Click the **Start Action List Visualizer** button .

The regular buttons to add, remove, move, ... Actions are replaced with new buttons. See *The Action List Visualizer User Interface* on page 51.

You can now start visualizing the Action List.

2.5.4. Visualizing an Action List at a particular speed (Run mode)

Have PitStop go through the Action List at a set speed. Meanwhile you can see what is happening in your document.

To run the Action List at a set speed

1. Make sure the Action List Visualizer is active.
   Starting the Action List Visualizer on page 53
2. Check the run speed and change it as required by clicking at the bottom of the dialog.
   10% is very slow; 100% is very fast.
3. *Set one or more breakpoints as required*.
4. Determine the scope:
   - To process the current page only, click the **Run on current page** button .
   - To process the whole document, click the **Run on all pages** button .

   Note: All Actions will be executed one after the other, page after page, until the end of the document.
5. To actually start visualizing, click the **Run** button .
   The Action List is executed from the beginning to the end, one Action after the other. Meanwhile, you can see what is happening. The pointer indicates which Action will be executed next. Processing will stop at a breakpoint, when you click the **Pause** button , or when the end is reached. Note that Actions in a collapsed group (hidden Actions) are executed in one go (so not one by one).
6. To restart processing after a breakpoint or a pause, click the **Run** button .
   Processing will go on until the next breakpoint, manual pause, or till the end.

Once all Actions have been executed, you can see the end result of the Action List in your sample document. You can now make changes if needed, and check the Action List again from the beginning. To do so, click the **Restart** button to undo all changes and move the pointer to the beginning of the Action List.

Note: You can also undo the changes through the menu: **Edit** > **Enfocus Undo Visualize Action List**.

2.5.4.1. Adding and removing breakpoints

Breakpoints indicate where the Action List Visualizer should pause processing. This is only relevant when you're visualizing the Action List in Run mode.

Note that breakpoints only are taken into account when they are visible. If they are hidden because they are part of a collapsed group, they are not taken into account.

Important: Processing will stop just before the Action with a breakpoint.

There are several ways to proceed:

- To add a breakpoint, click in the breakpoint column (to the right of the Actions, below the icon) next to the Action where you want a pause.
  This will add a breakpoint icon .
- To remove a breakpoint, click in the breakpoint column (to the right of the Actions, below the icon) on the breakpoint icon.
  The breakpoint is removed.
- To remove all breakpoints in one go, open the context menu and click **Remove all breakpoints**.
- To add a breakpoint where there is none, or to remove one where there is one:
  1. Select an Action in the Action List.
  2. Open the context menu.
  3. Click **Toggle breakpoint**.

2.5.5. Visualizing an Action List at your own speed (Step mode)

To go through an Action List, step by step, at your own speed, proceed as follows

1. Make sure the Action List Visualizer is active.
   Starting the Action List Visualizer on page 53
2. Determine the scope:
   - To process the current page only, click the **Run on current page** button .
   - To process the whole document, click the **Run on all pages** button .

     Note: All Actions will be executed one after the other, page after page, until the end of the document.

3. To actually start visualizing, click the **Step** button .

   Only the Action with the pointer is executed. Immediately after the Action is executed, the pointer moves to the next Action.

4. To proceed to the next Action, click the **Step** button . Do this until you have reached the end of the Action List.

   Actions in a collapsed group are executed but not shown, meaning that the pointer proceeds to the next visible Action in the Action List.

   Breakpoints are ignored. They are only relevant in Run mode.

Once all Actions have been executed, you can see the end result of the Action List in your sample document. You can now make changes if needed, and check the Action List again from the beginning. To do so, click the **Restart** button to undo all changes and move the pointer to the beginning of the Action List.

Note: You can also undo the changes through the menu: **Edit** > **Enfocus Undo Visualize Action List**.

2.5.6. Changing the Action List during visualization

With the Action List Visualizer active, you can make changes to the attributes of the Action List you're currently checking. They are applied immediately, so you can immediately see the impact of your changes.

It is not possible to add, remove or move Actions in the Action List; if you want to do that, you must stop the Action List Visualizer to make the buttons available again.

To make changes to the attributes of an Action

1. Make sure the Action List Visualizer is not running.
2. To display the attributes of the Action you want to change, do one of the following:
   - Click >> and select the Action you want to change.
   - Double-click the Action you want to change. (If you double-click once more, the attributes will be hidden again).
3. Change the attributes.
4. Check the impact of the changed Action List:
   - If the pointer is currently above the changed Action, click the **Restart** button to start from the beginning of the Action List.
   - If the pointer is currently below the changed Action, click the **Step** or **Run** button to continue.

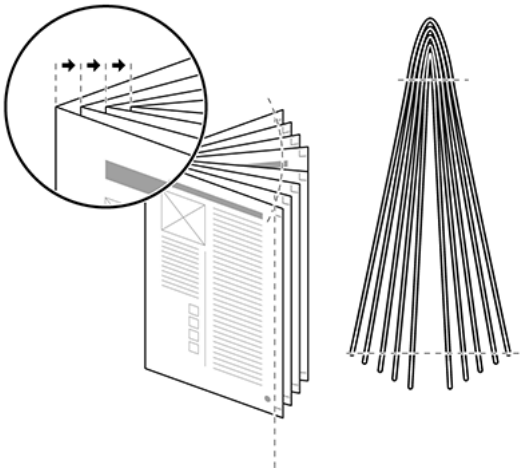
2.6. Action Lists in practice - a use case

The following real life example is used to illustrate in detail how to create an Action List. It shows:

- Which selections to make.
- Which operators to use.
- Which changes to apply.

2.6.1. Given: PDF documents of booklets with creep

Suppose you have PDF documents of booklets that are almost press-ready. The pages are to be printed double-sided, folded and trimmed. You want to make sure that the page numbers, which are close to the edge of the page, do not get trimmed off. Indeed, when pages are folded for saddle-stitch binding, the printed area slightly moves outward. This is known as **creep** in the publishing world. The more pages in a booklet, the larger the shift of the area of the inner pages will be.

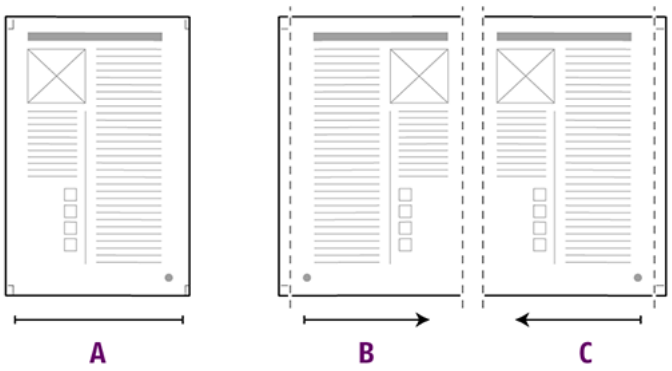


Creep moves the printed area of the inner pages outwards, which may cause page numbers near the outer edges of the pages to be trimmed off.

To compensate for this creep, you can create an Action List that does the following:

- Shift the printed area of the left-hand (even-numbered) pages 5 mm to the right.
- Shift the printed area of the right-hand (odd-numbered) pages 5 mm to the left (closer to the binding).
- Leave the first page unchanged (for example because this page is not numbered).

Example: Changing the page layout: move the printed area of the inner pages (**B** and **C**) towards the binding to compensate for creep, but leave the first page (**A**) unchanged.



2.6.2. Creating an Action List that changes the page layout of a PDF document

1. Using the **Enfocus Action List Editor**, create an Action List that looks as follows:

```
Select all
Select odd pages
Select first page
NOT
AND
Move page content (horizontal: 5.0 mm, vertical: 0.0 mm)
Select all
Select even pages
Select first page
NOT
AND
Move page content (horizontal: - 5.0 mm, vertical: 0.0 mm)
```

2. Click **View** > **Zoom** > **Zoom to Page Level** to see the pages on the complete media size.
3. To open the Action Lists dialog, click **Switch** > **Action Lists**.
4. Select the respective Action List and click **Run**.

   Switch will apply the Action List in the following steps:

Step	Action
1	Select all
	It's good practice to start Action Lists with a *Select all* Action, to reset previous selections if any.
2	Select odd pages
	Content on odd pages should move to the left, whereas content on even pages should move to the right. First, the odd pages will be processed.
3	Select first page
4	NOT

Step	Action
	NOT excludes the first page from your selection, because it should remain unchanged.
5	AND
	AND at this point combines the selections of steps 1 and 2 with the exclusion of step 4.
6	Move page content 5.0 mm horizontally.
	This change moves the page content 5 mm to the left.
7	Select all
	Resets the previous selection.
8	Select even pages
9	Select first page
10	NOT
	NOT excludes the first page from your selection, because it should remain unchanged.
11	AND
	AND at this point combines the selections of steps 7 and 8 with the exclusion of step 10.
12	Move page content –5.0 mm horizontally
	This change moves the page content 5 mm to the right.

3. Actions sorted per Type

3.1. Changes

The following Actions allow you to make changes to PDF documents, such as adding objects or page numbers, removing objects, rotating and scaling page content, ...

3.1.1. Add

3.1.1.1. Add background

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Adds a background to the selection that preceeds this Action in your Action List.

You can choose a color for the background and define a size (size of one of the page boxes or the same size as the bounding box of all objects).

3.1.1.2. Add barcode

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 2018

What it does

Adds the barcode of your choice. You can select the barcode you need from a list of common barcode types, choose the color of the back- and foreground and specify the position.

Tabs

Tabs	
Barcode	• **Type**: Select the barcode you want to add. We support over 120 barcode types. • **Value**: Enter the numeric value and/or a document variable by clicking the **Variable** button.

Tabs	
	The **Variable** button gives access to a list of predefined variables, such as %Current Document Name%, %Document Title%, %Page Number%, ...(for the full list, see below). The current value is shown at the bottom of the dialog. Note that this list of variables is also available in the *Add object* Action. If a check digit is needed, you can either enter it yourself or leave it blank and let PitStop add it. **Note:** Values are verified when the Action List is executed, there is no check during the configuration of the Action. • **Translate escape characters**: If selected, barcodes that support escape sequences can be used. For example, if this option is enabled, "\n" is considered an escape character instead of a plain string. For more information, refer to the documentation of your barcode library. • **Ignore check digit(s)**: If selected, the check digit is not verified. • **Width reduction**: Width reduction compensates for 'dot gain': printed material looking darker than intended. In case of barcodes, it means that the bars are enlarged and the gaps reduced. To correct the barcode width, you can either enter an absolute value (e.g. 1 mm) or a relative value (e.g. 5%). • **Font name and size**: Select the font and the font size of your choice. The chosen font will be used for the numeric values below the bars. Note that the numeric values may not be readable if you select a bar code font. • **Group barcode objects**: If selected (default), the barcode and the numeric value are grouped, so they can be handled (e.g. moved, changed,...) as one object.
Color	• Choose the **foreground** color. The default color is black. • Select a **background** as required and pick a background color.

Position	• There are two options to specify the position and size of the barcode:
	
	  • **Use selection bounding box**: if selected, the barcode will be placed on the bounding box of an object in the PDF that is selected. The size of the selected object determines how big the barcode will be.
	
	  • **Specify position and size**: Size and position can be defined independently from each other.
	
	  The absolute position is set by entering the X and Y coordinates.
	
	  The relative position is determined by the distance and position relative to one of the page boxes.
	
	  The size is set by entering the width and the height. If the lock icon looks closed, any changes you make to one of the dimensions changes the other dimension proportionally.

Tabs	
	• You can use the default **quiet zone** (= default for the chosen Action) or you can determine the dimensions. The lock icon can be used to make sure proportions are kept if changes are made afterwards. • Barcodes can be **rotated** as required. Rotation angles are 90°, 270° and 360°.
Data matrix	Only available if the chosen barcode type is Data Matrix. Options: • **Square** or **Rectangle** • **Size**: Choose one of the predefined sizes or 'Automatically Detect'. **Note:** The list of predefined sizes depends on the length of the barcode (= the value on the Barcode tab). If 'Automatically Detect' is chosen, the barcode will get the size that best fits the length of the value.

Note: This Action supports variables in most fields.

Document variables - Overview

This is the full ist of the predefined variables that can be inserted via the **Variable** button on the Barcode tab:

- %Current Document Name%
- %Full Document Path%
- %Time%
- %UTC Time%
- %Date%
- %UTC Date%
- %User Company%
- %User Name%
- %Page Number%
- %Page Count%
- %Document Title%
- %Page Box Dimensions%
- %Page Box Width%
- %Page Box Height%

Standard Action Lists

PitStop 2018 comes with a number of default Action Lists for generating barcodes.

Some of these Action Lists make use of smart variables; to that end a new Variable Set was added to PitStop 2018 (Smart Preflight Variable Set - PitStop Pro v1.3).

If you're not familiar with Smart Preflight, we recommend taking a short elearning course on Smart Preflight, available on the Enfocus website (*https://www.enfocus.com/learn*), or check out the *PitStop Reference Guide*, which has a chapter on Smart Preflight too.

Related Actions

- *Check Esko barcode value* on page 317
- *Check Esko barcode type* on page 317
- *Select Esko barcode* on page 411
- *Select Esko barcode type* on page 411

3.1.1.3. Add color bar

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Adds color patches to your PDF document. The color patches are individually created for each page and show all separations including any spot colors.

How to proceed

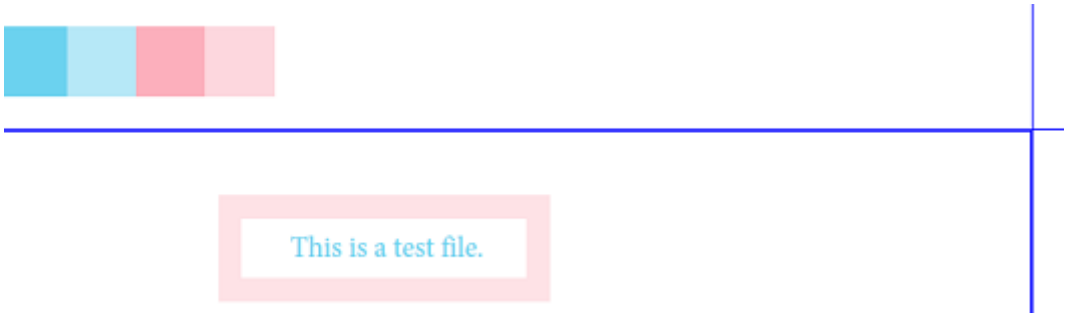
1. On the **Color Patches** tab, indicate how many tint values per separation you want to add.

   By default, a 100% tint of the color is added.

   - To change a value, double-click it in the **Tint values (%)** box and type an alternative value.
   - To add another value, click  and enter the required value.
   - To remove a value, select it and click .
2. Enter the required size of the color patches, i.e. the preferred height or width. This depends on the device you're using.
3. Select the preferred options:
   - **Repeat color patches**: The color patches are repeated till the end of the line (= right border of the page box). If this checkbox is cleared, each tint value of each color is added only once.
   - **Don't add process colors (C, M, Y, K)**: For process colors no color patches are added.
   - **Don't add if tint is 0%**: If a color is defined but not used in the PDF, no color patch will be added.
4. Switch to the **Position** tab.
5. Determine the position of the color bar relative to one of the page boxes.

Examples

Example 1: This document contains two spot colors, which are each added once, in 2 tint values (100% + 50%). Chosen position: relative to the top of the trim box (blue line). Process colors are not added.



Example 2: Same options as in the first example, but with **Repeat color patches** enabled.



3.1.1.4. Add copied graphics

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Copies graphic elements and positions them on the page. The graphics can be rotated, put in the foreground or background. You can place them at any position on the page and use the "repeat" feature to more precisely position the graphic.

How to proceed

1. Select the graphic(s) from a file or by making a selection. Do one of the following:
   - Select **Use first page of file** and select the file concerned. You can also use a variable.
   - Select the graphic you want to copy in your PDF using the PitStop Select Objects tool and select **Use grabbed graphics**. Click **Grab Selection**. The selected graphic is shown in the field below the button. If the graphic should be rotated, specify a rotation angle, e.g. 45.
2. Switch to the different tabs and select the appropriate options.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the graphics you want to copy (either elements you selected in the PDF or the first page of a particular PDF).
Attributes	Determine if the graphic should be pasted in the foreground or in the background. Select or clear the **Use page rotation** and **Use page scaling factor** checkbox: • To take into account page rotation and/or scaling factor, select this checkbox. The Action will be applied to the actual position of the page content. • To ignore page rotation and/or scaling factor, clear this checkbox. The Action will be applied to the original position of the page content (i.e. BEFORE applying page rotation and/or scaling factor). Enable **Share graphics between copies** to add the copied graphic as a shared form XObject. This means that the graphic is defined only once, but used several times, on several pages. This is an easy way to reduce the file size. **Note:** Only use this option if you're sure that all instances/ occurences of the graphic will remain the same (as is the case with a logo), because changing one graphic will change them all.
Region	Determine the region where the copied graphics should (or should not) be placed, relative to the page box of your choice. Margins can easily be set by grabbing the offsets from a selected area (use the Grab Offsets button ).
Repeat	If the graphics should be placed more than once on a page, change **No repeat** to: • **Distribute/Repeat fixed number of graphic elements** if you want to determine how often they should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the copied graphics evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the copied graphics. If you choose "repeat", you should define the exact distance between the copied graphics yourself. The distance can be between the bounding boxes of the copied graphic (choose: **Between edges**) or from center to center (choose: **Between centers**).

Tabs	On this tab, do the following:
	Note: Remember that you can use Smart Preflight variables to define the distances.
Position	Indicate how the graphic elements should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

3.1.1.5. Add object

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Inserts a chosen object (a line, a rectangle, an ellipse or a text) and positions it relative to one of the page boxes. This can be useful to add information to be trimmed off later.

Note: If you're inserting text, you can make use of predefined variables, such as the name of the document, the author, the page number, page count, the page box dimensions, ...See the example below.

The **Fill** and **Stroke** tabs allow you to define the color of the objects you are inserting.

Add rectangle

When adding a rectangle, you can choose different corner styles, e.g. rounded corners, chamfered corners or inverted corners. You can also determine the radius (only positive values are accepted).

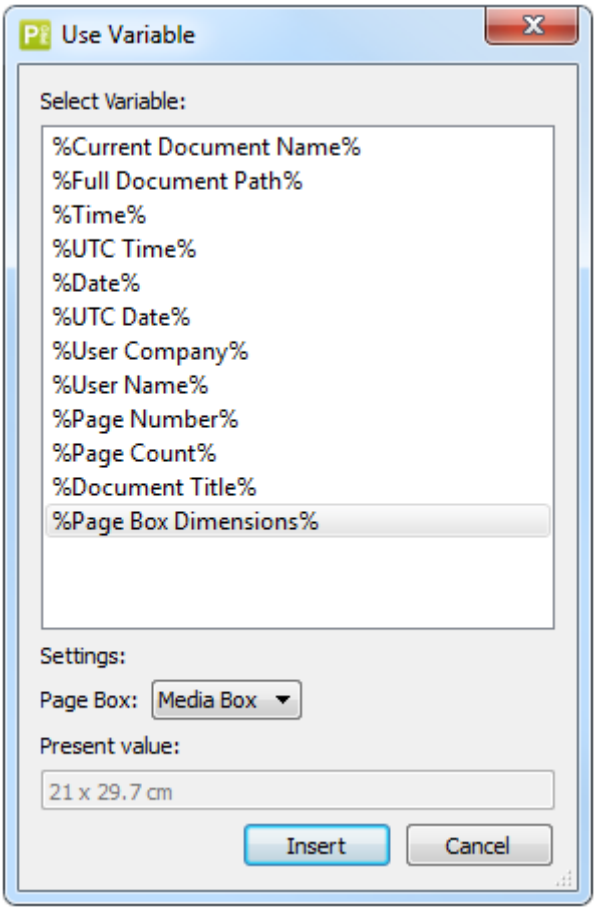
This option is useful for customers who want to automatically generate cutter guides or dielines for labels based on a PDF page box such as the trim box. See also the Action Lists based on this Action, which make a dieline in an overprinting spot color based on the trim box.

Example

To add the width and height of the media box to your document, proceed as follows:

1. In the attributes for the Add object Action, on the **Object and position** tab, choose **Add text in foreground**.
2. Click the **Variable** button.
3. Select **%Page Box Dimensions%**.
4. Select the page box of which you want to insert the dimensions, in this example **Media Box**. The current value is shown.
5. Click **Insert**.
6. Select a font and a font size and determine where the text must be inserted in the document, for example in the center of the media box with a particular offset.
7. Specify whether or not to take into account page rotation and page scaling factor if applicable.

Below is an example of the dialog that allows you to insert predefined text variables.



3.1.1.6. Add page box marks

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Allows you to add trim marks and/or bleed marks to your document in the style of your preference (InDesign or QuarkXPress).

3.1.1.7. Add page number

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Adds page numbers (including section and chapter numbers) to a PDF.

Note: The Global Change **Add Page Number** provides the same functionality.

How it works

You must first create a sample piece of text, which will be used to determine the format and style used for page numbering (font, color, size etc):

- If you want to add a page number only, the sample should only be a number, e.g. "3".
- If you want to add a page number with more information (for example: include the word "Page" and the total number of pages) add this to the sample, e.g. "Page 1 of 10".

The text strings (including spaces and punctuation) in this sample will be used as they are. For the numbers in this sample, you should indicate which one refers to the page number, hence should be considered a variable. For example, if your sample is "Page 1 of 10", "1" refers to the page number (Page %pagenr% of 10) and will be different on each page. "10" will not be changed, as it is not possible to use variables for other information than page numbers.

How to proceed

1. Create an example piece of text.
2. Select the sample by using the PitStop Select Objects tool .
3. In the attributes of the Action, click the **Grab Sample from Selection** button.

   The sample text appears in the Sample field.
4. Specify the position of the page numbers relative to the text and one of the page boxes. You can use a default offset, manually enter offset values or grab the document's offset values.
5. To start numbering on a different page than the first page of the document, enter the page number. For example, if you want to start numbering after the table of contents, for example on the third page of the document, enter "3". Note that you can also use a variable for this (added in PitStop 2020).
6. By default, the pages are numbered consecutively based on all pages of the PDF. However, if you want to base the page numbering on a selection of pages, select **For generating page number sequence, use: Selected pages**.

   Example:

   ```
   Select pages <!-- page range 1-3, only odd pages -->
   Add page number
   ```

   Output in case of PDF pages (default):

   - Page 1: numbered 1, page 2: not numbered, **page 3: numbered 3**

   Output in case of Selected pages:

   - Page 1: numbered 1, page 2: not numbered, **page 3 numbered 2**
7. If your sample text contains numbers, the **Variable number sequence** list is activated. This list allows you to indicate which number should be considered a variable (indicated by "%pagenr %").

   For example, if your sample text is "Page 2, Section 1", you will have three options:

   - "Page 2, Section 1" will insert "Page 2, Section 1" on every page.

- "Page %pagenr%, Section 1" will insert "Page 1, Section 1" on page 1, "Page 2, Section 1" ... (Section 1 will not change)
- "Page 2, Section %pagenr%" will insert "Page 2, Section 1" on page 1, "Page 2, Section 2" ... (Page 2 will not change)

8. Switch to the **Options** tab and select the appropriate checkbox:
   - **Remove any overlapping text** will remove existing page numbers.
   - **Only number pages that already have a number** will not add page numbers to pages that currently don't have any.
   - **Add white background** ensures that the page numbers are visible, even if the PDF has a dark background.

3.1.1.8. Add pages

Belongs to

- **Category:** Add; Page
- **Type:** Changes

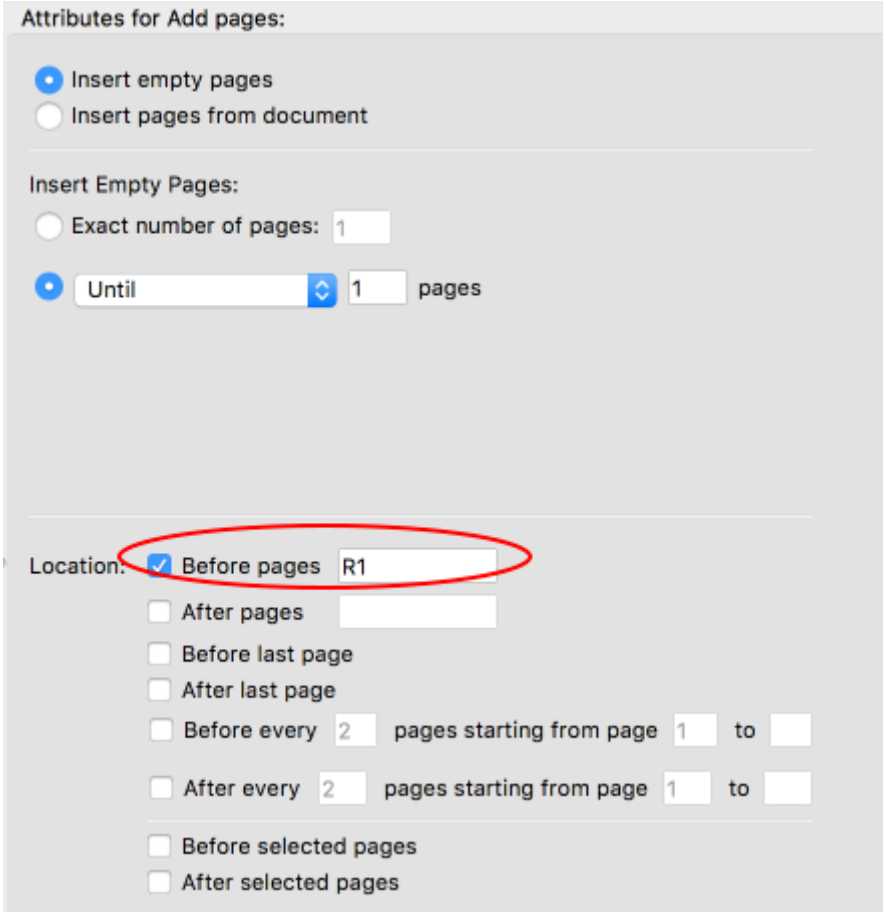
What it does

Allows you to insert either empty pages or pages from a particular PDF file (by embedding the file or by using the file path (optionally specified by a variable)).

You can choose the number of pages to add, the location of the new pages in the PDF ...

As of PitStop 2019, you can insert pages before or after a selection you made earlier in your Action List. You could for example select all pages with a certain string and insert empty pages based on this selection. See also the example Action List below.

"R[number]" notation
If you want to add pages starting from the end of the PDF, you can use the "R[number]" notation in the **Before pages/After pages** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ... This allows you for example to add a backup interleave page to every page in the PDF.



Example Action List

Suppose you have a mixed landscape/portrait document and you want to insert an empty page after every landscape page. That's possible with the following Action List.

```
Select all
Select by page orientation <!- select if page orientation = landscape ->
Add pages <!- select "insert empty pages" and "after selected pages" ->
```

3.1.1.9. Add registration marks

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Allows you to add registration marks to your document in the style of your preference (InDesign or QuarkXPress).

Registration marks ensure that the different separations in a color document are properly aligned.

Related Actions

Select registration marks on page 419

3.1.1.10. Add separation names

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 12 update 2

What it does

Allows the names of color separations to be generated and positioned within a PDF file. The separation names are individually created for each page and show all separations including any spot colors.

You have several options. You can specify:

- *How* the separation names should be displayed (stacked (i.e. one per line), inline (*reflow*) or all on top of each other (*on same location* - useful for color plates); in color or with color patches, rotated, ...). You can also determine the font and the font size.
- *Where* exactly they should be placed on the page (position of the color names relative to a page box).
- Whether or not *process colors* and *separations with 0% tint* should be displayed.
- If you have chosen to add color patches, whether or not they should have a border (*Add stroke on color patches*).

Examples

- Example 1: Layout: **Stack** and Color: **Separation names in black + color patches** are selected.



- Example 2: Layout: **Overflow** and Color: **Separation names in black + color patches** are selected. The color patches have a border, because **Add stroke on color patches** is enabled.



- Example 3: Layout: **Overflow** and Color: **Separation names in color** are selected.



3.1.1.11. Add trace path

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 2020

What it does

Generates a path or shape by tracing objects in a PDF.

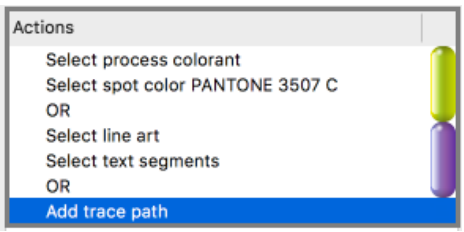
This Action generates a path around everything that's not white, which enables creating vector elements to be used as cutter guides or shapes for embossing.

Note: This Action is also available as an option in the Inspector Line Art tab (with exception of the Use colorant selection option, which is not available through the Inspector).

Attributes

Attribute	Description
Scan resolution (ppi)	Default value is 300. Increasing this value will slow down processing but improve accuracy (and vice versa).
White threshold	Default value is 10%. This is the best value to filter out tiny pixels that are artefacts. To change this threshold, drag the slider to right or to the left or enter the value of your choice manually. Increasing the white threshold may result in light gray parts being included in the selection.
Curve optimization	Default value is 20%. If you lower this value, more selection points will be taken into account to draw the curve, making the curve more accurate but less fluent.
Ignore white holes	This option allows you to include or ignore white shapes (i.e. paths fully inside an other path). If included, the white holes are cut out. This option is useful when making white underprints for printing on transparent substrates.
Invert trace path, use <page box> as outer edge	This option allows you to invert the created path, using the page box of your choice as an outer boundary.

Attribute	Description
Only add trace paths larger than ...	This option allows you to remove paths that are smaller than a specified size, i.e. paths of which the width and height of the bounding box are smaller than the entered value.
Only add largest trace path	This option allows you to remove all smaller paths, to keep only the largest one.

Use colorant selection	This option allows you to let the Action only trace the selected channels (e.g. only CMY), ignoring the others (e.g. K).
	
	This option requires two preceding "select" Actions; the first one to select the *channels*that need to be traced, the second to select the *objects* that need to be traced.
	
	Example Action List 1 (path based on process colors, in this example: CMY):
	
	`select process colorants (CMY on)`
	`select all`
	`trace path (Use colorant selection on)`
	
	Example Action List 2 (path based on text segments in a particular spot color, in this example: PANTONE 3507 C):
	
	`select spot color PANTONE 3507 C`
	`select text segments`
	`trace path (Use colorant selection on)`
	
	Example Action List 3 (draws a path around magenta and PANTONE 3507 C + works on text and line art)
	
	

Examples
Suppose you're running this Action on the below image. The generated trace path depends on the chosen options.



Attributes	Result
Default values, no extra options enabled	
Default values, ignore white holes	
Default values, ignore white holes, only add largest trace path; as a result, the single balloon is not traced anymore.	

Attributes	Result
Default values, ignore white holes, resolution of 72 ppi (iso 300)	
Default values, ignore white holes, resolution of 72 ppi (iso 300), no extra curve optimization (selected version, so you can clearly see the selection points)	
Default values, ignore white holes, resolution of 72 ppi (iso 300), with increased curve optimization (selected version, so you can see that now there are fewer selection points, resulting in a smoother curve)	

3.1.1.12. Paste objects from clipboard

Belongs to

- **Category:** Add, General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does

Allows you to paste objects from the clipboard to one or more selected pages. You can paste them multiple times (with fixed distances or distributed across a distance) as required and indicate where they should be placed.

This Action must be preceded by a "copy/cut "Action (that moves the objects to the clipboard) and a "select" Action (that indicates where the objects should be pasted) in the same Action List.

If there are several "copy/cut" Actions in the Action List, you may want to give each of the clipboards an appropriate name, to make sure the different objects are pasted on the correct pages.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut/copy-and-paste.
3. Add a *Copy or cut objects to clipboard* on page 105 Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 2 -if you added "Select all" in step 2, step 4 is redundant).
5. Add a *Paste objects from clipboard* Action and select the name of the clipboard (as entered in step 2). Switch to the different tabs to define the region and the position of the copied objects (see table below).

Note: Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the clipboard that contains the objects to be pasted. Determine whether or not the clipboard should be cleared after the object was pasted. This option determines what happens if there are no objects to be copied (= if the select Action in step 2 of the above procedure results in an empty selection). • If checked, the clipboard will be empty, so nothing will be pasted. • If cleared, the clipboard will still contain content from the previous page and that content will be pasted.
Attributes	Determine if the objects should be pasted in the foreground or in the background of the document.
Region	Determine the region where the objects should be moved to. The region is defined based on the page box of your choice and you can define margins within that page box, by grabbing the offsets from a selected area (using the **Grab position** button ). You can also specify a specific area the objects should not be placed in, also based on a page box and with the option to set margins. **Note:** The settings on this tab are only used if **Move graphic elements** is selected on the Position tab. If this is not the case, the original location of the graphic elements is preserved.

Tabs	On this tab, do the following:
Repeat	If the objects should be pasted more than once on a page, change **No repeat** to: • **Distribute/Repeat fixed number of graphic elements** if you want to determine how often the copied objects should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the pasted objects evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the pasted objects. If you choose "repeat", you should define the exact distance between the pasted objects yourself. The distance can be between the bounding boxes of the pasted objects (choose: **Between edges**) or from center to center (choose: **Between centers**). **Note:** Remember that you can use Smart Preflight variables to define the distances.
Position	If the selected objects should be moved, select **Move graphic elements**. Indicate how the objects should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

Related Action

- *Copy or cut objects to clipboard* on page 105
- *Add copied graphics* on page 63

3.1.1.13. Put selection in form

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Allows you to gather all selected objects in a form (a so-called XObject form).

Forms are rectangular frames in a PDF document that contain objects. The way in which you edit these forms and the objects inside them is different from regular objects in a PDF document. For example, you can select a regular object and move it to a random position on the page in your PDF document. Objects in forms can only be moved inside the form and thus, you can use the form to crop the object.

Note that you can use PitStop's Edit Form tool in order to edit the form and the objects it contains.

3.1.2. Color

3.1.2.1. Add default color spaces for color spaces that are not compliant to the Output Intent

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

If you are using an Output Intent that does not support a certain color space, you can use this Action to replace it with another color space that does comply.

You can select an alternative color space for Gray, RGB, and/or CMYK.

The following PDF/X and PDF/A standards are supported:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1
- PDF/A-2

3.1.2.2. Apply CMYK curve

Belongs to

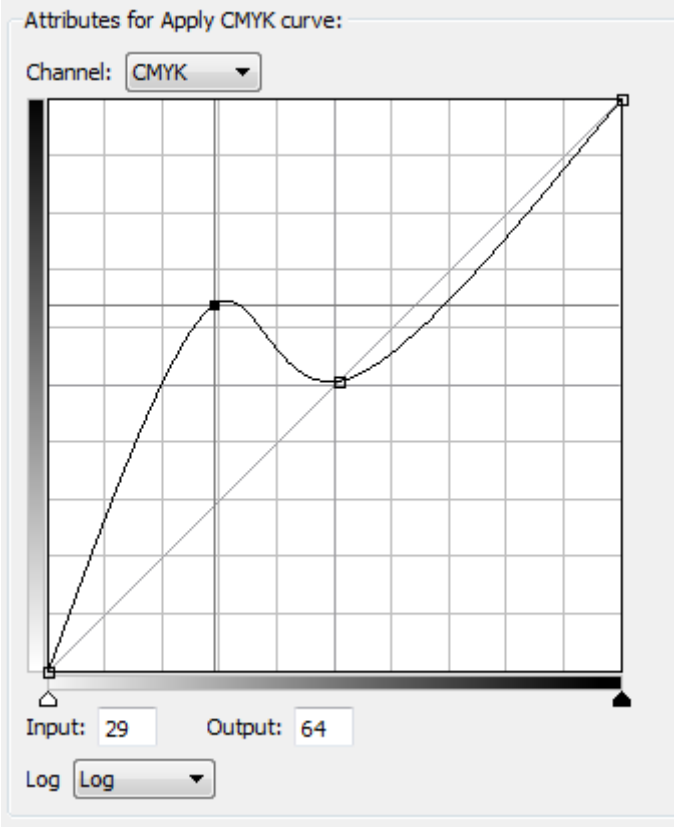
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied to selected CMYK objects, either on all four channels, or on individual C, M, Y, or K channels.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



3.1.2.3. Apply color curve

Belongs to

- **Application:** PitStop Pro
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied on separations of selected objects.

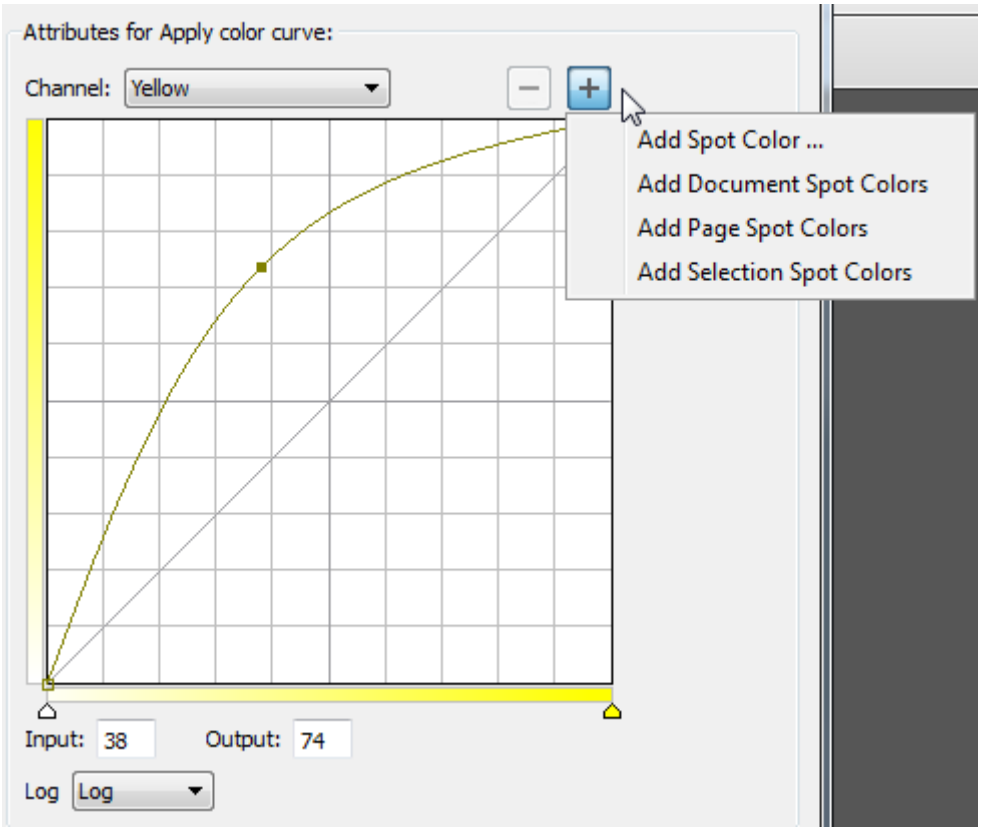
The default separations are C, M, Y, K, and Other (= all other separations in the file except for CMYK), but you can also add a curve for another spot color or varnish separation, which will be used if that color appears in the processed file.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Note: Apply color curve is also available as a Global Change!

Example

The + button allows you to add a curve for an additional color.



3.1.2.4. Apply DeviceLink

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to convert the color of the selected objects to Gray, CMYK or RGB using a device link profile (instead of an ICC profile).

DeviceLink profiles are device specific profiles, converting colors from one color space to another, without converting to LAB or any other device independent color space in between.

You can browse for a local DeviceLink profile or you can select one from the list; PitStop includes 40 DeviceLink profiles for CMYK-CMYK conversions and ink coverage reduction.

Note that you can convert only the stroke or fill of the objects, or both.

Note: If the objects concerned are tagged with an ICC profile, it must be removed first, before you can apply a DeviceLink profile. To do so, you can use *Tag object with an ICC*

profile, with the ICC profile set to **None**. Alternatively, you can use the PitStop Inspector (**Fill and Stroke** tab, ICC profile (at the bottom of the tab) set to None).

3.1.2.5. Apply Gray curve

Belongs to

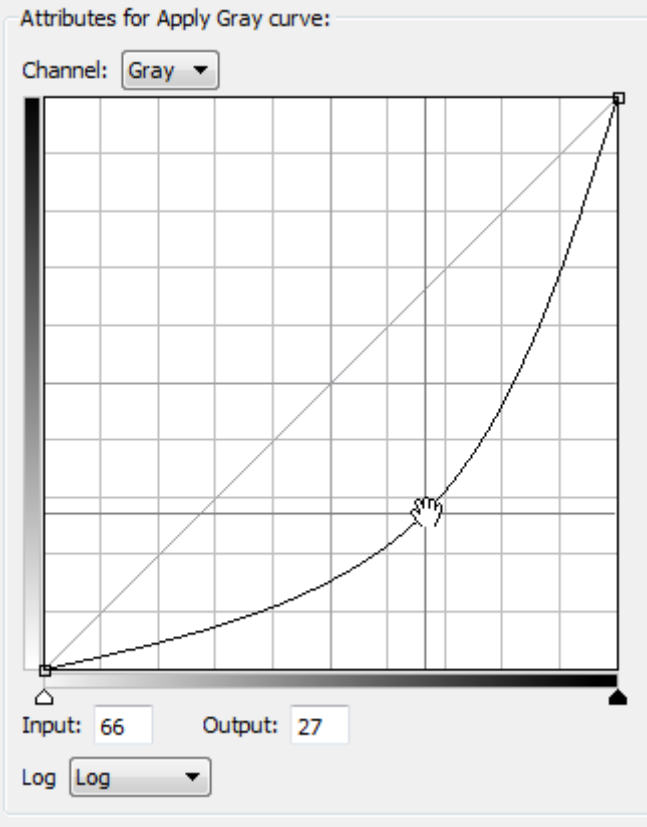
- **Application:** PitStop Pro
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows a curve to be applied to selected Gray objects.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



3.1.2.6. Apply Lab curve

Belongs to

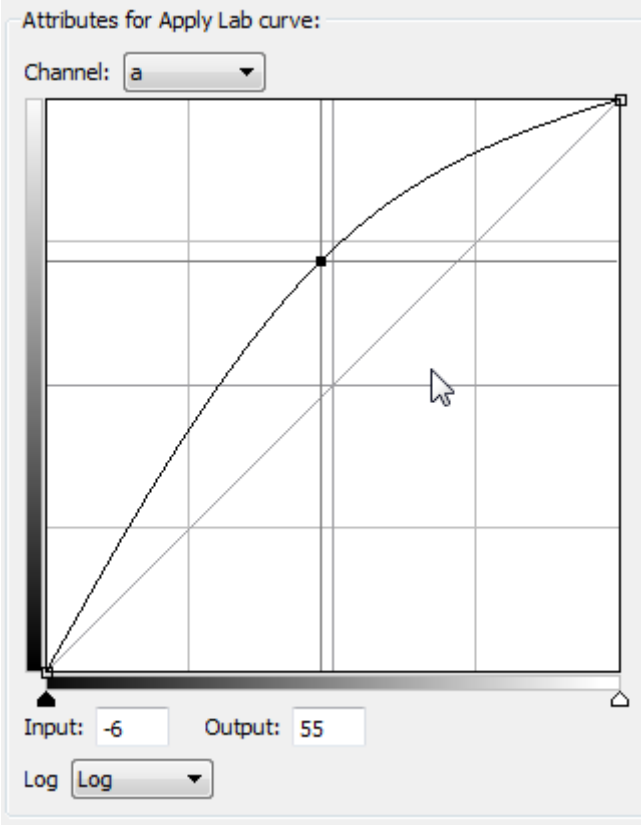
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied to selected Lab objects on individual lightness, a, or b channels.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



3.1.2.7. Apply RGB curve

Belongs to

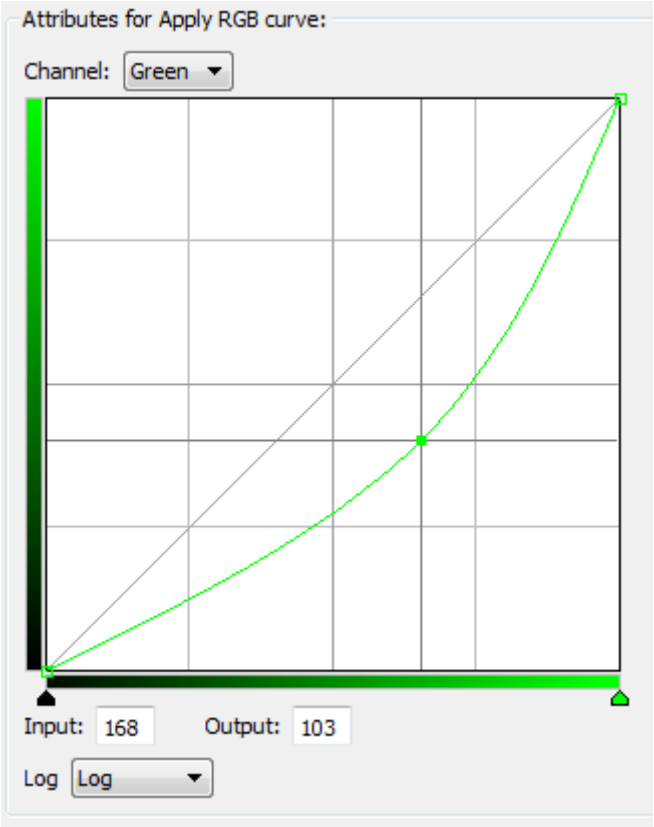
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied to selected RGB objects, either on all three channels, or on individual R, G, or B channels.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



3.1.2.8. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.

Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344

- *Remove custom transfer function* on page 226

3.1.2.9. Change color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to change the fill and/or stroke colors in a PDF.

How to proceed

Define the target colors as follows:

1. Select the appropriate checkbox, depending on what you want to change (Fill color or Stroke color).
2. Select the appropriate target color in one of the following ways:
   a. Select an object with the PitStop Select Objects tool and use the icon to grab the fill or stroke color  (depending on what you're defining).
   b. Click the color picker icon  and select the appropriate color.
   c. Select the required color space:
      - Device colors can be Gray, RGB or CMYK
      - Calibrated colors can be Gray or RGB
      - User Swatch (= user-defined colors)
3. Fine tune the color by moving the sliders.

3.1.2.10. Change default color spaces

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to set the default color spaces for Gray, RGB and CMYK objects in a PDF. These spaces are chosen from the list of available profiles (or you can browse for profiles on your system) and can be applied to all objects or only to objects with absent color spaces.

3.1.2.11. Change Gray to CMYK Black

Belongs to

- **Application:** PitStop Pro

- **Category:** Color
- **Type:** Changes

What it does

Remaps the device grayscale color space to the device CMYK color space, keeping overprint.

3.1.2.12. Change blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Changes

What it does

Allows to change the blending color space and/or the luminosity softmask blending color space (if defined in the PDF document).

You can:

- Change the color to CMYK, gray or RGB, or
- Remove the blending color space, by selecting "none" from the first list, or
- Leave one of the color spaces unchanged, by selecting **Do not change**.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Check if blending color space is defined* on page 261
- *Select by blending color space* on page 364

3.1.2.13. Change Output Intent

Belongs to

- **Category:** Color; Metadata
- **Type:** Changes

What it does

Changes a PDF's Output Intent to comply with a particular PDF/X or PDF/A version, using a particular ICC profile and/or ICC characterization.

Note that you can change the document Output Intent or the page level Output Intent.

Related Actions

Check Output Intent on page 265

3.1.2.14. Change rendering intent

Belongs to

- **Category:** Prepress;Color
- **Type:** Changes

What it does

Modifies the rendering intent of an object to one of the following:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96

3.1.2.15. Change spot color suffix

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Either modifies a selected spot color's suffix to one of the suffixes in the table below or removes any known spot color suffix.

This allows you to use the latest Pantone naming conventions when checking and correcting Pantone suffixes.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types. For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Check spot color suffix* on page 268

3.1.2.16. Convert alternate color space to CMYK

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the alternate color space for a spot to CMYK.

If you want to change all alternate color spaces except for gray, select the **Do not convert if alternate color space is gray** checkbox.

About alternate color spaces

The alternate color space is used as a 'backup' color space when the original spot color is not available on a specific output device, and when converting the spot color into CMYK. If this alternate color space is defined as anything other than CMYK or plain gray, the output results may not be up to standards.

3.1.2.17. Convert color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the color space of an object to gray, RGB, CMYK or a given spot color.

You can convert the fill and/or stroke color as required.

3.1.2.18. Convert color to shading color space

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts the colors in a PDF to their shading counterparts.

3.1.2.19. Convert images to indexed color space

Belongs to

- **Category:** Color;Image
- **Type:** Changes

What it does

Changes the color of images to the indexed color space.

About the indexed color space

The indexed color space uses no more than 256 colors, and is as such particularly suited for use in Web applications. Images are typically converted to indexed color mode in order to **decrease their file sizes**. When an image is converted to indexed color, a color lookup table is created, in

which the colors that were used in the image are stored and indexed. Using an indexed color table lets you reduce the file size of an image while maintaining the visual quality that you need.

3.1.2.20. Convert indexed color space to base color space

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the indexed color space back to the original colors.

About the indexed color space

The indexed color space uses no more than 256 colors, and is as such particularly suited for use in Web applications. Images are typically converted to indexed color mode in order to **decrease their file sizes**. When an image is converted to indexed color, a color lookup table is created, in which the colors that were used in the image are stored and indexed. Using an indexed color table lets you reduce the file size of an image while maintaining the visual quality that you need.

3.1.2.21. Convert process to DeviceN

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts all instances of device CMYK to DeviceN.

You must indicate what is most important to you:

- Reducing the number of color plates to a minimum, or
- Keeping the overprint settings

3.1.2.22. Convert shading color space to solid color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts shading colors ("gradients") in the corresponding solid colors. You can convert the fill, the stroke or both as required.

Shadings represent complex mathematical functions. That's why certain output devices may not be able to correctly interpret them. Shadings can also cause problems during color conversions.

Related Actions

Select shading objects on page 376

3.1.2.23. Convert spot color to equivalent CMYK color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the color of a spot color object to its CMYK equivalents (for example to save on ink).

You can do this for all spot colors, or only for spot colors of which the alternate color is CMYK or Gray (less risk of getting small color variations).

3.1.2.24. Create varnish

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Creates a varnish on top of the selected object.

This varnish is a user-defined spot color with the same shape of the selected object.

How to proceed?

Enter a name to recognize this spot color by, and indicate whether or not you wish to set it to overprint.

3.1.2.25. Make DeviceN without NChannel information

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts the color space to DeviceN without NChannel information.

About NChannel

NChannel is an extension of the DeviceN color space, a multi-component, device-dependent color space. NChannel color spaces give applications greater flexibility when representing colors that are not available on a target device.

NChannel is supported from PDF 1.6 (Acrobat 7.x) onwards. If you are opening a PDF in an earlier version of Adobe Acrobat, colors can print or display incorrectly.

About converting NChannel to DeviceN

This Action will convert NChannel to DeviceN, so the object looks as it will be printed when using devices not supporting PDF 1.6 features.

Note that there are three options. You can convert the color space to:

- **DeviceN**
- **NChannel with regular DeviceN color information only**
- **NChannel with color information additional to regular DeviceN**



Note: This Action will have no visual effect if all colors are available on the target device.

PitStop provides an Action List with the same functionality: Convert NChannel Color Space to DeviceN

Related Actions

- *Check for NChannel colors with non-trivial process dictionary* on page 256

3.1.2.26. Match fill and stroke colors

Belongs to

- **Category:** Color; LineArt
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Changes the stroke color to match the fill color or vice versa.

Use case

Suppose you want to print very small text. To improve the readability, you convert the text to outlines and add a stroke. However, the stroke color is black by default. This may not be desired, e.g. if your text is in color. In that case, you can run this Action with the option **Change the stroke color to match the fill color**.

Related Actions

Change color on page 84

3.1.2.27. Normalize PANTONE library names

Belongs to

- **Category:** Color
- **Type:** Changes
- **Since version:** 2018

What it does

Allows you to rename old or faulty PANTONE spot color names to match the new, correct naming conventions.

You can choose one or more of the following methods:

- **Replace PMS with PANTONE**: PMS stands for *Pantone Matching System* and was used in the past. Using this method, the old color name *PMS Yellow C* will become *PANTONE Yellow C*.
- **Fix upper/lower case mismatches**:
  - **Only make PANTONE name upper case**: "PANTONE" is not always spelled correctly. Using this method, you can fix this part of the color names. For example, *Pantone* Yellow C will be changed to *PANTONE* Yellow C.
  - **Fix all mismatches**: If selected, all mismatches will be fixed, for example *Pantone yellow C* will be changed to *PANTONE Yellow C*.
- **Add suffix if not present: <suffix of your choice>**: If suffixes are missing, you can tell PitStop which suffix to add. Note that only the current suffixes can be selected; old suffixes are not in the list.
- **Remove extra spaces**: Removes redundant spaces in PANTONE library names.

  Note: This option does not remove spaces in incorrect names, unless they have been corrected by one of the other normalization methods. For example, "Pantone Yellow C" will only be changed into "PANTONE Yellow C" if both "Make PANTONE uppercase" and "Remove extra spaces" are selected.
- **Add missing spaces**: Adds a space after the name PANTONE (if it's missing), and/or before the suffix (C, U, CP, UP) (if it's missing).

PitStop checks if the normalization method results in an existing PANTONE color. If that is the case, the color name is changed.

If no replacement is found, for example because the spot color name in the document is unknown/incorrect or no PANTONE Spot color, you will get a warning. This is also the case if renaming a colorant in the DeviceN space would result in a duplicate (as it's not possible to have twice the same name in a DeviceN space).

Related Actions

- *Check spot color by PANTONE library* on page 267
- *Select spot color* on page 376
- *Change spot color suffix* on page 86

3.1.2.28. Remap alternate color space to CMYK

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Remaps the alternate color spaces of the chosen spot colors to the preferred CMYK values.

How to proceed

1. To add the spot colors of which you want to remap the alternate color space, do one of the following:
   - To select the desired spot color from the list of spot colors (Spot color picker)
     1. Click .
     2. Select the preferred spot color and click **OK**. The selected color is shown in the table, with the corresponding CMYK values.
   - To define a new spot color
     1. Click the **Add New Color** button.
     2. In the table, in the first column (Name), replace "Color name" with the name of the new spot color.
   - To select the desired spot color from the Spot library picker
     1. Click the **Add Colors** button.
     2. Select the preferred spot color and click **OK**. The selected color is shown in the table, with the corresponding CMYK values.
2. Add or change the CMYK values as required.
3. To remove colors from the table
   - Use the **Remove All** button, or
   - Select a color and click  to remove only the selected color.

3.1.2.29. Remap color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Remap color is a complex but powerful Action that allows the remapping of colors from one color space to another.

For each color in the document you can specify whether or not you want to map it to another color (by means of "remapping rules"), and whether or not the overprint settings should change.

Note:

- Use the **Analyze page** or **Analyze document** buttons to get an overview of the colors in the document being processed.
- To change a remapping rule, click **Change** and make the required changes; to add a new one, click **Add**.
- Keep in mind that the order of the rules is important. You can change the order by selecting a rule and clicking **Up** or **Down**. The rules are evaluated from top to bottom. Every matching rule is executed, until a matching rule is found that is set to Keep for

both To and Overprint. In that case, no further rules are evaluated (see also example 2 below).

- You can remap colors, color spaces, color ranges and channels.

New in PitStop 2022

When mapping Device Gray to Device CMYK, you can now disable color management by selecting the **Force gray to keep same intensity** checkbox. That way, the gray value will only be mapped to the black component of the CMYK color space. In other words, the Gray brightness becomes equivalent K screen value.

Example: 30% gray will be remapped to 70% K, instead of a mix of C, M, Y and K.

Example 1

Suppose you have a CMYK PDF that you want to print in a single spot color, MySpot.cv.

To remap all the colors to this spot:

1. Under Attributes for Remap color, select the row that mentions **All other** and click **Change**.
2. In the **Color Remap Rule** popup, under **To:**, select **Color**.
3. Select the repository color MySpot.cv. You should have specified this color earlier in PitStop.
4. Select the desired overprint setting:
   - **Keep** the overprint settings as they are, do not change.
   - Enable overprint: **On**
   - Disable overprint: **Off**
5. Click **OK**.

To remap everything except, for example, 100% black text and objects to the selected target color MySpot.cv, you need a slightly more elaborated action:

1. Click **Add**.
2. Under **Remap**, select **Color** and **Device CMYK**.
3. Set the values to: C 0% M 0% Y 0% K 100%.
4. Under **To:**, select **Keep**.
5. Select the desired overprint setting.
6. Click **OK**.
7. Select **Add**.
8. In the **Color Remap Rule** popup, under **Remap**, select **Device CMYK**.
9. Under **To:**, select **Color**.
10. Select the repository color MySpot.cv. You should have specified this color earlier in PitStop.
11. Click **OK**.

The above Actions must be performed in the correct order. Under **Attributes for Remap color**, you should have three lines:

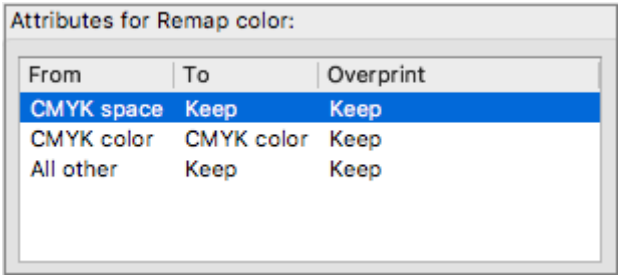
- The rule for "keep 100% Black" at the top
- Then the rule for "remap to MySpot.cv"
- "All other" at the bottom

Example 2

Suppose your document contains a rectangle in CMYK (100K).

When running the below Action, the rectangle won't be remapped: it will remain 100K, because of the first rule (= keep the color space). As a consequence, the other rules won't be checked anymore.

If the first rule would be removed (or placed at the bottom), the color of the rectangle would be remapped from 100K to 100C.



3.1.2.30. Remap spot color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to remap all spot colors in a document, or one particular spot color to:

- Gray
- The color's CMYK equivalent
- A custom CMYK equivalent
- Another spot color

You can apply the Action to either the fill or stroke color, or to both.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the color that should be remapped.
- From version 2021 onwards, you can use variables to define the CMYK values.

3.1.2.31. Remove ICC tag

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Removes the ICC tags either from the selected objects or from the whole document (if no selection is defined). You can remove the ICC tags from fill and/or stroke colors as required.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

In some workflows, e.g. without color management, ICC profiles are unwanted and may cause inconsistent color reproduction. In that case, you can use this Action to remove the ICC tags.

Related Actions

- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99
- *Check ICC profile version* on page 259

3.1.2.32. Remove rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Changes

What it does

Strips rendering intents from color managed objects in a PDF.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265

- *Change rendering intent* on page 86

3.1.2.33. Rename spot color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

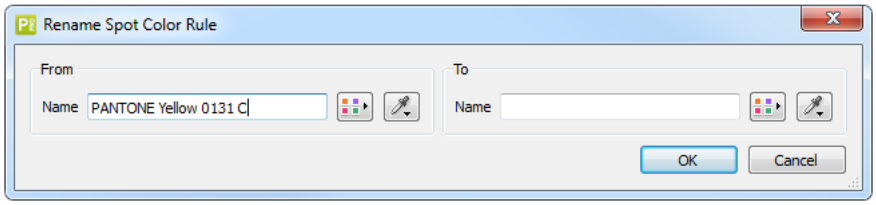
Allows you to change the name of spot colors in a document.

Note: From version 12 update 2 onwards, you can use regular expressions to define the source and target color. This is useful to rename variants of the same color, e.g. to rename “Varnish0”, “Varnish1”, “Varnish23” (i.e. "Varnish" followed by one or more digits) to “Varnish” (without any digits). To do so, build a rule that renames "Varnish([0-9])+" to "Varnish".

How to proceed

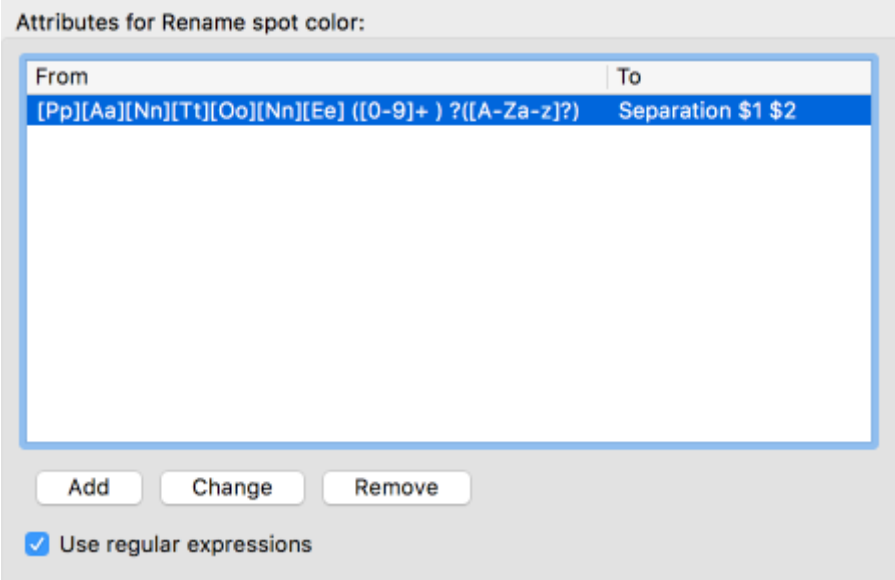
To rename one or more spot colors in a document

1. Select **Rename spot color**.
2. Optionally, select the **Use regular expressions** checkbox.
3. Click **Add**.
4. In the Rename **Spot Color Rule** dialog:
   - In the left part (under **From**), enter the name of the spot color that should be renamed.
   - In the right part (under **To**), enter a new name for the selected spot color.



5. Click **OK**.
6. To create another rule (i.e. to rename another spot color), repeat steps 3-5.

Example



The above rule will rename *Pantone* to *Separation* in spot color names like Pantone 0123 U (which will then become Separation 0123 U).

3.1.2.34. Snap color to color set

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to remap any colors that vary a little from your desired colors back to the desired color. This Action can also remap images to Black or CMYK.

Snap color to color set can be useful to keep tight control over the range of colors in a document.

How to proceed

Define the color set to which the colors in the PDF must be changed as follows:

1. To remap variants of black to 100% black, select **Black**.

   Note: If you want to remap **all colors** in your document to black, **only** select the **Black** checkbox. Do not add any other color.

2. To add another color the colors in the document should be remapped to if they are close to it:
   a. Click **New**. A new entry appears in the text box.
   b. If you want to use a spot color (optionally), select the **Spot color** checkbox and type the name of the spot color in the text field. You should define a CMYK equivalent too (see next step). The name of the spot color is shown in the text box.
   c. Enter the required values for CMYK (expressed in %) in the fields below the New/Remove button. Your changes are shown in the text box.

3. From the **Map images to** list, select the preferred color space for images. You can choose between black, CMYK, and (if applicable) the spot color(s) defined in the previous step.

3.1.2.35. Tag object with an ICC profile

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Tags objects with a Gray, RGB, CMYK or Lab color space with a chosen ICC profile.

You can only tag the stroke or fill color or both. If an object is tagged already, the ICC tag will not be modified, unless you select the **Change ICC profile if object is already tagged** checkbox.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Check ICC tagging* on page 258
- *Check ICC profile version* on page 259

3.1.3. Document

3.1.3.1. Add unique document IDs

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Adds a unique document ID (generated at random) to your document.

Related Actions

Check document unique IDs on page 271

3.1.3.2. Change document encoding

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Changes the PDF encoding to binary or ASCII.

About document encoding

ASCII encoding was formerly required to ensure that PDF files could be safely transported via e-mail or the Internet. However, most e-mail software in use today handles non-ASCII documents normally, eliminating the need to ASCII-encode your document.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Check data format* on page 271
- *Select by document encoding* on page 380

3.1.3.3. Change initial view

Belongs to

- **Category:** Document
- **Type:** Changes
- **Since version:** 12 update 2

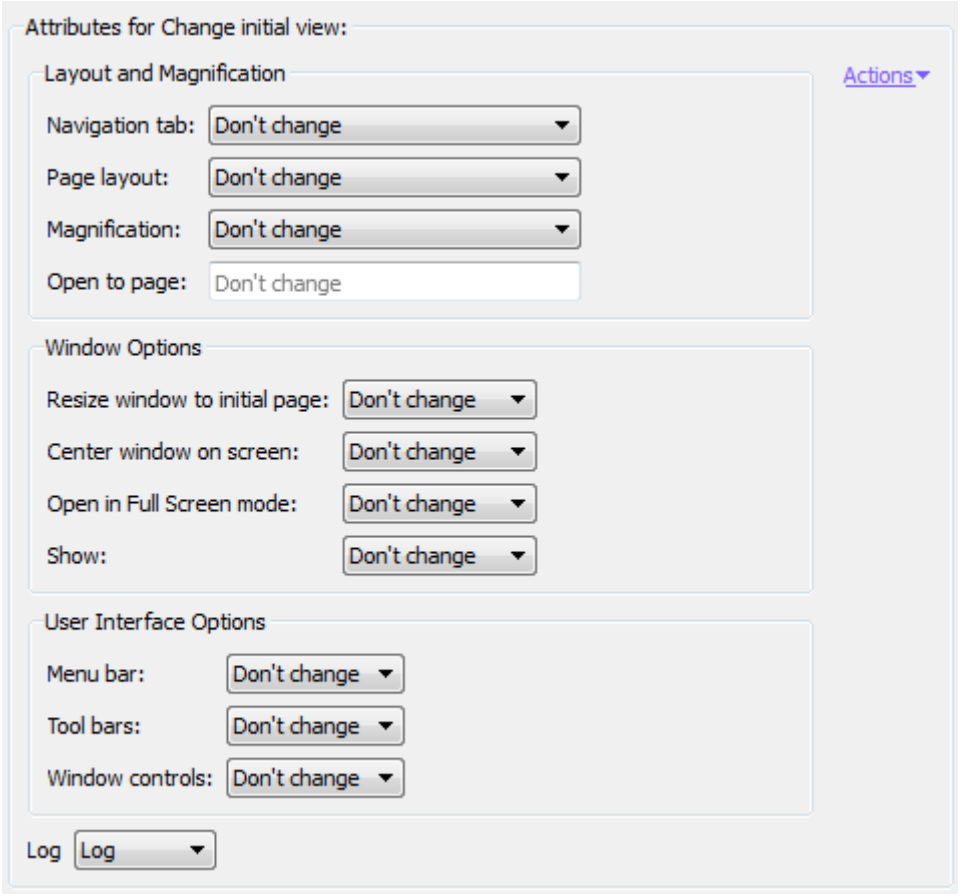
What it does

Allows the initial view settings of a PDF to be set or adjusted. The initial view is the way the PDF appears when it is opened in Adobe Acrobat or Adobe Reader (also when it is opened within a browser).

You can make a lot of changes, for example choose a particular page layout or magnification level, turn on or off certain window options, hide application toolbars or window controls ...



Note: The attributes for this Action, correspond to the Initial View options in Adobe Acrobat (See **File** > **Properties**, select the **Initial View** tab). If you do not change the attributes, these settings will be used. For a detailed overview of the meaning of each option, refer to the *Adobe help files*.



3.1.3.4. Change PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does

Allows you to change the text encoding of a PDF to comply with a particular PDF version.

Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change inline image syntax* on page 114

3.1.3.5. Make viewer preferences PDF/X compliant

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Allows you to change the viewer preferences of the PDF document, to make them PDF/X compliant.

PDF/X-1a:2003 and PDF/X-3:2003 require the view area, view clip, print area and print clip to be set to the media (or bleed) box.

As of PitStop 2022 it's also possible to remove the viewer preferences (all or only the one(s) of your choice).

Related Actions

Check PDF/X viewer preferences on page 277

3.1.3.6. Optimize document structure

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Guarantees that the underlying document structure of your PDF is efficient, for example by improving the compression of the document as required.

3.1.3.7. Overlay PDF

Belongs to

- **Category:** Document
- **Type:** Changes
- **Since:** 2020

What it does

Enables you to use a PDF as overlay or underlay in another document.

Note:

- This Action provides the same functionality as the Place PDF tool (part of the PitStop Edit toolset) in PitStop Pro.
- There's also an Overlay PDF app that can be used in a Switch workflow. It's available for download on the *Enfocus Appstore*.

Tabs

Tabs	
Source	The **Source File** is the file that will be added to the currently opened PDF. It will be placed on top of the current PDF, unless you have selected the **Put source page content behind target page content** checkbox on the Misc tab. You should specify the source file via the **PDF file path**, which refers to the location of the PDF. You can browse to the PDF file or you can enter the file path, optionally using variables. **Use page box** allows you to set the page box that you want to use. Finally, you should choose the preferred behavior (**Repetition Policy**) in case the added PDF file has fewer pages than the target PDF file. There are three options: • **Stop overlaying after last source page is used** (default option): if selected, the last page(s) of the target document won't have an overlay. • **Repeat last page**: the last page of the source file will be used as overlay for the last page(s) of the target document (until all pages have an overlay). • **Repeat all pages**: PitStop will add overlay pages, starting again from the beginning of the source file until all pages have an overlay.
Target	The **Target Area** indicates where the overlay should be placed. You can enter the coordinates of the area (manually, or grab from a selection), or you can specify the target page box. The **Scaling options** allow you to specify how the page should be scaled, if the added PDF file has a different page size than the target file. Options are: • Do not scale • Scale to fit, preserving aspect ratio • Fit width / fit height, preserving aspect ratio • Scale to fill, preserving aspect ratio (scales the source page enough to fit the larger dimension of the target page while preserving the source page's aspect ratio) You can also determine how the source content should be **aligned** to the target area (center, top, bottom, upper left, right, ...)
Misc	On this tab, you have two options: • **Change the opacity** of the source by moving the slider to the left. The default is 100% opacity.

Tabs	
	• **Put source page content behind target page content** to have an underlay instead of an overlay.

Remark

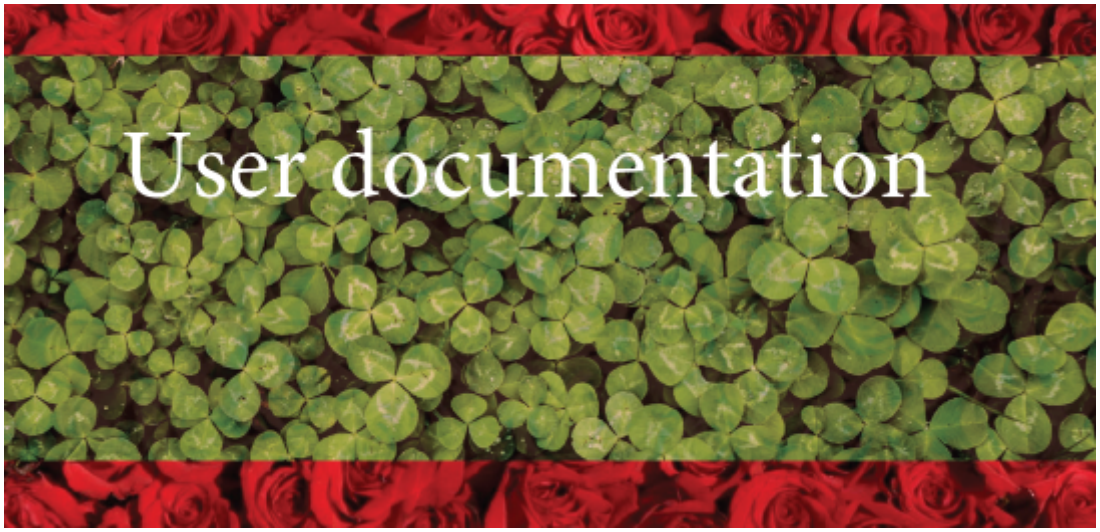
Note: The target page content for both overlays and underlays includes the content generated by previous runs of the Action. This is important in the case of underlays where, for an Action list with multiple underlays, the drawing order of the content generated by the instances of this Action is the reverse of the order in which the Actions themselves appear in the Action List.

Example:

The following Action List is run on a cover page which only contains a title in white. Both Actions have **Put source page content behind target page content** enabled.

```
Overlay PDF    (source file: PDF with an image of green clover, 80% opaque)
Overlay PDF    (source file: PDF with an image of roses, 100% opaque)
```

The result is a PDF with an image of roses in the background and the green clover on top of it.



3.1.3.8. Remove alternate presentations

Belongs to

- **Category:** Document
- **Type:** Changes
- **Since:** 2022

What it does

Removes the AlternatePresentations entry from the name dictionary of the selected document.

This is a fix for PDF/X-6, as PDF/X-6 does not allow alternate presentations.

3.1.4. General

3.1.4.1. Change object order

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Changes the layer position of an object in a PDF.

You can choose to move the object forwards, backwards, to the front, or to the back depending on where you want your object to appear in the layer stack.

3.1.4.2. Copy or cut objects to clipboard

Belongs to

- **Category:** General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does

Allows you to cut or copy the selected objects to a clipboard. You should give the clipboard a name (by default: Untitled 1), to avoid confusion when copy-and-pasting different selections in one Action List. You can use up to 1,000 clipboards if you wish, however it is important to realize that these clipboards are not saved; they are only used while the Action List in which they are used is run.

This Action should be preceded by a selection (i.e. to select the object you want to cut or copy) and followed by *Paste objects from clipboard* on page 74 in the same Action List. You cannot cut or copy something to a clipboard in one Action List and then paste it within another Action List.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut or copy.
3. Add a *Cut or copy objects to clipboard* Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 1, e.g. if you added "Select all" in step 1).
5. Add a *Paste objects from clipboard* on page 74 Action and set the attributes on the different tabs (e.g. to define the position of the pasted objects).

Note:

- Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.
- If there is nothing to select to cut or copy (i.e. the select Action of step 2 in the above procedure result in an empty selection), the content of the clipboard is not overwritten with an "empty" set of objects! The previous content (if any) is preserved and will be pasted once more. If you do not want this, you can select the **Clear clipboard after paste** checkbox in the attributes of *Paste objects from clipboard* on page 74 Action.

Related Action

- *Paste objects from clipboard* on page 74

3.1.4.3. Normalize line weight

Belongs to

- **Category:** General; LineArt; Position and size
- **Type:** Changes

What it does
Normalizes paths where a transformation matrix caused distortions, by removing the distortion, giving the path a uniform line weight equal to the average reported in the Inspector. The Action also works on sheared paths.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392
- *Check line weight* on page 296

3.1.4.4. Paste objects from clipboard

Belongs to

- **Category:** Add, General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does
Allows you to paste objects from the clipboard to one or more selected pages. You can paste them multiple times (with fixed distances or distributed across a distance) as required and indicate where they should be placed.

This Action must be preceded by a "copy/cut "Action (that moves the objects to the clipboard) and a "select" Action (that indicates where the objects should be pasted) in the same Action List.

If there are several "copy/cut" Actions in the Action List, you may want to give each of the clipboards an appropriate name, to make sure the different objects are pasted on the correct pages.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut/copy-and-paste.
3. Add a *Copy or cut objects to clipboard* on page 105 Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 2 -if you added "Select all" in step 2, step 4 is redundant).
5. Add a *Paste objects from clipboard* Action and select the name of the clipboard (as entered in step 2). Switch to the different tabs to define the region and the position of the copied objects (see table below).

Note: Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the clipboard that contains the objects to be pasted. Determine whether or not the clipboard should be cleared after the object was pasted. This option determines what happens if there are no objects to be copied (= if the select Action in step 2 of the above procedure results in an empty selection). • If checked, the clipboard will be empty, so nothing will be pasted. • If cleared, the clipboard will still contain content from the previous page and that content will be pasted.
Attributes	Determine if the objects should be pasted in the foreground or in the background of the document.
Region	Determine the region where the objects should be moved to. The region is defined based on the page box of your choice and you can define margins within that page box, by grabbing the offsets from a selected area (using the **Grab position** button ). You can also specify a specific area the objects should not be placed in, also based on a page box and with the option to set margins. **Note:** The settings on this tab are only used if **Move graphic elements** is selected on the Position tab. If this is not the case, the original location of the graphic elements is preserved.
Repeat	If the objects should be pasted more than once on a page, change **No repeat** to:

Tabs	On this tab, do the following:
	• **Distribute/Repeat fixed number of graphic elements** if you want to determine how often the copied objects should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the pasted objects evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the pasted objects. If you choose "repeat", you should define the exact distance between the pasted objects yourself. The distance can be between the bounding boxes of the pasted objects (choose: **Between edges**) or from center to center (choose: **Between centers**). **Note:** Remember that you can use Smart Preflight variables to define the distances.
Position	If the selected objects should be moved, select **Move graphic elements**. Indicate how the objects should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

Related Action

- *Copy or cut objects to clipboard* on page 105
- *Add copied graphics* on page 63

3.1.4.5. Rasterize page content, keeping text

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Allows you to rasterize complex graphics in PDF, for example to reduce the rendering complexity for a file for viewing on the iPad.

You can set the resolution of the generated bitmap (ppi), the preferred compression (JPEG, JPEG2000, ZIP, None), the required quality (maximum, high...), and decide whether or not to keep line art unchanged.

New since PitStop 13 update 2 is the option to turn off anti-aliasing. This is useful to avoid thin white lines that may appear when rasterizing images.

3.1.4.6. Rasterize selection

Belongs to

- **Category:** General
- **Type:** Changes
- **Since Version:** 2019

What it does

Allows you to rasterize selected content.

Rasterizing objects means converting them to an image. This is typically done to reduce the complexity of a file to speed up processing.

Note that it may not be possible to convert multiple objects to one image: PitStop tries to create as few images as possible without changing how the file looks. To achieve this, it takes into account layers, color space, position of the objects etc. For example, rasterizing two objects with two different color spaces, will result in two images; objects on different layers will result in different images, and objects that do not overlap will only become one image if no other objects are inbetween (because this would change how the file looks).

Note that this functionality is also integrated in PitStop Pro (accessible through the menu bar (**PitStop Pro** > **Object** > **Rasterize selection**) or the context menu of a selection).

Options

By default, rasterizing does not affect the way the objects look. However, in some cases it may be acceptable to have a slightly different look; in that case you may enable (some of) the advanced options (for example: conversion to a different color space). These options are marked with a warning icon to indicate that using them may change the appearance of the file.

Option	Choices
Resolution (ppi) of the generated bitmap	Enter the value of your choice.  **Note:** Do not misuse this Action to change the resolution of an image; the result will be far better when using a dedicated Action like *Resample image* on page 117.
Compression	Choices are: • JPEG • JPEG2000 • ZIP • None
Quality	Choices are: • Minimum • Low • Medium

Option	Choices
	• High • Maximum
Use anti-aliasing	Select or clear the checkbox. Turning off anti-aliasing may be useful to avoid thin white lines that may appear when rasterizing images.
Convert new resulting image(s) to indexed color space	Select or clear the checkbox.
Blend to	This option allows specifying a color space conversion on the selected objects, which may slightly change the appearance of the document. Choices are: • Page blending space • Gray • RGB • CMYK
Ignore blend and overprint restrictions	Select or clear the checkbox. Normally, overprint and blend spaces are respected when creating a single, merged image. However, if this is not possible (because it might change the appearance), an error will be reported. In that case, you may decide to ignore the blend and overprint restrictions, especially if they do not offer much added value.
Ignore original layer structure	Select or clear the checkbox. Normally, the layer structure is preserved and images remain on the same layer as the original object. If you enable this option, the layer structure and the layer properties are ignored, meaning that hidden layers and layers that do not print are also included in the new image. The new image will not be on any layer. The layers themselves will not be removed.
Force into single image	Select or clear the checkbox. If selected, all the above options are enabled in order to force the selected objects into one single image.
Force into separate images	Select or clear the checkbox. If selected, the selected objects will be rasterized and saved as separate images. This option is compatible with the **Blend to (color space)** option.

Option	Choices
Keep the original content and place the new resulting image(s)	Choices are: • at the front of the page • at the back of the page • in front of the original content • behind the original content

3.1.4.7. Remove associated files

Belongs to

- **Category:** General, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes associated files.

This fix can be used to make PDF files compliant with PDF 2.0.

Related Actions

- *Check for associated files* on page 278

3.1.4.8. Remove file specification from streams

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Removes links to embedded or external files from PDF streams.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will remove the link to these files.

3.1.4.9. Remove PostScript

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Removes all fragments of embedded PostScript in a PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

See also

- *Check for embedded PostScript fragments* on page 279
- *Select embedded PostScript fragments* on page 381

3.1.4.10. Replace page content by bitmap

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Converts the page content to a bitmap. You can choose the resolution of the generated bitmap (ppi), the compression method (JPEG, JPEG2000, ZIP, none) and the quality level.

New since PitStop 13 update 2 is the option to turn off anti-aliasing. This is useful to avoid white lines in flattened PDF files.

Other options are:

- **Apply overprint** to take into account the overprint settings
- **Blend to ...** to specify a color space conversion, which may slightly change the appearance of the document. Choices are: the page blending space, Gray, RGB and CMYK.

3.1.5. Image

3.1.5.1. Add alternate images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

If you are working with PDFs that contain very high resolution images and render slowly on screen, you can speed up rendering by adding alternate images and then clicking the PitStop **Speed Up Image Display** button (available in the Enfocus View Modes toolbar (Acrobat 8 and 9) or the PitStop View Panel (Acrobat X and XI)).

You can use this Action to add low resolution alternate images.

How to proceed

1. Select the preferred downsampling.

   Bicubic looks best but is slowest; subsampling looks worst but is fastest.
2. Specify the preferred resolution.

   72dpi is good for screen viewing.
3. Set **Resample above** to a higher value than the dpi chosen above.

   PitStop suggests a value, but you can change it as required.
4. Select **Convert to RGB** for even faster on screen rendering, but in RGB color values.

Related Actions

- *Select by alternate images* on page 384
- *Check for alternate images* on page 285
- *Remove alternate images* on page 116

3.1.5.2. Apply a gaussian blur to an image

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Allows you to apply a Gaussian blur to the selected images.

You can define the radius of the blur, by moving the slider. A higher radius will result in a higher amount of blur.

Applying a Gaussian blur is useful to reduce image noise and detail.

3.1.5.3. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

3.1.5.4. Change image brightness and contrast

Belongs to

- **Application:** PitStop Pro
- **Category:** Image
- **Type:** Changes

What it does

Allows you to make brightness and contrast adjustments to pixel images of all color spaces (e.g. RGB) and image types (e.g. JPEG).

Note: This option is also available in the PitStop Inspector (by selecting  > ).

3.1.5.5. Change image compression

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Change image compression changes the compression of selected images.

Color and Gray images can be compressed with JPEG, JPEG2000, ZIP or LZW compression (ZIP and LZW are lossless, JPEG lossy).

Monochrome images can be compressed with CCIT Group 3 & 4, ZIP or RunLength compression.

In addition, an ASCII Hex or 85 filter can be applied.

3.1.5.6. Change inline image syntax

Belongs to

- **Category:** Image, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does
Allows you to change the L key (or Length key) of a PDF to comply with a particular PDF version.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Compatibility with the current document version
- Compatibility with PDF 1.7 (no Length key)
- Compatibility with PDF 2.0 (write Length key)
- Keep presence of the Length key
- Fix the Length key (so it matches the actual inline image data length)

Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change PDF text string encoding* on page 101
- *Check inline image syntax*
- *Select inline image syntax* on page 387

3.1.5.7. Change OPI info

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Updates the OPI information of the document, for example if you have changed an OPI path with the PitStop Inspector in PitStop.

Note: This Action is mainly meant for OEMs, who can change OPI dictionaries through the PitStop Library. If an image with OPI information is encountered during processing, PitStop Library will call the OEM's code to replace it with the OEM's values.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Remove OPI* on page 117

- *Select images with OPI info* on page 386

3.1.5.8. Convert images to indexed color space

Belongs to

- **Category:** Color;Image
- **Type:** Changes

What it does

Changes the color of images to the indexed color space.

About the indexed color space

The indexed color space uses no more than 256 colors, and is as such particularly suited for use in Web applications. Images are typically converted to indexed color mode in order to **decrease their file sizes**. When an image is converted to indexed color, a color lookup table is created, in which the colors that were used in the image are stored and indexed. Using an indexed color table lets you reduce the file size of an image while maintaining the visual quality that you need.

3.1.5.9. Crop images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Allows you to crop images to match a clip mask and/or a particular page box.

New in 13 update 1: You can now remove the unwanted white borders (e.g. of scanned images), by selecting the **Crop white borders of image** checkbox. This option also works on stencil marks and is particularly useful as it enables subsequent Actions to work on the size of visible objects.

3.1.5.10. Remove alternate images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Removes alternate images from a PDF.

If you are working with PDFs that contain very high resolution images and render slowly on screen, you can speed up rendering by adding alternate images and then clicking the PitStop **Speed Up Image Display** button (available in the Enfocus View Modes toolbar (Acrobat 8 and 9) or the PitStop View Panel (Acrobat X and XI)).

As these alternate images are not necessary for print, you may use this Action to remove them and only keep one version. You have three options:

- **Default for printing** only preserves the images that are marked "default for printing" (recommended if you know that the alternate images have been correctly marked for printing)
- **Lowest resolution** only preserves the version with the lowest resolution, regardless of the printing setting (best for print production)
- **Highest resolution** only preserves the version with the highest resolution, regardless of the printing setting (best for on-screen viewing)

Related Actions

- *Check for alternate images* on page 285
- *Select by alternate images* on page 384
- *Add alternate images* on page 112

3.1.5.11. Remove OPI

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Removes OPI (Open Prepress Interface) information from a PDF.

OPI images are treated special as they are assumed to be preview images. They will for example not be preflighted as other images would be. If you don't use OPI in your workflow, run this Action to remove irrelevant OPI information and get correct editing and preflighting of documents.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Change OPI info* on page 115
- *Select images with OPI info* on page 386

3.1.5.12. Resample image

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Resamples, i.e. changes the resolution of the selected image(s).

How to proceed

1. Select the preferred resampling or interpolation method:
   - **Average Resampling**: computes the average pixel color of the pixels in the sample area, and replaces the entire area with this average.
   - **Bicubic resampling**: calculates the values of the new dots on the basis of a weighted average of the pixels in the same area.
   - **Bicubic B-Spline resampling**: is a modified bicubic interpolation with more sharpening effects and is recommended for upsampling.
   - **Bilinear resampling**: uses weighted interpolation between 4 pixels in the original image.

   Note: Bicubic gives the best result for photographs (but takes the longest to compute).
2. Enter the preferred resolution, for example 72 ppi for screen viewing.
3. To only resample images with a resolution below a particular threshold, select the **Resample above ... ppi** checkbox and enter a value.

   For example, if you enter 150 ppi, only images with a resolution above 150 ppi will be resampled.

3.1.5.13. Sharpen an image with unsharp mask

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Allows you to sharpen edges in pixel images by applying the unsharp mask filter.

This filter:

- Compares adjacent pixels (specified by **Radius** and **Threshold**) to determine which pixels to correct.
- Increases the contrast of these pixels (specified by **Amount**).

You can modify the amount of contrast to be applied when correcting pixels (Amount), the distance (Radius) and the brightness difference (Threshold) between adjacent pixels.

The effects of the unsharp mask filter are far more pronounced on-screen than in high-resolution output. For print, experiment to determine which options work best for your image.

Note: This option is also available in the PitStop Inspector (by selecting  > ).

3.1.6. Layers

3.1.6.1. Add objects to layer with name

Belongs to

- **Category:** Layers
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Allows you to add any selected objects to a specific layer. You can identify the layer concerned by entering a string (e.g. Layer1). Optionally, you can at the same time remove the added objects from the other layers.

How to proceed

1. Add a "select" Action to the Action List, to select the objects you want to add, for example *Select all* on page 410.
2. Add **Add objects to layers** to the Action List.
3. Enter the name of the layer.
4. Optionally, select **Remove from other layers**.

Example

To add all annotations to a particular layer and remove them from another layer, use the following Actions:

```
Select annotations <!-- Select annotations on page 397 -->
Add objects to layers <!-- Enter a name, e.g. AnnotationLayer and select Remove from
 other layers-->
```

Related Actions

- *Add objects to layer* on page 119
- *Remove objects from layers* on page 125

3.1.6.2. Add objects to layer

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to add any selected objects to a specific layer. You can identify the layer concerned by selecting it using another Action in the same Action List.

Optionally, you can at the same time remove the added objects from the other layers.

How to proceed

1. Add a first "select" Action to the Action List, to select the **layer** to which you want to assign the objects.
2. Add a second "select" Action to the Action List, to select the **objects** to be added.



Note: You don't have to specify operators in between the two "select" Actions. However, you can also use **combined** "Select" Actions to specify the layer or the objects concerned (see example 2).

3. Add **Add objects to layers** and select the **Add to selected layers** radio button.

Examples
Example 1: The following Action List will add all annotations to Layer1 and remove them from the other layers:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 Layer1 -->
Select annotations <!-- Select annotations on page 397 -->
Add objects to layers <!-- Select Remove from other layers -->
```

Example 2: The following Action List will add XObjects and annotations to LayerA and LayerB:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 "equals [AB]"; enable Use regular expressions -->
Select XObjects <!-- Select XObjects on page 384 -->
Select annotations <!-- Select annotations on page 397 -->
OR
Add objects to layers
```

Related Actions

- *Add objects to layer with name* on page 119
- *Add objects to layer* on page 119

3.1.6.3. Change layer properties

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to change certain properties, i.e. default visibility and presence in the Layers panel ("layer configuration") of the layers selected by another Action in the same Action List.

Example
To change the properties of **all** layers in the PDF, create the following Action List:

```
Select layers <!-- Select layers on page 389 -->
Change layer properties
```

Related Actions

- *Check layer properties* on page 293
- *Select objects in layers by layer properties* on page 390

3.1.6.4. Fix layers

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to perform a number of fixes to the layers in a PDF.

Options:

- Remove alternate layer configurations, only keep default configuration
- Add missing layer configuration names (e.g. "config_1", "config_2", ...)
- Make layer configuration names unique
- Remove order from layer configuration if layers are missing
- Remove AS (AutoState) entry from layer configurations. (AutoState entries are application specific usage entries).

Note: Layer configuration refers to the Layers panel.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Check layers on page 293

3.1.6.5. Flatten layers

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Removes the selected layers. You can choose whether or not to remove the objects on these layers as well:

- To keep all objects, regardless of their visibility, select **Make all elements visible**. All objects (including hidden objects) will become visible after the layers have been removed.
- To keep all objects **based on their default visibility**, select **Preserve the initial view of the PDF**. Objects on layers with **default** visibility turned on are preserved (and remain visible). All other objects (i.e. by default hidden objects) are removed.
- To keep all objects **based on their current visibility**, select **Preserve the current view of the PDF**. Objects on visible layers are preserved, regardless of their default visibility state. All other objects (i.e. currently hidden objects) are removed.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Flatten objects in layer on page 123

3.1.6.6. Flatten objects in layer

Belongs to

- **Category:** Layers
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Removes the selected objects from ALL layers and at the same time removes all empty layers.

You can choose whether or not to remove hidden objects:

- To keep all objects, regardless of their visibility, select **Make all elements visible**. All objects (including hidden objects) will become visible after the layers have been removed.
- To keep all objects **based on their default visibility**, select **Preserve the initial view of the PDF**. Objects on layers with **default** visibility turned on are preserved (and remain visible). All other objects (i.e. by default hidden objects) are removed.
- To keep all objects **based on their current visibility**, select **Preserve the current view of the PDF**. Objects on visible layers are preserved, regardless of their default visibility state. All other objects (i.e. currently hidden objects) are removed.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Flatten layers on page 122

3.1.6.7. Remove empty layers

Belongs to

- **Category:** Remove; Layers
- **Type:** Changes

What it does

Removes empty layers selected by another Action in the same Action List.

Example
The following Action List will remove **all** empty layers in the PDF:

```
Select layers <!-- Select layers on page 389 -->
Remove empty layers
```

To remove Layer1 and 2, if they are empty:

```
Select layers by name <!-- Select layers by name on page 390 - Choose "equals Layer
 [12]" and "Use regular expressions" -->
Remove empty layers
```

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Remove objects from layers on page 125

3.1.6.8. Remove objects from layers

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to remove objects from the selected layers in a PDF document.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

How to proceed

1. Add a first "select" Action to the Action List, to select the **layer** from which you want to remove objects.
2. Add a second "select" Action to the Action List, to select the **objects** to be removed.



Note: You don't have to specify operators in between the two "select" Actions. However, you can also use **combined** "select" Actions to specify the layer or the objects concerned (see example 2).

3. Add **Remove objects from layers**.

Examples

Example 1: The following Action List will remove all objects from Layer1:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 Layer1 -->
Select all <!-- Select all on page 410 -->
Remove objects from layers
```

Example 2: The following Action List will remove XObjects and annotations from LayerA and LayerB:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 equals [AB]; enable "Use regular expressions" -->
Select XObjects <!-- Select XObjects on page 384 -->
Select annotations <!-- Select annotations on page 397 -->
OR
Remove objects from layers
```

Related Actions

- *Add objects to layer with name* on page 119
- *Add objects to layer* on page 119

3.1.6.9. Rename layer

Belongs to

- **Category:** Layers
- **Type:** Changes
- **Since version:** 12 update 3

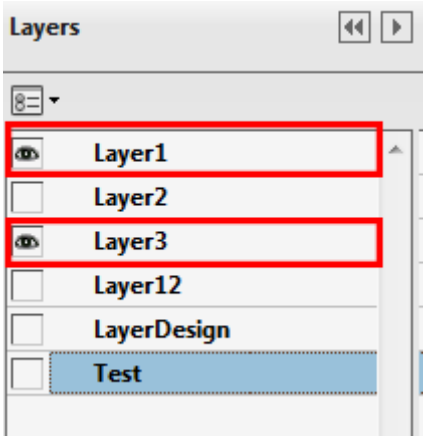
What it does

Allows you to change the name of the layers in a document.

Note: You can also use regular expressions to define the source and target layer name.

Example

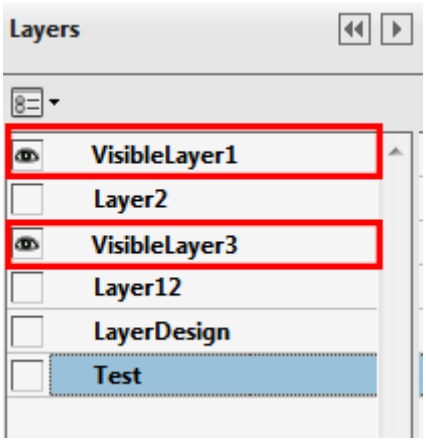
Suppose you want to rename the layers that are visible in your document, in this example Layer1 and Layer3 (but not Layer2, Layer12 or any other layer).



Proceed as follows:

1. Select the **Rename Layer** Action.
2. Under Attributes for Rename layer, configure the source and target layer as follows:
   - **From**: Layer([13])
   - **To**: VisibleLayer$1
3. Select the **Use regular expessions** checkbox.
4. Click **OK**.
5. Run the Action List.

Result:



3.1.7. Line Art

3.1.7.1. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image

- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.

Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

3.1.7.2. Change dash pattern

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Changes the pattern of dashed lines or converts them to continuous lines.

How to proceed

To use continuous lines, click .

To create a dashed pattern, click  and configure the following fields:

- In the **On** fields, enter the desired length of the dashes.
- In the **Off** fields, enter the desired size of the spaces between the dashes.
- In the **Phase** field, enter a value to indicate where the dash pattern should begin. For example, if you have chosen dashes of 5 cm each, if you have specified a phase of 2 cm, the first dash will have a length of 3 cm (5 cm - 2 cm).

3.1.7.3. Change fill and/or stroke

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to turn on or off the fill and/or stroke for the selected objects.

3.1.7.4. Change fill type

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to change the fill type of the selected objects to either Non-Zero Winding (Fill) or Even-odd (Eofill).

About the fill type

The fill type is an attribute of polygons and loops: compound paths with intersecting lines. To determine whether a point is part of the shape, two different rules can be applied:

- The **Non-Zero Winding** rule (or standard rule). This rule supposes that you draw a line from a point inside the shape to the outside of the shape, without passing through a vertex. You must now count the number of times edges wind around the point inside the shape, in a counter-clockwise direction:
  - For every edge that crosses the line from the point inside the shape in one direction, add 1 to the winding number.
  - For every edge that crosses the line in the opposite direction, subtract 1.

  If the winding number is not equal to zero, the shape area to which the point belongs, is filled. For more information, refer to *http://www.wikipedia.org/wiki/nonzero-rule*.
- The **Even-odd rule**: This rule also supposes that you draw a line between a point inside the shape outline and a point outside its outline.
  - If that line crosses the line of the shape an odd number of times, the shape area to which the point belongs, is filled.
  - If the number of crossings is even, the area is not filled.

Checking the fill type of line art

To see which rule is applied, check the object's fill attributes:

1. Select the object, using the Enfocus Select tool .
2. Click to display the Enfocus Inspector and select > .
3. At the bottom, check which button is selected:
   - If **Fill** is selected, the **Non-zero Winding rule** applies.

- If  **Eofill** is selected, the **Even-odd** rule applies.

3.1.7.5. Change flatness

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to set the flatness of a PostScript curve.

The flatness determines how the objects in a document are printed on a PostScript printer.

The default setting for flatness is 1. Increasing this value will speed up printing, but can reduce the print quality (resulting in visible segments in the curve). Decreasing this value will slow down printing, but will improve the print quality.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

3.1.7.6. Change line cap

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes how the end of a vector line looks like.

How to proceed

- To have the line end exactly, click  **butt**.
- To put a round end on the line, click  **round**.
- To have corners projected beyond the length of the line, click  **projecting square**.

3.1.7.7. Change line join

Belongs to

- **Category:** LineArt; Text

- **Type:** Changes

What it does

Changes how a corner on a vector line looks like.

How to proceed

- To have a sharp corner, click  **miter**.
- To put a round corner on the line, click  **round**.
- To flatten the corners, click  **bevel**.

3.1.7.8. Change line weight

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes the thickness of a selected line to the desired line weight.

Related Actions

- *Select by line weight* on page 392
- *Check line weight* on page 296

3.1.7.9. Change miter limit

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes the length of the extension of a corner on a vector line.

The miter limit is the limit when a join switches from mitered (pointed) to beveled (squared-off). To allow “pointier” angles, you can increase the miter limit.

3.1.7.10. Change stroke adjustment

Belongs to

- **Category:** LineArt; Text

- **Type:** Changes

What it does

Allows you to enable or disable stroke adjustment.

Stroke adjustment takes care of the rendering of paths on a raster device (printing device, computer monitor, etc.).

Example

If stroke adjustment is **turned off**, the device will draw the pixel only if it covers the path for more than 50%.

This means that a 1 pixel wide line can be drawn in different ways:

- If the line is drawn nicely on top of a pixel of the screen, the line will look fine.
- If the line is spread over 2 pixels of the screen, the width will be 2 pixels on some places and 1 pixel on other places, turning the line into an ugly, jaggy line.

If stroke adjustment is **turned on**, a correction will be made in such a way that the line looks nice and has the same width (1 pixel) everywhere.

3.1.7.11. Close path

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Joins the connection between the first and the last anchor point of a path (as required).

3.1.7.12. Combine subpaths

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Combines two selected paths.

About subpaths

A path is considered the combination of the path itself which represents most graphic state properties such as color, line-weight, etc. and the subpaths which represent the lines. For example, a doughnut is a single path with a single fill and stroke color, which consists of two subpaths (=two circles).

Related Actions

- *Select subpaths* on page 396

- *Split in subpaths* on page 141

3.1.7.13. Combine and divide shapes

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **Since version:** 2018

What it does

Allows you to combine the selected objects into one shape or vice versa, divide a shape in multiple parts.

In case of combining shapes, you should indicate how the overlapping parts should be handled:

- **Unite**: Combines the selected objects into a single shape.
- **Intersect**: Keeps the areas where objects are stacked on top of each other.
- **Exclude**: Keeps the areas where an odd number of objects are stacked on top of each other.
- **Minus front**: Keeps the areas of the bottom shape which are not overlapping with the overlying shapes.
- **Minus back**: Keeps the areas of the top shape which are not overlapping with the underlying shapes.

If you want to keep the original shapes, select **Create copy**. The changes will be made on the copy and the original shapes will be kept as they are.

Combine/Divide Shapes is also an option in the PitStop Pro > Object menu and in the context menu when you make a selection, and a tab in the PitStop Inspector.

Note: If used on 'open' paths, the paths are closed before the operation is executed. The result may be unexpected.

Examples

```
Select line art
Combine and divide shapes <!-- Choose an option -->
```

Suppose you're running this Action List on a file with the following 3 partly overlapping objects:



The table below shows the result of each of the options.

Chosen option	Result
Unite	

Chosen option	Result
	Note that the new shape gets the color of the front/top shape.
Intersect	As there is no part where all three objects are stacked on each other, the intersection is empty and all shapes are removed.
Exclude	
Minus front	
Minus back	
Divide	 Once divided, you can for example move the different parts apart. 

Related Actions

Select line art on page 393

3.1.7.14. Convert stroke to fill

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **Since version:** 2018

What it does

Converts a stroked path to a filled path.

The stroke properties become the fill properties of the newly created object.

There are two methods to make the conversion:

- **Placing the objects with stroke or fill in a knockout group** This method puts everything in a form. This may be undesirable; if so, you can select the second option.

  Clipping the object with fill by the object with stroke This method works in a different way, without knockout groups, it simply cuts away the stroked object. Note that exceptionally small hairlines may be visible (depending on the renderer used).

In most cases, there will be no visual difference between both methods.

Examples
Some examples where this Action can be useful:

- You want to combine shapes (*Combine and divide shapes* on page 133). This is not possible with objects that have no fill.
- You want to remove one dash of a dashed line. This is only possible after you have converted the stroke to a filled path.

3.1.7.15. Crop line art

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **Since version:** 2018

What it does

Performs a hard crop on line art.

This is useful to remove redundant data, for example content that is masked away. This reduces the complexity and makes the file faster to process and easier to edit. Note that PitStop 2018 comes with a standard Action List "Clean Up Content" that makes use of this Action.

There are three ways to crop line art:

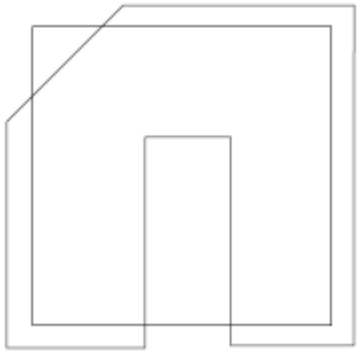
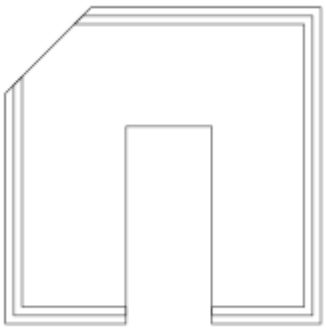
- **Crop line art to clip mask** Allows you to "execute" clipping masks on line art: the objects are cropped to their clipping mask, while the clipping path itself and anything that was clipped away is removed, without causing any visual difference. During this process, strokes are contourized (converted to fill paths). As a consequence, 'redundant' (because invisible) line art is removed, which reduces the file size and speeds up the rendering and processing of your artwork files.
- **Crop line art to the page box of your choice**: Removes all line art outside the specified page box.
- **Crop line art to forms**: Removes all line art outside the form (if applicable).

In case of knockout behavior, there are two methods to crop the line art:

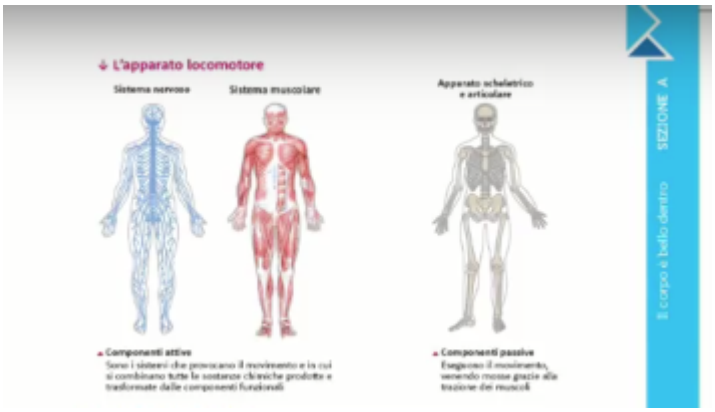
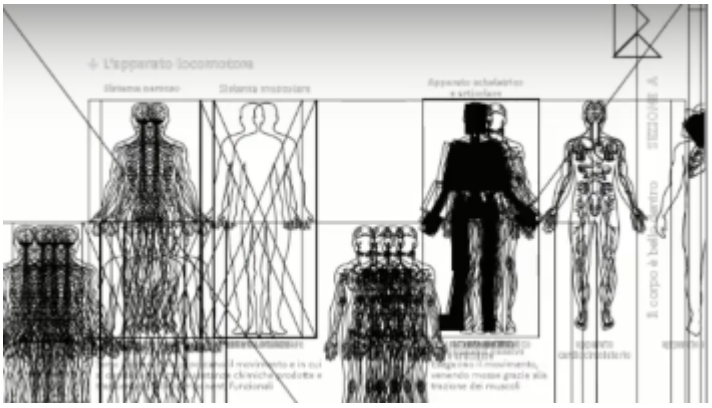
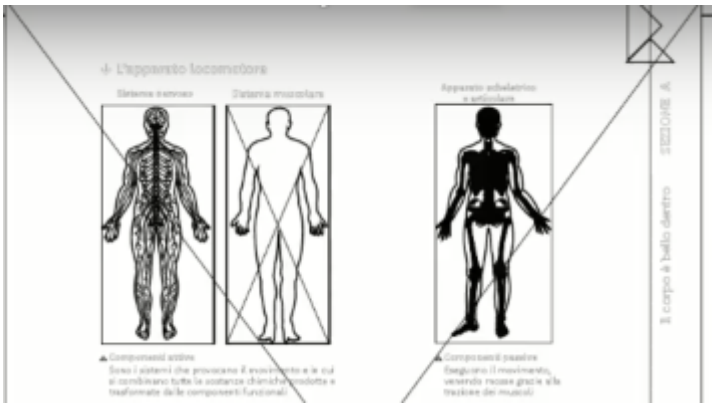
- **Placing the stroke and fill objects in a knockout group** This method puts everything in a form. This may be undesirable; if so, you can select the second option.
- **Clipping the fill object by the stroke object** This method works in a different way, by cutting away the stroked object. No forms/knockout groups are created. Note that exceptionally small hairlines may be visible (depending on the renderer used).

In most cases, there will be no visual difference between both methods.

Example 1

	Clipped image. There is no visual difference before and after cropping/running the Action.
	Clipped image in wireframe mode BEFORE cropping/running the Action.
	Clipped image in wireframe mode AFTER cropping/running the Action.

Example 2

	How the page looks. There is no visual difference before and after cropping/running the Action.
	Page in wireframe mode BEFORE cropping/running the Action.
	Page in wireframe mode AFTER cropping/running the Action.

Want to know more?

There is a nice movie explaining this Action. Check it out on our learning platform (www.enfocus.com/learn): *PitStop 2018 features*.

3.1.7.16. Fix negative dash pattern phase

Belongs to

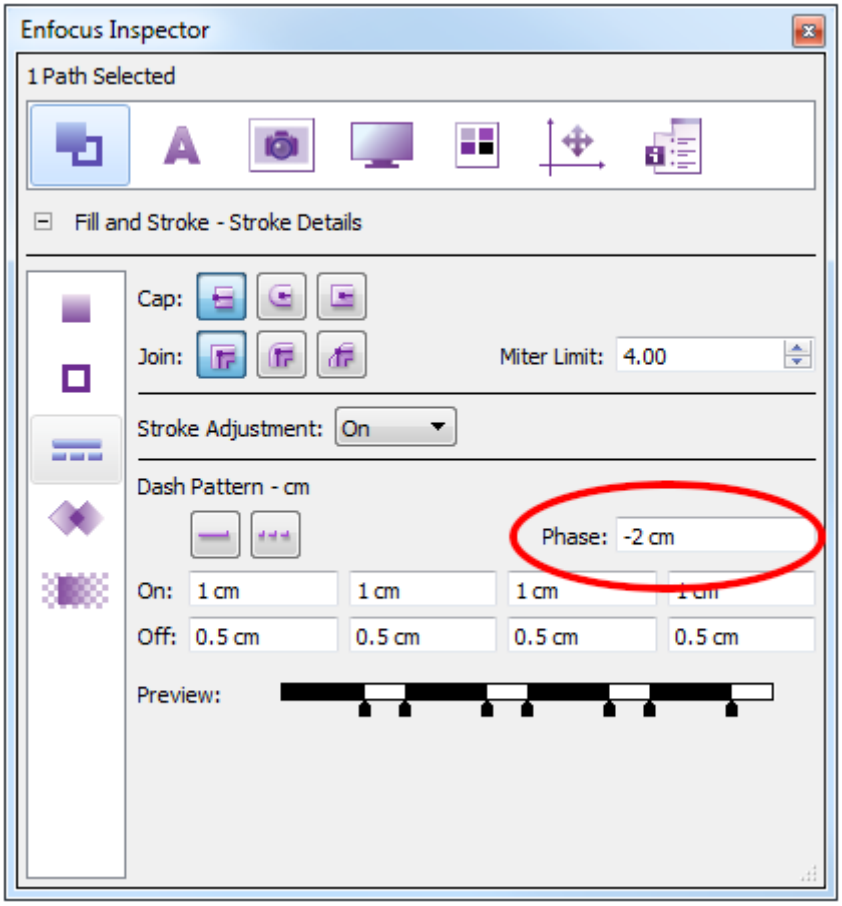
- **Category:** LineArt
- **Type:** Changes

- **Since version:** 13

What it does

Converts a negative dash pattern phase into a positive phase without any visual change.

The dash pattern phase specifies the distance into the dash pattern to start the dash. Negative values may not be supported by the RIP.



Example:

Applying this Action to the dashed pattern in the above example (phase = - 2 cm) will result in a new phase of 4 cm. This positive value is calculated by adding the total length of the dash pattern (6 cm) to the negative phase (-2 cm).

Related Actions

- *Select objects with negative dash pattern phase* on page 394

- *Fix negative dash pattern phase* on page 137

3.1.7.17. Match fill and stroke colors

Belongs to

- **Category:** Color; LineArt
- **Type:** Changes
- **Since version:** 12 update 3

What it does
Changes the stroke color to match the fill color or vice versa.

Use case

Suppose you want to print very small text. To improve the readability, you convert the text to outlines and add a stroke. However, the stroke color is black by default. This may not be desired, e.g. if your text is in color. In that case, you can run this Action with the option **Change the stroke color to match the fill color**.

Related Actions

Change color on page 84

3.1.7.18. Normalize line weight

Belongs to

- **Category:** General; LineArt; Position and size
- **Type:** Changes

What it does
Normalizes paths where a transformation matrix caused distortions, by removing the distortion, giving the path a uniform line weight equal to the average reported in the Inspector. The Action also works on sheared paths.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392
- *Check line weight* on page 296

3.1.7.19. Open path

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Removes the connection between the first and the last anchor point of a path.

3.1.7.20. Reverse path

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **New Since:** PitStop 2022

What it does

Changes the direction of the starting and ending point of the selected path.

3.1.7.21. Separate stroke and fill

Belongs to

- **Category:** Line Art
- **Type:** Changes

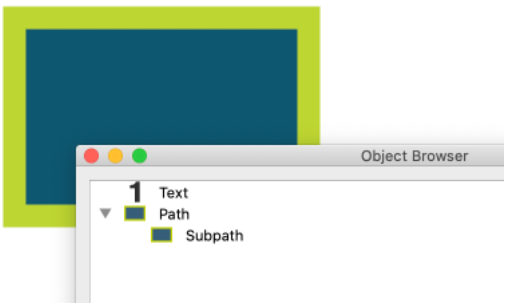
What it does

Splits stroke and fill of line art that has both a stroke and a fill.

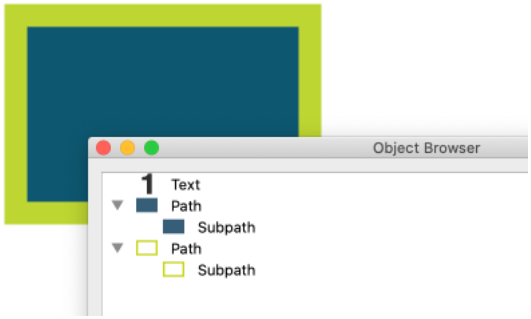
This is for example useful if you want *to add bleed around a contour*, which is able to extend line art, but only if it's not both stroked and filled.

Example

Before:



After:



Related Actions

- *Add bleed around contour* on page 215

3.1.7.22. Split in subpaths

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Allows you to split any compound path into separate paths, for example to give them a different color.

Splitting compound paths in

In , you can as well split compound paths. Proceed as follows:

1. Select the compound path (by using the PitStop Select Objects tool).
2. Right-click it.
3. Click **Path** > **Compound Path** > **Release Compound Path**.

Related Actions

- *Combine subpaths* on page 132
- *Select subpaths* on page 396

3.1.8. Metadata

3.1.8.1. Add missing creation and modification date

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Inserts the creation and modification date.

In some legacy PDF applications it was possible to create a PDF file without a creation or modification date. This Action fixes this issue.

Related Actions

Check creation and modification date on page 301

3.1.8.2. Change annotation flags

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Allows you to enable or disable the annotation flags of your choice.

Following flags can be changed:

- Invisible
- Print
- NoRotate
- ReadOnly
- ToggleNoView
- Hidden
- NoZoom
- NoView
- Locked
- LockedContents

Related Actions

- *Check annotation flags settings* on page 298
- *Check annotations print setting* on page 299
- *Use flags to select annotation* on page 404

3.1.8.3. Change annotations print setting

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Change annotations' print setting allows you to set the selected annotations to **Printing** or **Non-Printing**.

3.1.8.4. Change binding

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Allows you to redefine a document's binding; you can set binding to the right or to the left.

Most European language documents are bound on the left.



Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Check binding* on page 300
- *Select by binding* on page 399

3.1.8.5. Change document info

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Changes the document information as found in the document properties in Acrobat.

You can change, remove or replace the following details:

- Producer
- Title
- Subject
- Author
- Creator
- Keywords

If you want to replace document info, you can make use of fixed strings and/or variables, such as the user name, company, date ...

Example

To replace the current keywords in your document with the document title and the word "PDF", proceed as follows:

1. Run the Change document info Action to remove the current keywords:

```
Change document keywords <!-- select Remove -->
```

2. Run the Change document info Action to insert the new keywords:

```
Change document keywords <!-- select: Set to PDF, %Document Title% -->
```

Related Actions

- *Check document info* on page 301
- *Select by document info* on page 400

3.1.8.6. Change document information dictionary compliance

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Makes the information dictionary compliant with the chosen PDF version.

About the info dictionary

The info dictionary contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document Properties.

The specifications for the info dictionary depend on the PDF version:

- PDF 1.7: The info dictionary is optional. If it's present, it may contain the following entries: Title, Author, Subject, Keywords, Creator, Producer, CreationDate, ModDate and Trapped.
- PDF 2.0: The info dictionary is optional. If it's present, it may be empty, or contain CreationDate and/or ModDate. The other entries are deprecated.
- PDF/X-6: There should be no info dictionary, or if there is one, it should be empty.



Note: There is one exception to the above: if there is a PieceInfo dictionary in the document catalog dictionary, the info dictionary is required and must contain the ModDate entry.

Note that as of PDF 2.0, the *info* dictionary is officially called *information* dictionary.

Options

- **PDF 1.7**: PitStop only adds an info dictionary (including ModDate) if document level PieceInfo is present.
- **PDF 2.0**: PitStop removes deprecated entries from the info dictionary (if necessary). If document level PieceInfo is present, it makes sure there is an info dictionary that contains ModDate.
- **PDF/X-6**: PitStop removes the info dictionary if there is one, except if document level PieceInfo is present; then it makes sure there is an info dictionary that contains ModDate.
- **Current document version**: PitStop detects the current PDF version and makes sure the info dictionary is compliant with the current PDF version.
- **None (leave it unchanged)**: This option prevents PitStop from interfering with the info dictionary at the time of saving the file.

3.1.8.7. Change Output Intent

Belongs to

- **Category:** Color; Metadata
- **Type:** Changes

What it does

Changes a PDF's Output Intent to comply with a particular PDF/X or PDF/A version, using a particular ICC profile and/or ICC characterization.

Note that you can change the document Output Intent or the page level Output Intent.

Related Actions

Check Output Intent on page 265

3.1.8.8. Change PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes

What it does

Changes the Acrobat and PDF version of a PDF.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.



Note: Changing the PDF version will not change the attributes of a higher version PDF to those of a lower one - it only changes the version **number**. As higher versions of Acrobat always save the PDF version number up to their version, even if nothing has changed, this Action can be useful to reset the PDF version to the one used to create the PDF.

Example

If you configure this Action to change the PDF version to PDF 1.5, both the PDF version and the Acrobat version will be changed. The new PDF version will be PDF 1.5; the new Acrobat version will be 6.0.

If you change the PDF version to PDF 2.0, the Acrobat version will remain unchanged.

Related Actions

- *Select by PDF version* on page 400

- *Check PDF/Acrobat compatibility* on page 311

3.1.8.9. Change PDF/A version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Changes the version key tag in a PDF/A document to another version key.

The following version keys are supported:

- PDF/A-1a
- PDF/A-1b
- PDF/A-2a
- PDF/A-2b
- PDF/A-2u

About PDF/A version keys

PDF/A is a specialized subset of the PDF specification, also known as "PDF for **A**rchive".

The PDF/A version key identifies the version of the PDF/A standard the document complies with. If the version key is not set correctly, the document is not PDF/A compliant. Note that changing the **key** does not change the compliance of the document! It will only allow you to continue with your workflow.

Related Actions

- *Remove PDF/A version key* on page 154
- *Check PDF/A version key* on page 312

3.1.8.10. Change PDF/X version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Changes the version key tag in a PDF/X document to another version key.

The following version keys are supported:

- PDF/X-1a:2001
- PDF/X-32002
- PDF/X-1a:2003
- PDF/X-3:2003

- PDF/X-4
- PDFX/-4p

About PDF/X version keys

PDF/X is a specialized subset of the PDF specification, also known as "PDF for Exchange".

The PDF/X version key identifies the version of the PDF/X standard the document complies with. If the version key is not set correctly, the document is not PDF/X compliant. Note that changing the **key** does not change the compliance of the document! It will only allow you to continue with your workflow.

Related Actions

- *Remove PDF/X version key* on page 155

3.1.8.11. Change ProcSet resources

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Adds, removes or does not change the ProcSet entry as specified in the attributes of this Action.

You can as well have PitStop make the appropriate change based on the document's PDF version (see Options).

This Action is useful to make a PDF compliant with a particular PDF version.

About ProcSet resources

Procedure sets are categories of related PDF operators used in content streams. The ProcSet entry in a content stream's resource dictionary holds an array that consists of the procedure sets used in that content stream, for example: /ProcSet [/PDF /Text] . Procedure sets are used only when the content stream is printed to a PostScript output device.

ProcSet resources were used in older PDF versions, but as of PDF 1.4 this feature is considered obsolete. As of PDF 2.0, this feature is deprecated.

For more details, refer to *the PDF Reference* (See 14.2 Procedure Sets).

Options

- **Add ProcSet (default)**
- **Remove ProcSet**
- **Do not change the ProcSet presence** (so if the ProcSet entry is defined, just keep it; if it's not, do not add it)
- **Add, remove or don't change ProcSet, dependent on the document's PDF version**, PitStop behaves as follows:
  - PDF 1.3 and earlier: Add ProcSet resources
  - PDF 1.4 - PDF 1.7: Do not change the ProcSet presence

- PDF 2.0: Remove the ProcSet resources

3.1.8.12. Change trapped flag

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Modifies the trapped flag.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

3.1.8.13. Fix PDF/A extension schema definitions in document XMP metadata

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Fixes issues with the PDF/A extension schema definitions in document XMP metadata.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

About XMP schema definitions

PDF/A supports the predefined schema definitions of the XMP 2004 specification. However, as these only cover general metadata requirements, custom XMP schemas ("extension schemas") are also supported to meet company- or industry-specific requirements, on condition that a description of these extension schemas is embedded in the XMP.

3.1.8.14. Fix version compatibility with PDF/A-2

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Fixes the header and catalog version of the PDF to make it compliant with PDF/A-2.

Related Actions

- *Check version compatibility with PDF/A-2*

3.1.8.15. Fix version compatibility with PDF/X-6

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Fixes the header and catalog version of the PDF to make it compliant with PDF/X-6 or PDF/X-6p.

Related Actions

- *Check version compatibility with PDF/X-6*

3.1.8.16. Flatten annotations

Belongs to

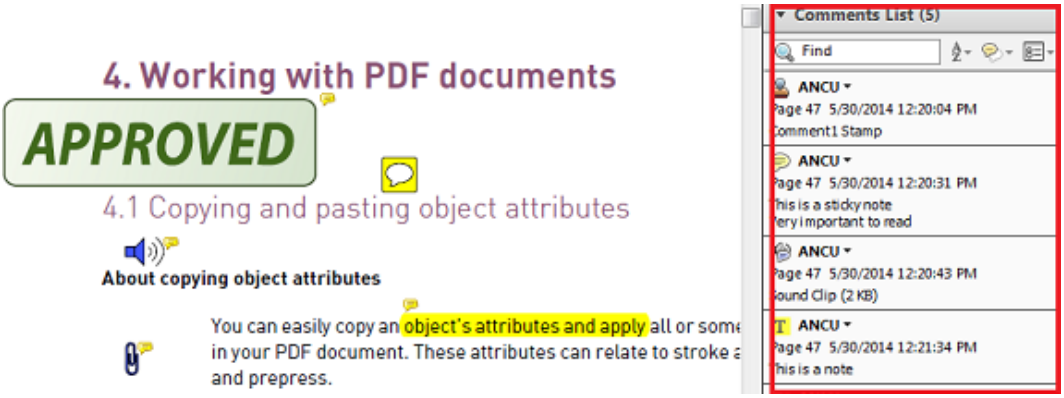
- **Category:** Metadata
- **Type:** Changes
- **Since version:** 12 update 3

What it does

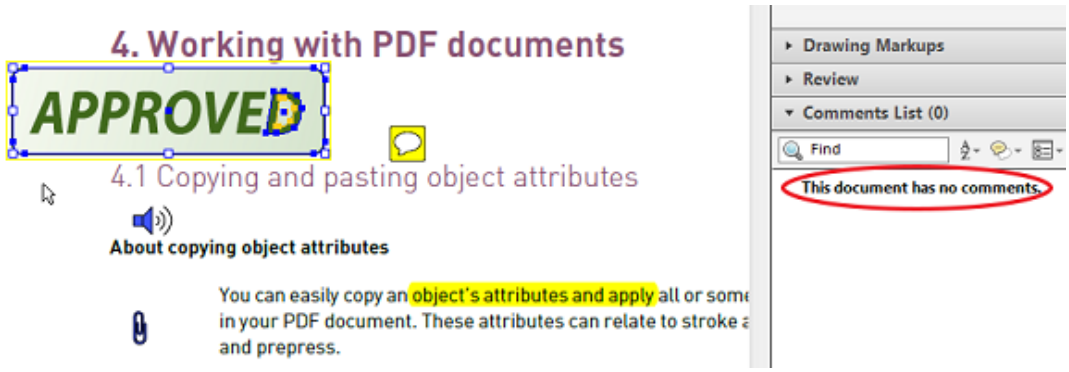
Allows you to flatten the annotations in a PDF document. The annotations (often interactive elements such as sound clips, callouts, stamps,...) are converted to simple graphics that can be selected, changed, removed, ...

Example

Before: The PDF contains five annotations: a stamp, a sticky note, a sound clip, a text note and an attachment.



After: The PDF does not contain any annotations anymore; the Comments List is empty. The graphics in the PDF can be selected and removed or modified (e.g. the color, size,...) as required. Note that the callouts are removed.



3.1.8.17. Flatten form fields

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Allows you to convert form fields to normal objects in a document.

This Action is useful if you have output issues with form fields as content, for example because the output device or the PDF renderer does not support form fields.

Related Actions

- *Check form fields* on page 304

- *Remove form fields* on page 152

3.1.8.18. Make document metadata consistent

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Makes sure that the metadata in the different metadata locations has the same values. In case of inconsistencies, the most recent value is used.

If multiple creators are not considered an inconsistency, select the **Allow multiple creators** checkbox. In that case, the "Creator" property will not be changed, even if it is not the same in the different metadata locations.

How it works

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

- *Check if document metadata is consistent* on page 308
- *Select if document metadata is inconsistent* on page 403

3.1.8.19. Remove action dictionaries

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes action dictionaries ("actions") from a PDF.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

You may want to remove these actions, as they are not allowed in a PDF/X file. The Remove action dictionaries Action will only remove the **action**; the object (the bookmark, annotation) the actions are linked to will not be removed. For example, if you remove the action from a bookmark, the bookmark is still visible, but not clickable anymore.

Related Actions

Check for action dictionaries on page 305

3.1.8.20. Remove additional actions

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **Since:** 2022

What it does

Removes additional action entries from Root, Page, Widget and Field dictionaries.

This is a fix for PDF/X-6, as PDF/X-6 does not support additional actions.

3.1.8.21. Remove form fields

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes any PDF form fields from a document.

You may lose data if you do this.

Related Actions

- *Check form fields* on page 304

3.1.8.22. Remove Javascript

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes JavaScript code (which might perform unwanted actions) from a PDF.

This language is often used to add interactive functionality to PDF files. However, in a print production environment, these scripts serve no purpose and may result in increased file sizes.

Related Actions

Check for Javascript on page 306

3.1.8.23. Remove attachments

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **Since Version:** 13 update 2

What it does

Removes attachments and attachment annotations from a PDF. This may be useful to reduce the file size.



Note: After running the Action, the attachment reference may still be visible in the Attachments pane. After saving and closing the file, it will be gone.

This Action does not work on PDF Portfolios, as this would result in empty PDF files.

3.1.8.24. Remove marked content

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Strips PDF generator defined content from a PDF.

Marked content is content tagged with special messages so that the application that opens it can read it in a particular way.

Related Actions

Check marked content on page 311

3.1.8.25. Remove metadata

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes the selected metadata from a PDF. This is typically done to reduce the file size.

You can remove the following types of metadata:

- Annotations
- Thumbnails
- Article threads
- Page labels
- Acrobat capture info
- Bookmarks
- Structural information (= removes all tags, including Tagged PDF tags)
- PieceInfo
- Job ticket
- Named destinations (includes annotations and bookmarks)
- Metadata streams (to reduce the size of the file) - new option since PitStop 13 update 2



Note: In PitStop 2019, the 'Remove structural information' checkbox has been split up into two separate checkboxes: 'Structural information' and 'PieceInfo'. Action Lists from earlier versions with 'Remove structural information' enabled, will have both checkboxes selected.

3.1.8.26. Remove name from XObjects

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes Name from form XObject and image XObject stream dictionaries. This is typically done to fix deprecated PDF 1.x features.

3.1.8.27. Remove PDF/A version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

This Action removes the PDF/A version key from the PDF file.

Related Actions

- *Change PDF/A version key* on page 146

- *Remove PDF/A version key* on page 154

3.1.8.28. Remove PDF/X version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

This Action removes the PDF/X version key from the PDF file.

Related Actions

- *Change PDF/X version key* on page 146
- *Check PDF/X version key* on page 312

3.1.8.29. Remove unused destinations

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Destinations identify locations or views in a PDF you can point to using bookmarks or links. As destinations increase the file size, you may want to remove the destinations that are not used, to reduce the file size.

See also: *Check unused destinations* on page 314

3.1.8.30. Set correct document XMP name spaces

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

The XMP metadata standard (used for labeling metadata in PDFs) defines namespaces for defined sets of core properties. This Action checks if the correct document XMP namespaces are used, and fixes issues as required.

Related Actions

Check if document XMP name space uses correct prefix on page 309

3.1.8.31. Set XMP file identifiers

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Adds missing file identifiers to the PDF's XMP metadata stream, for example: the Version ID, the DocumentID, the RenditionClass.

Related Actions

Check file identifiers in document XMP metadata on page 272

3.1.9. Operators

3.1.9.1. Copy or cut objects to clipboard

Belongs to

- **Category:** General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does

Allows you to cut or copy the selected objects to a clipboard. You should give the clipboard a name (by default: Untitled 1), to avoid confusion when copy-and-pasting different selections in one Action List. You can use up to 1,000 clipboards if you wish, however it is important to realize that these clipboards are not saved; they are only used while the Action List in which they are used is run.

This Action should be preceded by a selection (i.e. to select the object you want to cut or copy) and followed by *Paste objects from clipboard* on page 74 in the same Action List. You cannot cut or copy something to a clipboard in one Action List and then paste it within another Action List.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut or copy.
3. Add a *Cut or copy objects to clipboard* Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 1, e.g. if you added "Select all" in step 1).
5. Add a *Paste objects from clipboard* on page 74 Action and set the attributes on the different tabs (e.g. to define the position of the pasted objects).

Note:

- Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.
- If there is nothing to select to cut or copy (i.e. the select Action of step 2 in the above procedure result in an empty selection), the content of the clipboard is not overwritten with an "empty" set of objects! The previous content (if any) is preserved and will be pasted once more. If you do not want this, you can select the **Clear clipboard after paste** checkbox in the attributes of *Paste objects from clipboard* on page 74 Action.

Related Action

- *Paste objects from clipboard* on page 74

3.1.9.2. Paste objects from clipboard

Belongs to

- **Category:** Add, General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does

Allows you to paste objects from the clipboard to one or more selected pages. You can paste them multiple times (with fixed distances or distributed across a distance) as required and indicate where they should be placed.

This Action must be preceded by a "copy/cut "Action (that moves the objects to the clipboard) and a "select" Action (that indicates where the objects should be pasted) in the same Action List.

If there are several "copy/cut" Actions in the Action List, you may want to give each of the clipboards an appropriate name, to make sure the different objects are pasted on the correct pages.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut/copy-and-paste.
3. Add a *Copy or cut objects to clipboard* on page 105 Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 2 -if you added "Select all" in step 2, step 4 is redundant).
5. Add a *Paste objects from clipboard* Action and select the name of the clipboard (as entered in step 2). Switch to the different tabs to define the region and the position of the copied objects (see table below).

Note: Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the clipboard that contains the objects to be pasted. Determine whether or not the clipboard should be cleared after the object was pasted. This option determines what happens if there are no objects to be copied (= if the select Action in step 2 of the above procedure results in an empty selection). • If checked, the clipboard will be empty, so nothing will be pasted. • If cleared, the clipboard will still contain content from the previous page and that content will be pasted.
Attributes	Determine if the objects should be pasted in the foreground or in the background of the document.
Region	Determine the region where the objects should be moved to. The region is defined based on the page box of your choice and you can define margins within that page box, by grabbing the offsets from a selected area (using the **Grab position** button ). You can also specify a specific area the objects should not be placed in, also based on a page box and with the option to set margins. **Note:** The settings on this tab are only used if **Move graphic elements** is selected on the Position tab. If this is not the case, the original location of the graphic elements is preserved.
Repeat	If the objects should be pasted more than once on a page, change **No repeat** to: • **Distribute/Repeat fixed number of graphic elements** if you want to determine how often the copied objects should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the pasted objects evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the pasted objects. If you choose "repeat", you should define the exact distance between the pasted objects yourself. The distance can be between the bounding boxes of the pasted objects (choose: **Between edges**) or from center to center (choose: **Between centers**). **Note:** Remember that you can use Smart Preflight variables to define the distances.
Position	If the selected objects should be moved, select **Move graphic elements**. Indicate how the objects should be positioned relative to the chosen

Tabs	On this tab, do the following:
	region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

Related Action

- *Copy or cut objects to clipboard* on page 105
- *Add copied graphics* on page 63

3.1.10. Packaging

3.1.10.1. Change layer processing steps - ISO 19593-1

Belongs to

- **Application:** PitStop Pro
- **Category:** Packaging
- **Type:** Changes
- **Since Version:** 13 update 2

What it does

Allows you to change processing steps metadata of the layers of a PDF. You can either choose a different group or a different type. Processing steps metadata is defined by ISO standard 19593-1. For more information, refer to *the website of ISO (International Organization for Standardization)*.

Supported groups:

- Structural
- Dimensions
- Braille
- Legend
- Positions
- White
- Varnish

You can as well define a custom group and custom step types. To do so, enter the appropriate name in the text box.

Related Actions

- *Select layers by processing steps - ISO 19593-1*
- *Check processing steps - ISO 19593-1* on page 318
- *Remove processing steps - ISO 19593-1* on page 232

3.1.10.2. Close gaps in contours

Belongs to

- **Category:** Packaging

- **Type:** Changes
- **Since Version:** 13 update 2

What it does
Allows you to close gaps in contours. You can set the threshold, e.g. only close gaps that are smaller than 0,10 cm.

If gaps should only be closed if the result is a closed contour, select the corresponding checkbox.

Remark

We recommend using this Action in combination with *Override rounding rules* on page 447 because of precision issues.

Related Action

- *Select inside or outside contour* on page 425

3.1.11. Page

3.1.11.1. Add hems or pockets

Belongs to

- **Category:** Page
- **Type:** Changes

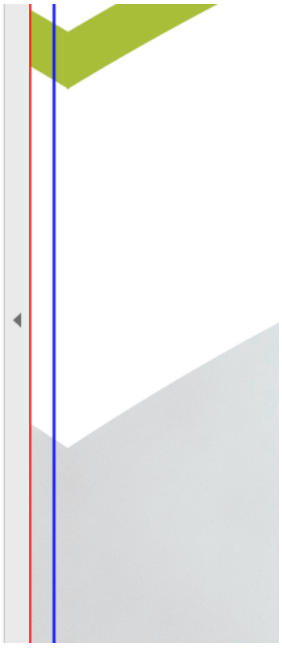
What it does

Generates mirrored content for banners, i.e. hems or pockets between the trim and bleed box. You can choose to add them to particular sides and/or to the corners.

You can also add a margin inside the trim box. This value determines where the bleed starts from the inside of the trim box. This can be useful to avoid hairlines if the artwork is positioned close to the trim box.

Example

Bleed is added between the trim box (in blue) and the bleed box (in red). The line art is mirrored, not extended.



3.1.11.2. Add pages

Belongs to

- **Category:** Add; Page
- **Type:** Changes

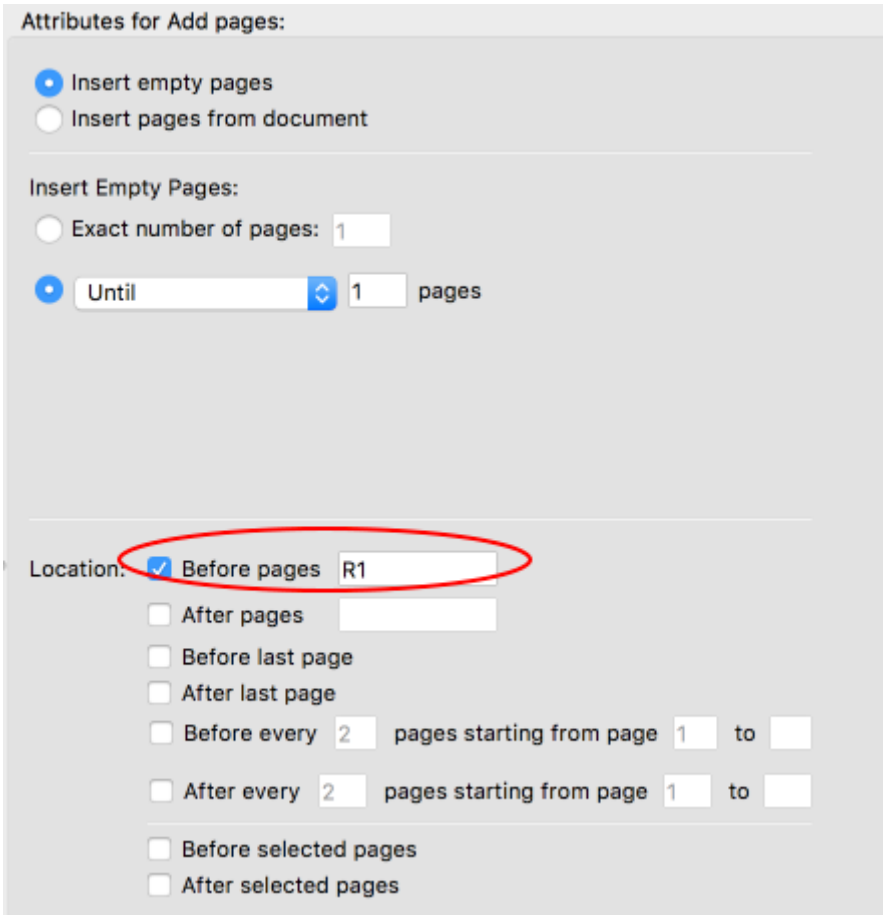
What it does

Allows you to insert either empty pages or pages from a particular PDF file (by embedding the file or by using the file path (optionally specified by a variable)).

You can choose the number of pages to add, the location of the new pages in the PDF ...

As of PitStop 2019, you can insert pages before or after a selection you made earlier in your Action List. You could for example select all pages with a certain string and insert empty pages based on this selection. See also the example Action List below.

"R[number]" notation
If you want to add pages starting from the end of the PDF, you can use the "R[number]" notation in the **Before pages/After pages** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ... This allows you for example to add a backup interleave page to every page in the PDF.



Example Action List
Suppose you have a mixed landscape/portrait document and you want to insert an empty page after every landscape page. That's possible with the following Action List.

```
Select all
Select by page orientation <!- select if page orientation = landscape ->
Add pages <!- select "insert empty pages" and "after selected pages" ->
```

3.1.11.3. Apply page rotation

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Sets the page rotate key defined in the PDF to 0 °. This may have a visual effect.

3.1.11.4. Apply page scaling factor

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Apply page scaling factor removes the page scaling factor and scales the page to compensate.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By applying the page scaling factor, the actual page size will become 20 by 20 inches.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.



Note: When the result of applying the scaling factor exceeds the size of 200x200 inches, the page may not be displayed well. This is a limitation of Adobe Acrobat.

Related Actions

- *Check if page scaling factor is used* on page 323
- *Remove page scaling factor* on page 175

3.1.11.5. Center page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Places all objects in the center of the page.

You can:

- Center the objects horizontally, vertically or both.
- Center the content relative to a page box and set margins (left, right, top and bottom).
- Use page rotation and scaling factor as required.
- Only center the visible part of the content.

3.1.11.6. Change art box

Belongs to

- **Category:** Page

- **Type:** Changes

What it does

Allows you to create or resize an art box.

You must choose one of the following options:

- To create a new art box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize the art box relative to the axes of the existing art box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of the art box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

3.1.11.7. Change bleed box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a bleed box.

You must choose one of the following options:

- To create a new bleed box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a bleed box relative to the axes of the existing bleed box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a bleed box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**

- **Always require page box to be defined**

3.1.11.8. Change blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Changes

What it does

Allows to change the blending color space and/or the luminosity softmask blending color space (if defined in the PDF document).

You can:

- Change the color to CMYK, gray or RGB, or
- Remove the blending color space, by selecting "none" from the first list, or
- Leave one of the color spaces unchanged, by selecting **Do not change**.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Check if blending color space is defined* on page 261
- *Select by blending color space* on page 364

3.1.11.9. Change crop box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a crop box.

You must choose one of the following options:

- To create a new crop box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a crop box relative to the axes of the existing crop box, select **Resize** and enter the required values.

- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a crop box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

3.1.11.10. Change media box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a media box.

Choose one of the following options:

- To create a new media box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a media box relative to the axes of the existing media box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a media box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Position the page content**

The last option allows you to determine the position of the content on the page. Note that the dropdown only controls *the distance between the new page box and the content*. Options are:

- **No move**: The content stays where it was (the coordinates do not change), regardless of the new size or position of the media box. It is possible that the content does no longer fit in the media box!
- **Center**: The content will keep its position relative to the center of the mediabox. For example, if the content is placed in the bottom left corner of the media box, that will also be the case after resizing, but again: it is possible that the content does no longer fall inside the media box (e.g. if the new box is too narrow).
- **Lower left/lower right**: The content will keep its position relative to the lower left or lower right of the media box; the distance to the lower left or lower right of the media box will be kept the

same. For example, if the content is placed in the rightmost corner of the media box, that will also be the case after resizing.

- **Upper left/upper right**: The content will keep its position relative to the upper left or upper right of the media box; the distance to the upper left or upper right of the media box will be kept the same. For example, if the content is placed in the rightmost corner of the media box, that will also be the case after resizing.
- **Shrink to fit**: This option makes sure that the content fits the new page box; the content may be resized as well if needed.

Remark

Be aware that this Action does not change the crop box; only the media box and the content (if moved along with the media box) are affected. As Acrobat uses the crop box definition for display, when opening the file in Acrobat, the content may not be visible/no longer centered due to the media box being resized and content being moved along. You can fix this by removing the crop box or by changing the crop box in the same way as the media box (see *Remove crop box* on page 174 or *Change crop box* on page 165).

If no crop box was defined, Acrobat uses the media box for display.

3.1.11.11. Change objects that are close to the page edge

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes objects that are close to the page edge, but do not bleed enough.

You must specify the required distance to the trim box and the distance into the bleed.

Optionally, you can choose to treat subpaths of compound paths individually. In that case, each of the subpaths will be changed separately.

See also:

- *Check if object is close to the page edge* on page 321
- *Select objects close to the page edge* on page 415

3.1.11.12. Change page box layout

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the page box layout in a PDF to Press, Screen viewing or PDF/X Layout.

The attributes depend on the chosen layout:

- **Press layout** (typically used for print)

  If you select this layout, the trim box will be derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, and *art box* is the second, the trim box will be derived from the bleed box, if found; if there is no bleed box found, the trim box will be derived from the art box; if there is no art box, the Action will search for the third page box in the list, and so on.

  You must also define the minimum distance between the media and bleed boxes and between the bleed and trim boxes.

  To get the PDF to display at the size of the media it will be printed on, select the appropriate option:

  - **Crop box must equal trim box**, or
  - **No crop box must be defined or the crop box equals the media box**. This means that, if the crop box is not defined yet, it will not be added by this Action; if the crop box is defined, it will get the same size and position as the media box.

- **Screen viewing**

  If you select this layout, the page is defined solely by the crop box, which should have the same size as the media box. No other page boxes are allowed. The crop box/media box is derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, the crop box/media box will be derived from the bleed box if found in the PDF; if the bleed box is not found, the second page box in the list will be searched for, ...

- **PDF/X layout**

  If you select this layout, the exact page box layout depends on the chosen PDF/X version.

  - If you have chosen PDF/X-1a:2003 or PDF/X-3:2003, the art box or trim box shall not extend beyond the boundaries of the bleed box and the crop box.
  - PDF/X-4 allows either a trim or an art box but forbids having both.
  - PDF/X-6 allows an art box, next to the mandatory trim box.

  To define the trim box relative to the media box, define the desired margins.

Related Actions

Check page box layout on page 326

3.1.11.13. Change page format

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Snaps the page box of your choice to a multiple of either columns or rows.

This Action is useful for newspapers or magazines with content displayed in columns and rows.

How to proceed

To configure the Change page format Action

1. Select the page box you wish to define.
2. Select **A multiple of columns** and/or **A multiple of rows** as required.
3. Set the preferred column or row width.
4. Add column/row spacing as required.

See also *Check page format* on page 327

3.1.11.14. Change page labels

Belongs to

- **Category:** Page
- **Type:** Changes
- **Since Version:** 2019

What it does

Changes the label of a page. You can select a different number style, a different prefix and/or change the number to start with.

If you leave any of the options unselected, then the corresponding label property remains untouched (or receives the default property value, if the document did not have page labels).

Example

Suppose you have a document with 10 pages and inconsistent page labels (e.g. inconsistent numbering, some with and some without prefix, etc.). You could use the following Action List to make the labels consistent (mydoc_1, mydoc_2, mydoc_3 etc).

```
Select pages with page label   <!- choose "range: 1-10" and select both odd and even
 -->
Change page labels             <!- choose "number style: decimal", "prefix: mydoc_",
 start: 1" -->
```

Related Actions

- *Select pages with page label* on page 417
- *Remove page labels* on page 176

3.1.11.15. Change page orientation

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the page layout to either portrait, landscape or the orientation that is used most in the PDF.

The page orientation is based on the selected page box. If you don't want to change the page orientation in case all pages have already the same orientation, enable the **Only apply if not all pages have the same orientation** checkbox.

Related Actions

- *Select by page orientation* on page 413
- *Check page orientation* on page 327

3.1.11.16. Change trim box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a trim box.

You must choose one of the following options:

- To create a new trim box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a trim box relative to the axes of the existing trim box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a trim box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

3.1.11.17. Flip content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Flips the contents of a selected object horizontally or vertically.

You can flip the content relative to the center of one of the page boxes. Note that you can take page rotation into account as required.

Related Actions

- *Check for flipped objects* on page 338
- *Flip selection* on page 199

3.1.11.18. Move media box to 0.0

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the coordinates of the media box, so that the lower left corner of the media box is located at coordinates 0,0. This won't change the way the file looks.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

3.1.11.19. Move objects into the page box

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Moves the selected objects into a particular page box.

You can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects out of the page box* on page 171

3.1.11.20. Move objects out of the page box

Belongs to

- **Category:** Page; Position/Size

- **Type:** Changes

What it does

Moves the selected objects out of a particular page box.

You can can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects into the page box* on page 171

3.1.11.21. Move page box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to move one of the page boxes to the desired position.

You can choose which page you want to move, and define the target position in one of the following ways:

- By specifying the position relative to one of the other page boxes, based on the anchor point.
- By specifying the target X and Y coordinates.
- By specifying the values by which the X and Y axis should be moved.

You can take into account page rotation and scaling factor as required.

3.1.11.22. Move page content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page in the preferred direction (horizontally or vertically) by the specified distance:

- A positive value, e.g. "1 cm" will move the content to the right (horizontally) or to the top of the page (vertically).
- A negative value, e.g. "-1 cm" will move the content to the left (horizontally) or to the bottom of the page (vertically).



Note: Remember that the unit used in Actions (in this example "cm") is defined in the Preferences (Units & Guides Category).

You can choose whether or not to take into account page rotation and scaling factor (if applicable).

3.1.11.23. Move page content to corner

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page to a chosen corner.

This Action does not center the object on the corner but moves the closest objects to that corner and moves the other objects by the same distance towards the corner (horizontally or vertically).

Example

To move the page content to the lower left

1. Select Move page content horizontally to **Left Side**.
2. Select Move page content vertically to **Bottom Side**.
3. Select the page box to be used as a reference, for example the **media box**.
4. Optionally, set **margins** to be added to the media box.
5. Select the **Use page rotation and scaling factor** checkbox, if page rotation and scaling factor should be taken into account.

3.1.11.24. Normalize page boxes

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Normalizes page boxes, i.e. makes sure they are all positioned correctly and are placed in the right order, e.g. the media box should be the largest box, the bleed box should be inside the bleed marks, ...

3.1.11.25. Normalize Page Rotate Key

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to manipulate page rotate keys in a PDF.

You can do one of the following:

- Flatten a rotate key into the page content (no visual effect)
- Introduce a rotate key for landscape pages and flatten it for portrait pages.

  You can indicate which page box determines the page orientation. For example, if you select "trim box" and the trim box is 4 units wide and 3 units tall, the page is considered to have a landscape orientation.
- Remove a rotate key without flattening it into the page content. This may have a visual effect.

Related Actions

- *Check page rotation angle* on page 328
- *Select by page rotation angle* on page 413
- *Apply page rotation* on page 162

3.1.11.26. Remove art box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the art box from a PDF.

The art box delimits the size a PDF will display in a page layout application like QuarkXPress. An art box is not essential to a PDF's structure and may be removed.

3.1.11.27. Remove bleed box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the bleed box from a PDF.

The bleed box delimits the size the area beyond the final cut size of a document onto which ink may be printed in order to provide a bleed effect (which is where ink goes right to the edge of the page). A bleed box is not essential to a PDF's structure and may be removed.

3.1.11.28. Remove crop box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the crop box from a PDF.

The crop box is the PDF page box that defines the frame of a PDF as it is displayed on screen. If you remove this box, the PDF will display at Media Box size.

3.1.11.29. Remove empty page

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Deletes any pages in a PDF document that contain no objects.

You can specify that elements outside of a specific page box should be ignored. This way you can make sure that pages containing only registration marks (which are graphic elements outside the visible or printable page area, i.e. the trim box) are considered empty.

You can also ignore visually empty pages (i.e. paper-white and invisible (fully transparent) objects).



Tip: When you've removed the empty pages, check whether the page numbering is still consistent. If necessary, you can correct the page numbering using *Add page number* on page 66. Also check other references to page numbers such as the table of contents, the index or cross-references. If these page numbers are incorrect, you will need to update your source files and create a new PDF document.

Related Actions

- *Check for empty pages* on page 319
- *Select empty pages* on page 415

3.1.11.30. Remove page scaling factor

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Removes the page scaling factor an reverts the page to its original size.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By removing the page scaling factor, the page size will be at 10 by 10 inches again.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.

Related Actions

- *Check if page scaling factor is used* on page 323
- *Apply page scaling factor* on page 163

3.1.11.31. Remove page labels

Belongs to

- **Category:** Page
- **Type:** Changes
- **Since Version:** 2019

What it does

Removes the selected page labels. This Action has no attributes. It's typically used with *Select pages with page label* on page 417.

Related Actions

- *Change page labels* on page 169
- *Select pages with page label* on page 417

3.1.11.32. Remove sub-page navigation support

Belongs to

- **Category:** Page
- **Type:** Changes
- **Since Version:** 2022

What it does

Removes the PresSteps entry from a selected page's dictionary.

This is a fix for PDF/X-6, as PDF/X-6 does not support sub-page navigation.

3.1.11.33. Remove trim box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the trim box from a PDF document. The trim box defines the final cut size of a printed PDF document.

3.1.11.34. Reorder pages

Belongs to

- **Category:** Page; Document
- **Type:** Changes
- **Since Version:** 2017

What it does

Allows you to change the order of the pages in a document.

There are three preconfigured options:

- Reverse pages (first page becomes last etc)
- Swap first and last page
- Swap even and odd pages

When you select one of these options, you can immediately see the new page order in the Preview section at the bottom of the pane.

Apart from that, you can configure for each individual page what the new page number should be. To do so, you should select 'Custom' from the list of options and enter the page numbers in the preferred order (one by one, or using the notation explained in the GUI).



Note:

- Any 'forgotten' pages (not listed in the custom order), will be added at the end.
- If a page is by accident listed twice, the first occurrence counts.

By default, page labels are re-ordered together with the pages, unless you clear the **Move page labels** checkbox.

Examples

In the table below you can find some examples. Remember that you can enter any combination you want; you're warned about syntax errors and you can preview the page order for a document of up to 1000 pages.

Notation	Meaning
One single page number 5	Put this page first, then add the other pages without changing the order. *5*, **1, 2, 3, 4, 6, 7, 8, 9, 10**
R followed by one page number R5	Put this page counting from the back first, then add the other pages without changing the page order. *6*, **1, 2, 3, 4, 5, 7, 8, 9, 10**
One single page number followed by three dots 5...	Put this page first, add the following pages till the end of the document, finally add the missing pages (all without changing the page order). *5*, 6, 7, 8, 9, 10, **1, 2, 3, 4**

Notation	Meaning
R number followed by three dots R5... R1...	Put this page counting from the back first, then put the following pages counting from the back of the document, finally add the other pages (7-10) *6*, 5, 4, 3, 2, 1, **7, 8, 9, 10** *10*, 9, 8, 7, 6, 5, 4, 3, 2, 1
(number, number) ... (2,1)... (6,5)...	Swap the pages in between the brackets and do the same for the rest of the document. Other pages are added at the end. *2, 1*, 4, 3, 6, 5, 8, 7, 10, 9 *6, 5*, 8, 7, 10, 9, **1, 2, 3, 4**
R number (number-number) number (number, number) R1 (3-6) 2 (8,7)	Put the last page first (10), then a page range (pages 3 to 6), then a particular page (2), then swap even and odd pages (swap 8 and 7), add leftover pages (1, 9). *10*, 3, 4, 5, 6, *2*, 8, 7, **1, 9**

Use case

When receiving PDFs in spreads, after having split the pages and added marks and bleeds, page 1 (which is actually the back cover) should be moved to the last page. Using this Action, that's very easy.

Remark

Due to a refresh issue in Adobe Acrobat, sometimes the page order seems not to be changed after successfully running the Action. Saving and reopening the document may solve the issue.

3.1.11.35. Rotate content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Rotates the page content at a particular angle around a particular point.

You could for example rotate the page content at an angle of 90° relative to the center of the media box.

You can choose whether or not to take into account page rotation.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate object* on page 204
- *Rotate objects as group* on page 204

3.1.11.36. Rotate page

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to set page rotation to -90, 0, 90 or 180 degrees (clockwise).

Related Actions

Rotate content on page 178

3.1.11.37. Scale page boxes

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to scale all page boxes simultaneously.

Specify X and Y scaling percentages. You can anchor the page boxes at a certain corner in the PDF, for instance at the lower left corner of the media box. You can also choose whether or not to use the page rotation.



Note: If you want to scale the page boxes proportionally, you need to specify the same values for X and Y.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

3.1.11.38. Scale page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

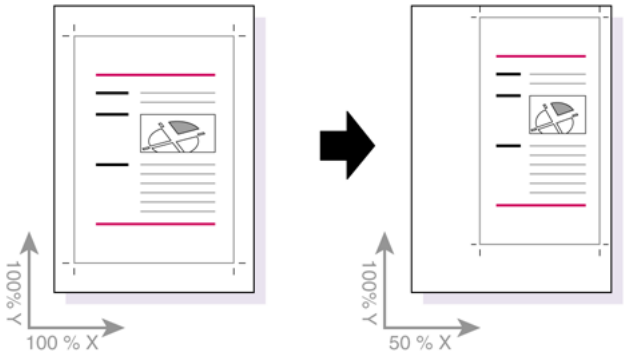
What it does

Scales page content along the X and/or Y axis by a certain percentage.

Note: If you want to scale the page content proportionally, you need to specify the same values for X and Y.

Example

Suppose you have an A4-size PDF document (210 x 297 mm). You want to keep the page size “as is”, but need to make the page content narrower. You also wish to move the page content to the upper right corner of the crop box.



How to proceed

1. Enter the preferred scaling percentage for the X and Y axis.
2. Do one of the following:
   - To define an anchor point, select **Anchored at**.
   - To define the target position of the page contents, select **Moving page content to**.
3. Define the anchor point or target position, for example (anchored at/moving to) the upper right of the crop box.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

3.1.11.39. Scale page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Scales the page content to fit the size of a particular page box. You can add extra margins, if necessary.

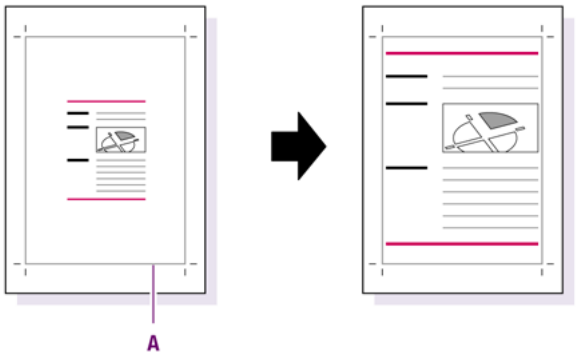
You should also define the target position of the page content inside the page box, e.g. "page content should move to the upper right".

You can choose whether or not to take into account the page rotation and scaling factor.

Scaling is by default restricted to the visible elements of the page (unless you clear the **Use only visible part of content** checkbox), to avoid that hidden content leads to incorrect results.

Example

In the example below, the page content is scaled to fit the size of the trim box (A).



Related Actions

- *Scale page content* on page 179
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

3.1.11.40. Scale to fit page size

Belongs to

- **Category:** Position/Size; Page
- **Type:** Changes

What it does

Scales all page boxes (and optionally all page content as well) until the specified page box fits the target size.

The target size should be specified by defining the target width and height either as a value, a percentage of the original value or proportionally relative to the other dimension.

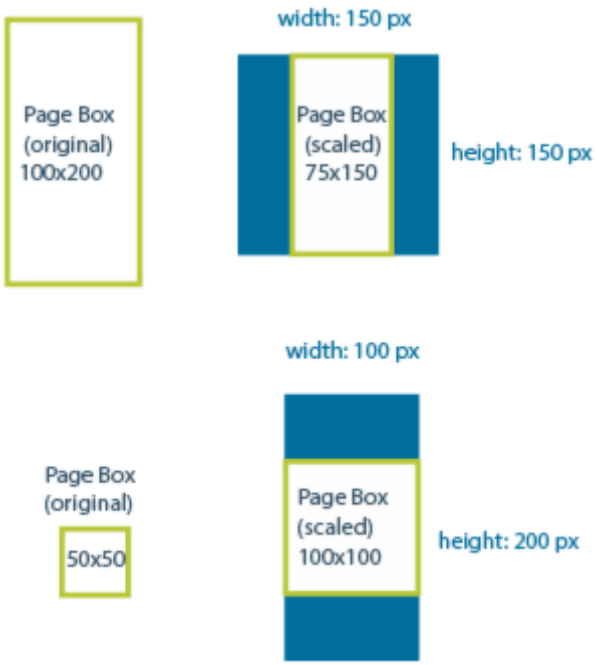
Note that for both the page content and the page boxes you can separately decide whether or not to scale proportionally to match the target page size.

Remark

In case of proportional scaling (=default, **Allow non-proportional scaling** checkbox NOT selected), it may happen that the requested target width and height cannot be achieved without

changing the aspect ratio; in that case, the target size serves as a frame in which the resized page box should fit.

For example, if the original page box is a rectangle and the requested width and height result in a square, the page box will be scaled to fit in the square (and vice versa). See the image below; the blue object represents the requested target dimensions.



Related Actions

- *Scale page content to fit* on page 180
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

3.1.11.41. Set page size to the largest in document

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Increases the size of smaller pages in a PDF document, so they are all equal to the size of the largest page.

If a PDF contains pages of different sizes, this may cause problems during the printing process. You can use this Action to fix this problem.

Related Actions

Set page size to the smallest in document on page 183

3.1.11.42. Set page size to the smallest in document

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Decreases the size of larger pages in a PDF document, so that they are all equal to the size of the smallest page.

If a PDF contains pages of different sizes, this may cause problems during the printing process. You can use this Action to fix this problem.

Related Actions

Set page size to the largest in document on page 182

3.1.11.43. Shrink page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Shrinks page content to fit the size of a particular page box. You can add extra margins, if necessary. You should also define the anchor point, for example "anchored at the lower left of the media box".

You can choose whether or not to take into account page rotation and scaling factor.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179

3.1.11.44. Split pages in half

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Splits pages in half in a certain direction (horizontally, vertically, or orientation dependent), based on the desired page box.

Orientation depending means that the landscape pages are split vertically and portrait pages are split horizontally.

Note: PitStop provides three Actions Lists, allowing you split A4, A5 and US Letter documents in half.

This Action can be useful if you scanned two pages of a book as a single page, but want to have them as separate pages (e.g. for better readability); or if you have an image spread over two pages which has to be split in two for printing purposes.

3.1.11.45. Use trim marks to set page box

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to set the trim box and/or the bleed box based on the trim or bleed marks found in the PDF.

Note:

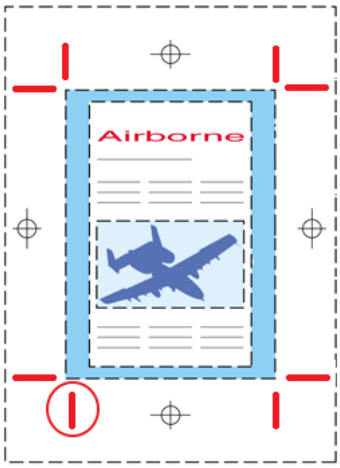
- Crop marks with a **dash pattern** cannot be used to set the page box.
- Crop marks generated with Illustrator, InDesign and QuarkXpress are supported.

How to proceed

1. Indicate which page box you want to set: the trim box, the bleed box or both.
2. Specify the color of the trim marks by choosing one or more of the following:
   - 400% CMYK
   - Separation All (registration)
   - 100% black
   - A specific color.
3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Pro Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value (if you're using a different unit).

Example

In the image below, the red marks are detected as trim marks and used to set the trim box (blue box). The position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line), but the deviation (= difference between the position of both marks) is less than the specified threshold.



Related Actions

- *Select trim marks* on page 419
- *Check if trim marks match page box* on page 323

3.1.12. PDF 2.0

3.1.12.1. Change document information dictionary compliance

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Makes the information dictionary compliant with the chosen PDF version.

About the info dictionary

The info dictionary contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document Properties.

The specifications for the info dictionary depend on the PDF version:

- PDF 1.7: The info dictionary is optional. If it's present, it may contain the following entries: Title, Author, Subject, Keywords, Creator, Producer, CreationDate, ModDate and Trapped.
- PDF 2.0: The info dictionary is optional. If it's present, it may be empty, or contain CreationDate and/or ModDate. The other entries are deprecated.
- PDF/X-6: There should be no info dictionary, or if there is one, it should be empty.

Note: There is one exception to the above: if there is a PieceInfo dictionary in the document catalog dictionary, the info dictionary is required and must contain the ModDate entry.

Note that as of PDF 2.0, the *info* dictionary is officially called *information* dictionary.

Options

- **PDF 1.7**: PitStop only adds an info dictionary (including ModDate) if document level PieceInfo is present.
- **PDF 2.0**: PitStop removes deprecated entries from the info dictionary (if necessary). If document level PieceInfo is present, it makes sure there is an info dictionary that contains ModDate.
- **PDF/X-6**: PitStop removes the info dictionary if there is one, except if document level PieceInfo is present; then it makes sure there is an info dictionary that contains ModDate.
- **Current document version**: PitStop detects the current PDF version and makes sure the info dictionary is compliant with the current PDF version.
- **None (leave it unchanged)**: This option prevents PitStop from interfering with the info dictionary at the time of saving the file.

3.1.12.2. Change halftone origin

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

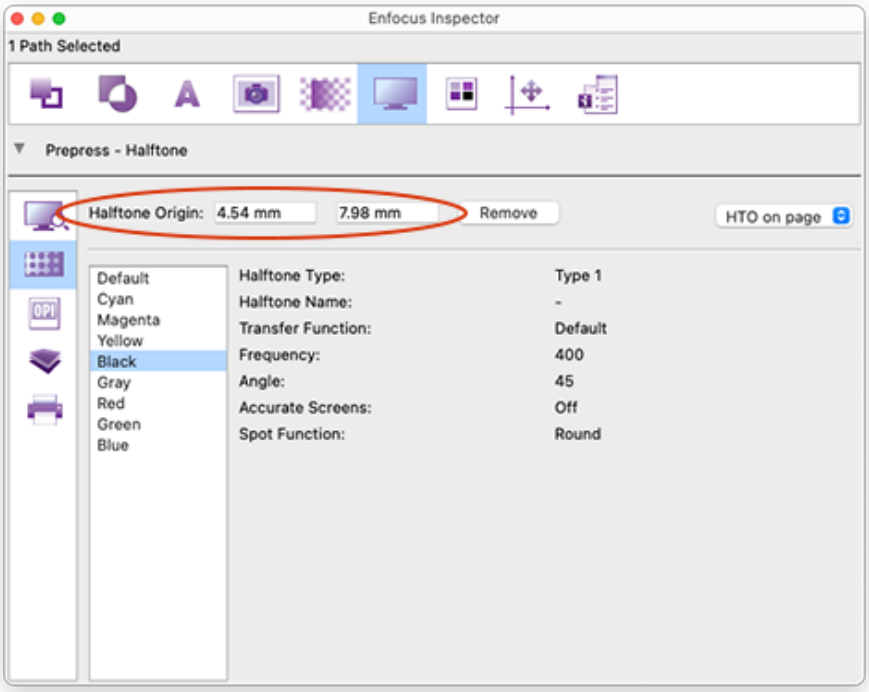
Changes the halftone origin by the entered values.

You can change the halftone origin on page or form level as required:

- The X and Y values relative to the lower-left corner of the Media Box.
- The X and Y values in the form space of the outer selected Form XObject.

This Action is typically used for packaging and labels (step and repeat), to make sure that all images have the same halftone origin, hence look identical when printed.

Note that you can view (and also manually change) the halftone origin of a selected object in the Inspector, on the Prepress - Halftone tab.



Related Actions

- *Check halftone origin* on page 334
- *Select by halftone origin* on page 422
- *Set default halftone origin* on page 196

3.1.12.3. Change inline image syntax

Belongs to

- **Category:** Image, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does

Allows you to change the L key (or Length key) of a PDF to comply with a particular PDF version.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Compatibility with the current document version
- Compatibility with PDF 1.7 (no Length key)
- Compatibility with PDF 2.0 (write Length key)
- Keep presence of the Length key
- Fix the Length key (so it matches the actual inline image data length)

Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change PDF text string encoding* on page 101
- *Check inline image syntax*
- *Select inline image syntax* on page 387

3.1.12.4. Change PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does

Allows you to change the text encoding of a PDF to comply with a particular PDF version.

Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change inline image syntax* on page 114

3.1.12.5. Change PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes

What it does

Changes the Acrobat and PDF version of a PDF.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.

Note: Changing the PDF version will not change the attributes of a higher version PDF to those of a lower one - it only changes the version **number**. As higher versions of Acrobat always save the PDF version number up to their version, even if nothing has changed, this Action can be useful to reset the PDF version to the one used to create the PDF.

Example

If you configure this Action to change the PDF version to PDF 1.5, both the PDF version and the Acrobat version will be changed. The new PDF version will be PDF 1.5; the new Acrobat version will be 6.0.

If you change the PDF version to PDF 2.0, the Acrobat version will remain unchanged.

Related Actions

- *Select by PDF version* on page 400
- *Check PDF/Acrobat compatibility* on page 311

3.1.12.6. Change ProcSet resources

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Adds, removes or does not change the ProcSet entry as specified in the attributes of this Action.

You can as well have PitStop make the appropriate change based on the document's PDF version (see Options).

This Action is useful to make a PDF compliant with a particular PDF version.

About ProcSet resources

Procedure sets are categories of related PDF operators used in content streams. The ProcSet entry in a content stream's resource dictionary holds an array that consists of the procedure sets used in that content stream, for example: /ProcSet [/PDF /Text] . Procedure sets are used only when the content stream is printed to a PostScript output device.

ProcSet resources were used in older PDF versions, but as of PDF 1.4 this feature is considered obsolete. As of PDF 2.0, this feature is deprecated.

For more details, refer to *the PDF Reference* (See 14.2 Procedure Sets).

Options

- **Add ProcSet (default)**
- **Remove ProcSet**
- **Do not change the ProcSet presence** (so if the ProcSet entry is defined, just keep it; if it's not, do not add it)
- **Add, remove or don't change ProcSet, dependent on the document's PDF version**, PitStop behaves as follows:
  - PDF 1.3 and earlier: Add ProcSet resources
  - PDF 1.4 - PDF 1.7: Do not change the ProcSet presence
  - PDF 2.0: Remove the ProcSet resources

3.1.12.7. Change Requirements

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes or adds either all document Requirements or one or more specific Requirement types (in that case you can specify which types to add or to remove).

The Requirements dictionary specifies the requirements the PDF file has. Until PDF 2.0, the only possible requirement was 'EnableJavaScripts'. As of PDF 2.0, a number of new types are allowed, such as 3D Markup, Attachment, Encryption etc.

Related Actions

- *Check if Requirements are used* on page 334

3.1.12.8. Remove alternative blend modes

Belongs to

- **Category:** PDF 2.0, Prepress, Remove
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes alternative blend modes in case of multiple blend modes, because using multiple blend modes is deprecated in PDF 2.0. Only the first blend mode is kept.

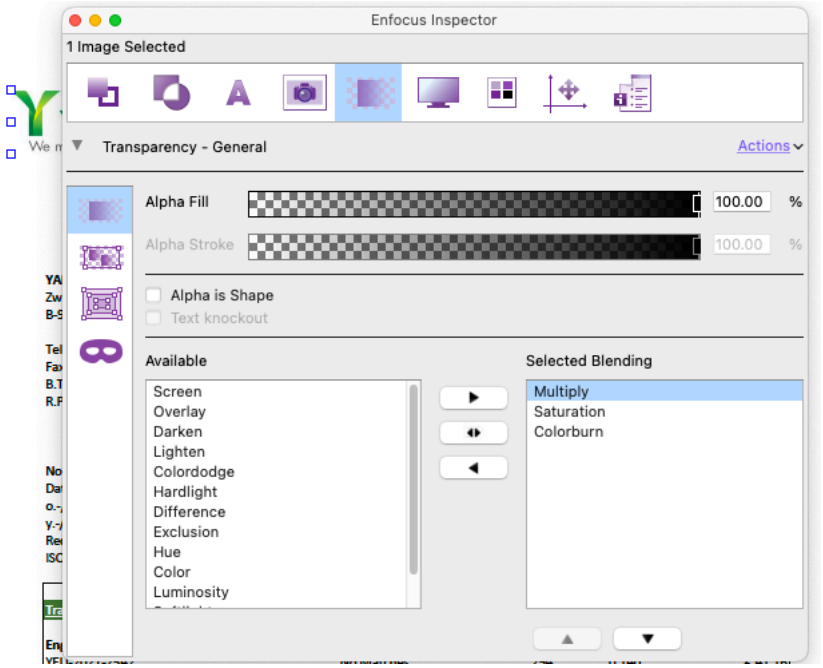
Note that you can check the blend modes using the PitStop Inspector (Transparency - General).

Blend modes determine how colors on different layers blend with each other. For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Example

In this example, three blend modes are selected: Multiply, Saturation and Colorburn.

Running this Action will remove Saturation and Colorburn and only keep the first blend mode in the list: Multiply.



Note: As of PitStop 2022, it will no longer be possible to add multiple blend modes to a selected object using the Enfocus Inpector. However, if an object already has multiple blend modes, they will still be shown.

Related Actions

- *Select by blend modes* on page 431
- *Check for non-standard blend modes* on page 345

3.1.12.9. Remove associated files

Belongs to

- **Category:** General, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes associated files.

This fix can be used to make PDF files compliant with PDF 2.0.

Related Actions

- *Check for associated files* on page 278

3.1.12.10. Remove black point compensation

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes objects that have a black point compensation attribute (regardless of its value).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Related Actions

- *Check black point compensation* on page 330
- *Select black point compensation* on page 421
- *Set black point compensation* on page 195

3.1.12.11. Remove CharSet or CIDSet

Belongs to

- **Category:** PDF 2.0, Text
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the CharSet or CIDSet if present in the PDF.

If a font is subset, only the characters of the font that are actually used are embedded in the document. They are held in a CharSet (simple fonts) or a CIDSet (composite fonts).

CharSets and CIDSets are deprecated in PDF 2.0. That means that they are allowed, but not needed, so they can as well be removed.

Related Actions

Check if a subset font contains a complete CharSet or CIDSet on page 354

3.1.12.12. Remove DPart metadata

Belongs to

- **Category:** PDF 2.0, Text

- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes DPart metadata from a PDF if present.

DPart (Document Part) metadata provides information about pages or parts of a PDF, allowing PDF processors to easily identify pages or page ranges that have particular properties.

This is a PDF 2.0 feature, hence this Action is typically used to check for PDF 2.0 features.

Related Actions

Check DPart metadata on page 332

3.1.12.13. Remove enforcements on viewer preferences

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the Enforced key if it is used in the Viewer preferences.

Enforcing the viewer preferences is a PDF 2.0 feature, hence this Action is typically used to remove PDF 2.0 features.

Related Actions

- *Check enforced viewer preferences* on page 332

3.1.12.14. Remove file specification keys

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes PDF 2.0 specific file specification keys.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will remove the PDF 2.0 specific file specification keys, such as Thumb, AFRelationship and EP.

Related Actions

Check file specification keys on page 278

3.1.12.15. Remove name from XObjects

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes Name from form XObject and image XObject stream dictionaries. This is typically done to fix deprecated PDF 1.x features.

3.1.12.16. Remove Output Intents

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the Output Intents from the document and/or the individual pages.

An Output Intent describes the color characteristics of the output devices on which the PDF document might be rendered. The Output Intent may be defined on document and/or page level.

Related Actions

- *Check if Output Intents are used* on page 334

3.1.12.17. Remove specific Output Intent keys

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes either the Mixing Hints or Spectral Data key, or both if they are available in the Output Intents (on page or document level) of the PDF.

These keys are PDF 2.0 specific, hence this Action is typically used to removed PDF 2.0 features.

Related Actions

- *Check Missing Hints in Output Intent*
- *Check Spectral Data in Output Intent*

3.1.12.18. Set black point compensation

Belongs to

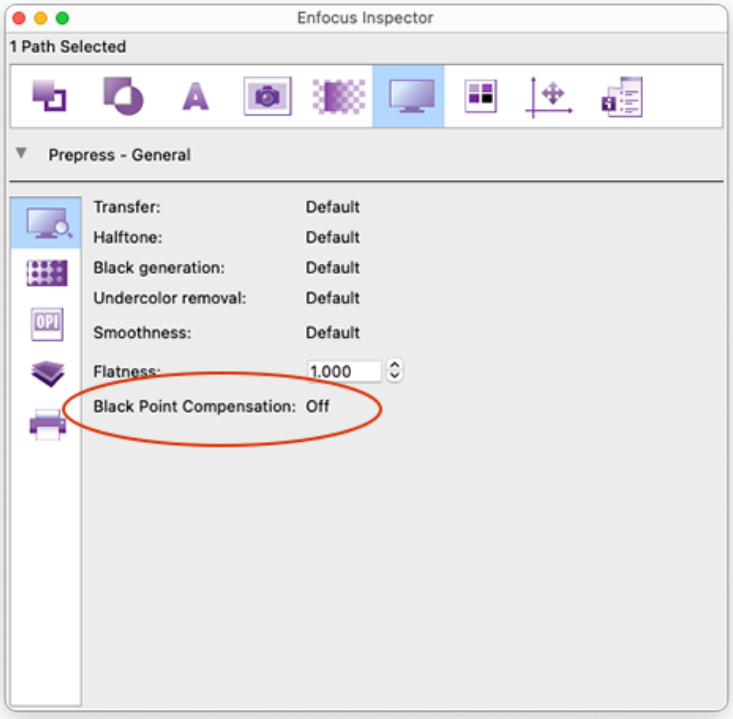
- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Allows you to set the black point compensation to a particular value (On, Off, or Default).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Note that the black point compensation attribute of a selected object can be found and changed in the Enfocus Inspector, on the **Prepress - General** tab.



Related Actions

- *Check black point compensation* on page 330
- *Select black point compensation* on page 421

- *Remove black point compensation* on page 192

3.1.12.19. Set default halftone origin

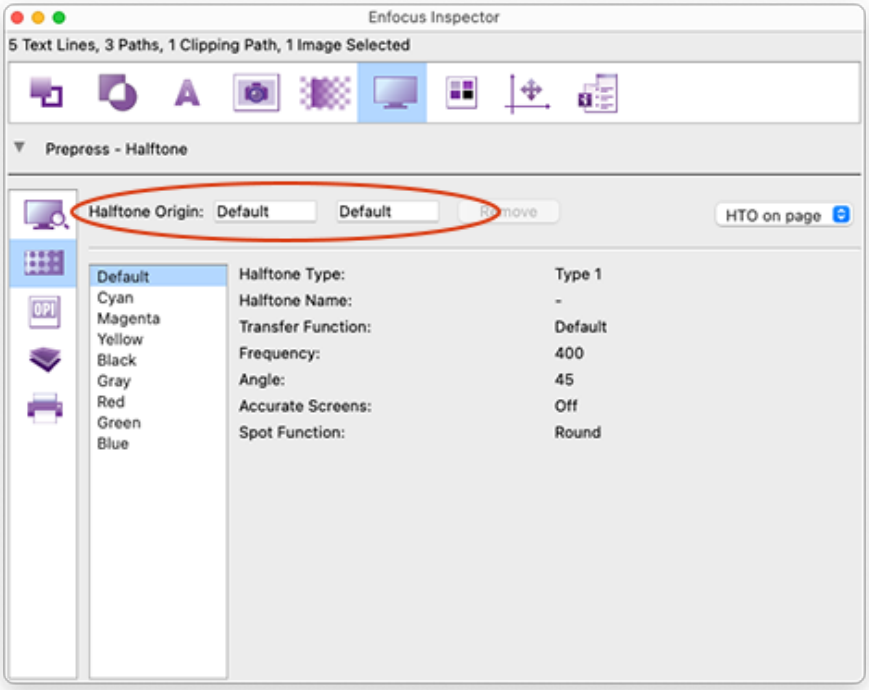
Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does
Changes the halftone origin to 'Default'.

'Default' means that the halftone origin (HTO) is not specified, so setting the HTO to 'Default' removes the HTO from any object it uses. This is useful if you want to remove PDF 2.0 features from your document.

Note that you can view (and also manually change) the halftone origin of a selected object in the Inspector, on the Prepress - Halftone tab.



Related Actions

- *Check halftone origin* on page 334
- *Select by halftone origin* on page 422
- *Change halftone origin* on page 186

3.1.13. Position and size

3.1.13.1. Align or distribute objects

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Aligns or distributes the selected objects and/or distributes spacing between them.

You can align objects relative to your selection ("Selection bounding box") or to one of the page boxes.

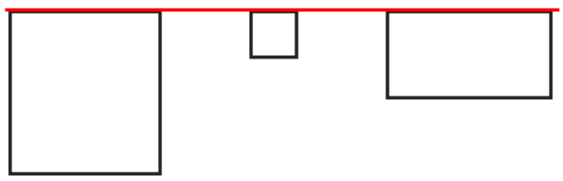
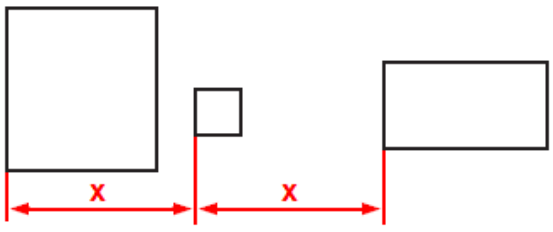
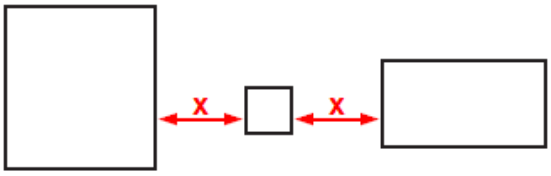
Note: This functionality is also available in the Enfocus Inspector (on the Position tab).

Remarks

The 'Select all' Action, which is added automatically to a new Action List, should be removed in most cases. You can either add your own 'select' Actions or run the Action List on a user selection.

Note that you could also create your Action List by recording your actions while aligning and/or distributing objects using the Enfocus Inspector.

Examples

Example	Description
	Aligned top edges.
	Distributed left edges.
	Distributed horizontal spacing.

3.1.13.2. Apply page scaling factor

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Apply page scaling factor removes the page scaling factor and scales the page to compensate.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By applying the page scaling factor, the actual page size will become 20 by 20 inches.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.

Note: When the result of applying the scaling factor exceeds the size of 200x200 inches, the page may not be displayed well. This is a limitation of Adobe Acrobat.

Related Actions

- *Check if page scaling factor is used* on page 323
- *Remove page scaling factor* on page 175

3.1.13.3. Apply page rotation

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Sets the page rotate key defined in the PDF to 0 °. This may have a visual effect.

3.1.13.4. Center page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Places all objects in the center of the page.

You can:

- Center the objects horizontally, vertically or both.
- Center the content relative to a page box and set margins (left, right, top and bottom).

- Use page rotation and scaling factor as required.
- Only center the visible part of the content.

3.1.13.5. Change position

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Moves selected objects to a new position.

You can define an absolute or a relative target position:

- **Move absolute to** moves either all selected objects in one go or each of the selected objects individually to a new position relative to the page they are on.
- **Move relative by** moves an object in relation to itself.

Indicate whether page rotation and/or the page scaling factor (if applicable) should be taken into account when moving the selection.

3.1.13.6. Flip content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Flips the contents of a selected object horizontally or vertically.

You can flip the content relative to the center of one of the page boxes. Note that you can take page rotation into account as required.

Related Actions

- *Check for flipped objects* on page 338
- *Flip selection* on page 199

3.1.13.7. Flip selection

Belongs to

- **Category:** Position/Size
- **Type:** Changes
- **Since version:** 2020

What it does

Flips a selected object horizontally or vertically.

You can flip the content relative to the center of the selection bounding box or to the visible area of selection. This last option is relevant if part of a selected image has been clipped away.

Note that you can take page rotation into account as required.

Example
This Action is useful to flip images while keeping text untouched.

```
select image
flip selection
```

Related Actions

- *Check for flipped objects* on page 338
- *Flip content* on page 170

3.1.13.8. Move objects into the page box

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Moves the selected objects into a particular page box.

You can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects out of the page box* on page 171

3.1.13.9. Move objects out of the page box

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the selected objects out of a particular page box.

You can can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects into the page box* on page 171

3.1.13.10. Move objects to corner

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Moves the selected graphic elements to the defined corner of the selected page box.

How to proceed

Proceed as follows:

1. Select the anchor point of the object you want to use for positioning the object, for example "upper left".
2. Select the anchor point of the specified page box you want to use for positioning, for example "center".
3. Select the page box itself, for example "crop box".
4. Select the **Use page rotation** checkbox as required.

Example

To move the images in your document to the lower right corner of the page, without cutting off the images, use:

```
Select images
Move objects to corner
     <!-- settings (example): Place the lower right corner of the graphic elements
 relative to the lower right corner of the trim box -->
```

If you have chosen to place the center of the graphic elements relative to the lower right corner of the trim box, the center point of the image will be positioned on the lower right corner point of the trim box, meaning that the right hand side and lower half of the image will lie outside of the trim box.

Related Actions

- *Move objects out of the page box* on page 171
- *Move objects into the page box* on page 171

3.1.13.11. Move page content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page in the preferred direction (horizontally or vertically) by the specified distance:

- A positive value, e.g. "1 cm" will move the content to the right (horizontally) or to the top of the page (vertically).
- A negative value, e.g. "-1 cm" will move the content to the left (horizontally) or to the bottom of the page (vertically).



Note: Remember that the unit used in Actions (in this example "cm") is defined in the Preferences (Units & Guides Category).

You can choose whether or not to take into account page rotation and scaling factor (if applicable).

3.1.13.12. Move page content to corner

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page to a chosen corner.

This Action does not center the object on the corner but moves the closest objects to that corner and moves the other objects by the same distance towards the corner (horizontally or vertically).

Example

To move the page content to the lower left

1. Select Move page content horizontally to **Left Side**.
2. Select Move page content vertically to **Bottom Side**.
3. Select the page box to be used as a reference, for example the **media box**.
4. Optionally, set **margins** to be added to the media box.
5. Select the **Use page rotation and scaling factor** checkbox, if page rotation and scaling factor should be taken into account.

3.1.13.13. Normalize line weight

Belongs to

- **Category:** General; LineArt; Position and size
- **Type:** Changes

What it does

Normalizes paths where a transformation matrix caused distortions, by removing the distortion, giving the path a uniform line weight equal to the average reported in the Inspector. The Action also works on sheared paths.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392

- *Check line weight* on page 296

3.1.13.14. Remove page scaling factor

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Removes the page scaling factor an reverts the page to its original size.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By removing the page scaling factor, the page size will be at 10 by 10 inches again.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.

Related Actions

- *Check if page scaling factor is used* on page 323
- *Apply page scaling factor* on page 163

3.1.13.15. Rotate content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Rotates the page content at a particular angle around a particular point.

You could for example rotate the page content at an angle of 90° relative to the center of the media box.

You can choose whether or not to take into account page rotation.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate object* on page 204
- *Rotate objects as group* on page 204

3.1.13.16. Rotate page

Belongs to

- **Category:** Page

- **Type:** Changes

What it does

Allows you to set page rotation to -90, 0, 90 or 180 degrees (clockwise).

Related Actions

Rotate content on page 178

3.1.13.17. Rotate object

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Rotates an object at a certain amount of degrees around a particular point.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate content* on page 178
- *Rotate objects as group* on page 204

3.1.13.18. Rotate objects as group

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Rotates a selection of objects at a particular angle around a particular point.

You could for example rotate the selection around the center of the media box at an angle of 90 degrees.



Note: Rotating objects as a group means that all of the selected objects act as one large object during the rotation.

How to proceed

1. Select what specific place in the page box you want to use as the rotation point (center, lower left ...).
2. Specify the page box of your choice or choose "selection bounding box" or "visible area of selection". This last option is relevant if part of a selected image has been clipped away.
3. Define the rotation angle.
4. Select the **Use page rotation** checkbox as required.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate content* on page 178
- *Rotate object* on page 204

3.1.13.19. Scale page boxes

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to scale all page boxes simultaneously.

Specify X and Y scaling percentages. You can anchor the page boxes at a certain corner in the PDF, for instance at the lower left corner of the media box. You can also choose whether or not to use the page rotation.

Note: If you want to scale the page boxes proportionally, you need to specify the same values for X and Y.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

3.1.13.20. Scale page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

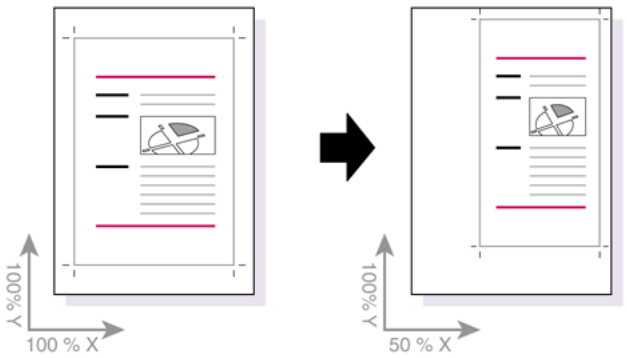
What it does

Scales page content along the X and/or Y axis by a certain percentage.

Note: If you want to scale the page content proportionally, you need to specify the same values for X and Y.

Example

Suppose you have an A4-size PDF document (210 x 297 mm). You want to keep the page size “as is”, but need to make the page content narrower. You also wish to move the page content to the upper right corner of the crop box.



How to proceed

1. Enter the preferred scaling percentage for the X and Y axis.
2. Do one of the following:
   - To define an anchor point, select **Anchored at**.
   - To define the target position of the page contents, select **Moving page content to**.
3. Define the anchor point or target position, for example (anchored at/moving to) the upper right of the crop box.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

3.1.13.21. Scale page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Scales the page content to fit the size of a particular page box. You can add extra margins, if necessary.

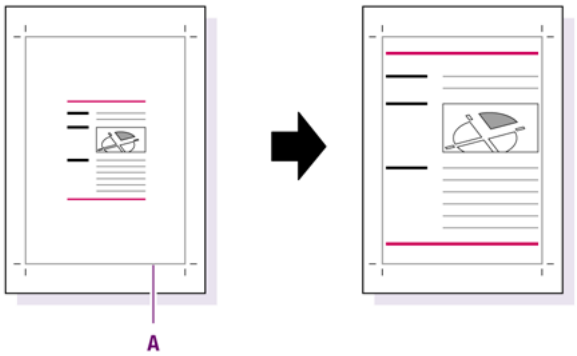
You should also define the target position of the page content inside the page box, e.g. "page content should move to the upper right".

You can choose whether or not to take into account the page rotation and scaling factor.

Scaling is by default restricted to the visible elements of the page (unless you clear the **Use only visible part of content** checkbox), to avoid that hidden content leads to incorrect results.

Example

In the example below, the page content is scaled to fit the size of the trim box (A).



Related Actions

- *Scale page content* on page 179
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

3.1.13.22. Scale selection

Belongs to

- **Category:** Position/Size
- **Type:** Changes
- **Since Version:** 2017

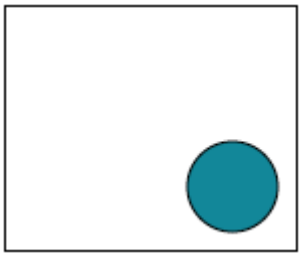
What it does
Resizes one or more selected objects.

You can set the width and height using fixed values, variables, percentages or page boxes, proportional or not. You can also determine the anchor point of the object being scaled and the direction in which the object will resize.

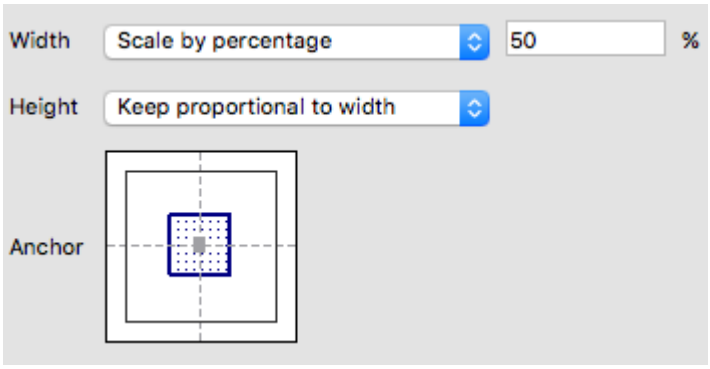
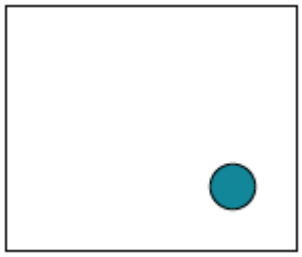
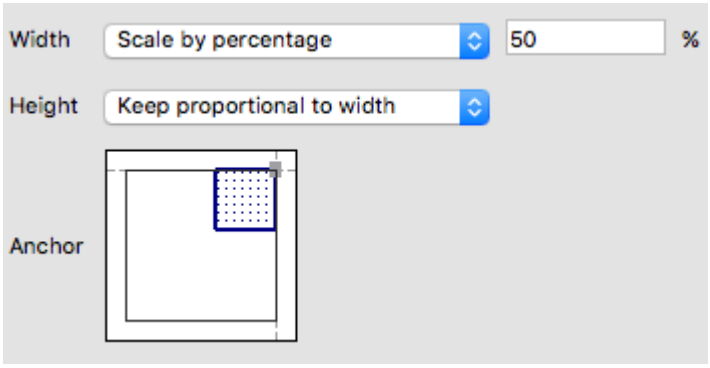
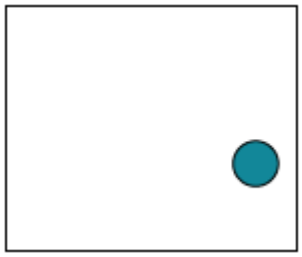
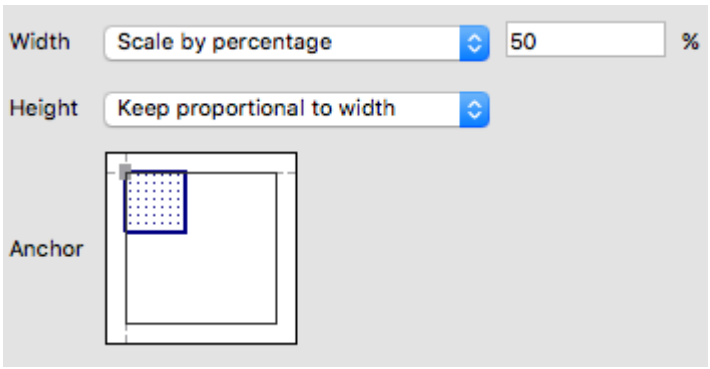
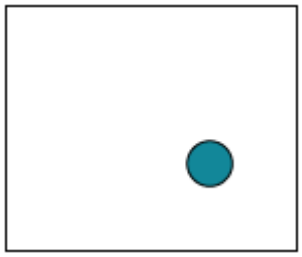
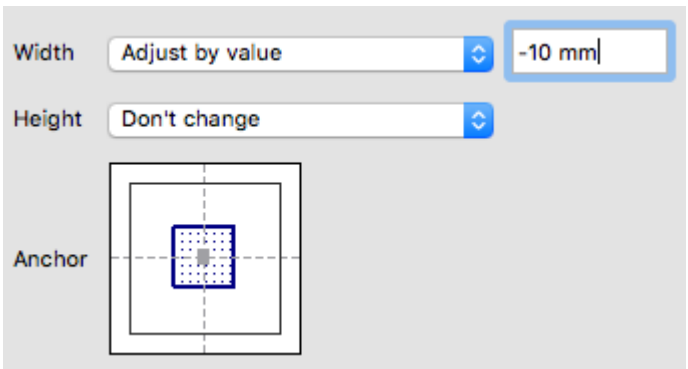
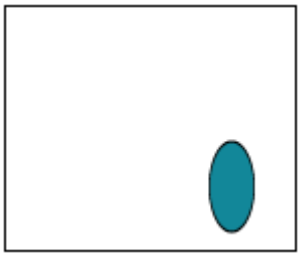
Note that the reference for the anchor point is the bounding box of the selection.

Example 1: One object selected

Object before scaling:

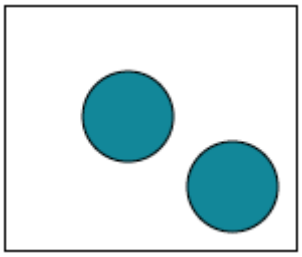


Result of the Action depending on the chosen options:

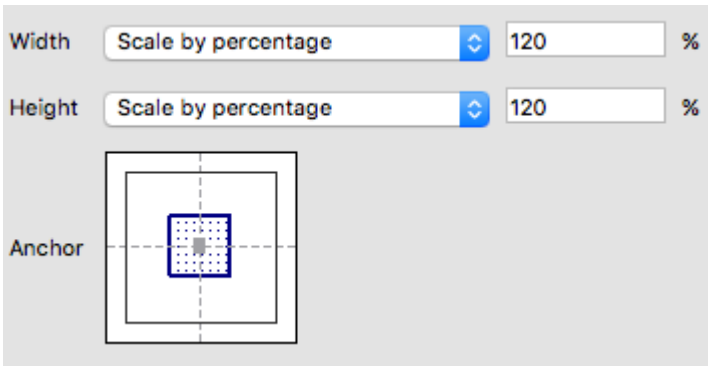
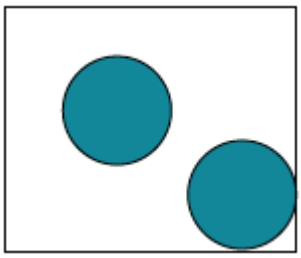
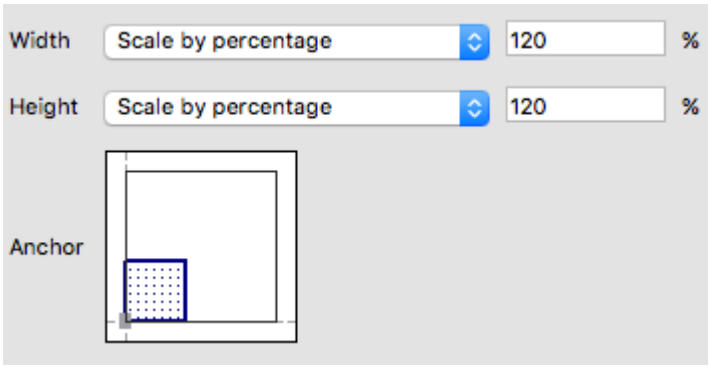
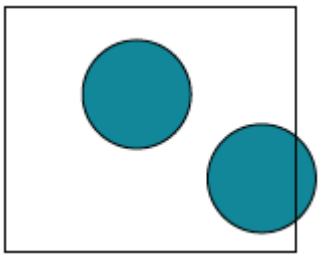
Chosen options	Result
	
	
	
	

Example 2: Two objects selected

Objects before scaling:



Result of the Action depending on the chosen options:

Chosen options	Result
	
	

3.1.13.23. Scale to fit page size

Belongs to

- **Category:** Position/Size; Page
- **Type:** Changes

What it does

Scales all page boxes (and optionally all page content as well) until the specified page box fits the target size.

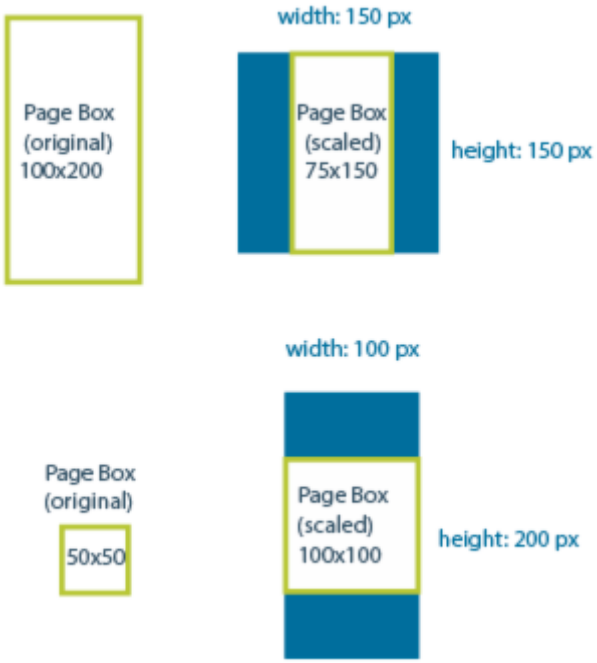
The target size should be specified by defining the target width and height either as a value, a percentage of the original value or proportionally relative to the other dimension.

Note that for both the page content and the page boxes you can separately decide whether or not to scale proportionally to match the target page size.

Remark

In case of proportional scaling (=default, **Allow non-proportional scaling** checkbox NOT selected), it may happen that the requested target width and height cannot be achieved without changing the aspect ratio; in that case, the target size serves as a frame in which the resized page box should fit.

For example, if the original page box is a rectangle and the requested width and height result in a square, the page box will be scaled to fit in the square (and vice versa). See the image below; the blue object represents the requested target dimensions.



Related Actions

- *Scale page content to fit* on page 180
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

3.1.13.24. Shrink page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Shrinks page content to fit the size of a particular page box. You can add extra margins, if necessary. You should also define the anchor point, for example "anchored at the lower left of the media box".

You can choose whether or not to take into account page rotation and scaling factor.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179

3.1.13.25. Use trim marks to set page box

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to set the trim box and/or the bleed box based on the trim or bleed marks found in the PDF.

Note:

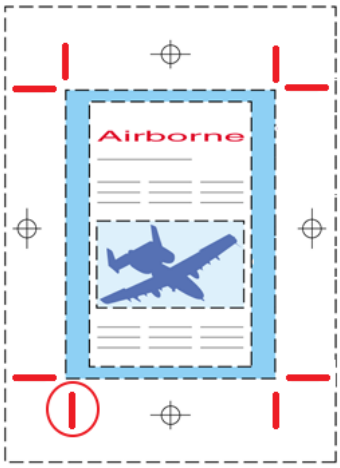
- Crop marks with a **dash pattern** cannot be used to set the page box.
- Crop marks generated with Illustrator, InDesign and QuarkXpress are supported.

How to proceed

1. Indicate which page box you want to set: the trim box, the bleed box or both.
2. Specify the color of the trim marks by choosing one or more of the following:
   - 400% CMYK
   - Separation All (registration)
   - 100% black
   - A specific color.
3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Pro Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value (if you're using a different unit).

Example

In the image below, the red marks are detected as trim marks and used to set the trim box (blue box). The position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line), but the deviation (= difference between the position of both marks) is less than the specified threshold.



Related Actions

- *Select trim marks* on page 419
- *Check if trim marks match page box* on page 323

3.1.14. Prepress

3.1.14.1. Add bleed

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since version:** 13

What it does

Allows you to add bleed all around the page, e.g. on all 4 edges if needed.

Note: This Action applies bleed based on the bleed box; if you don't have a bleed box yet, you can use the 'Change bleed box' Action to create one.

You may use this Action to make your file PDF/X-4 compliant.

How to proceed

1. Select the edge(s) you want to add bleed to. Bleed is added from the trim box edges to the bleed box.
2. Select **Add bleed in corners** as required.
3. Indicate where the bleed should start (inside the bleed box).

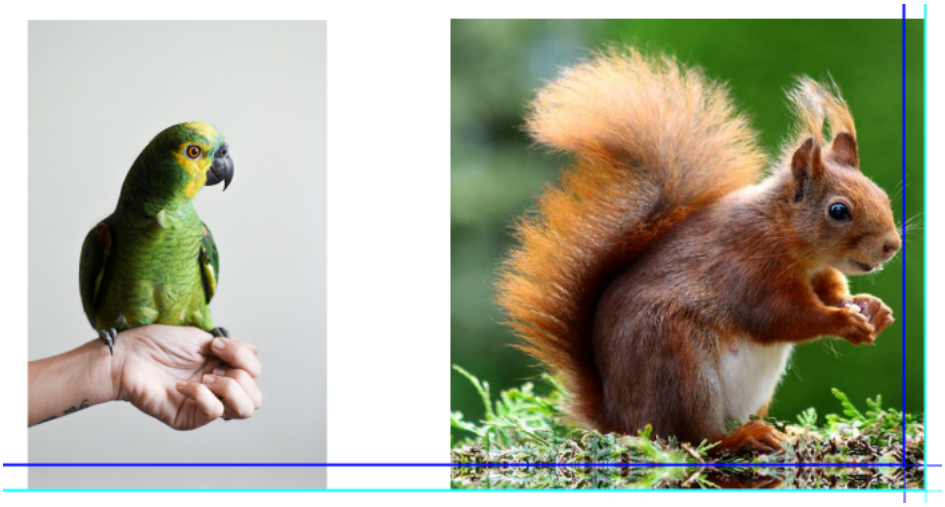
Note: By default, the same values are used on all edges; if you change one value, all other values are automatically changed as well. If you don't want this, click the Lock icon , so it changes to . You can now use different values as required.

4. Select **Mirror margins according to page binding** as required. When selected, the inner and outer instead of the left and right margins have to be set, so the amount of bleed may be different for even and odd pages.
5. By default, to add bleed, PitStop uses several techniques, such as extending clips and mirroring existing content. In some cases, it may be preferable to only use the mirroring technique. If that is the case, select **Only add bleed by mirroring content**. Note that this also helps to keep the file size down.
6. Select one of the following options as required:

Option	Description
Only add bleed by mirroring content	By default, to add bleed, PitStop uses several techniques, such as extending clips and mirroring existing content. In some cases, it may be preferable to only use the mirroring technique. If that is the case, select this option. Note that this also helps to keep the file size down. **Note:** We advise clearing this checkbox if line art needs to be extended. See example 3 below.
Allow mirroring of text	Mirroring of text can be useful to generate fold-over flaps for banners with text near the trim edge.
Use all objects to fill bleed area when mirroring	By default, objects that do not touch the trim box are not used to create bleed, unless you select this option. In that case, objects near the trim box are also mirrored.
Retain objects in bleed area	By default, existing objects in the bleed area are removed, unless you select this option.

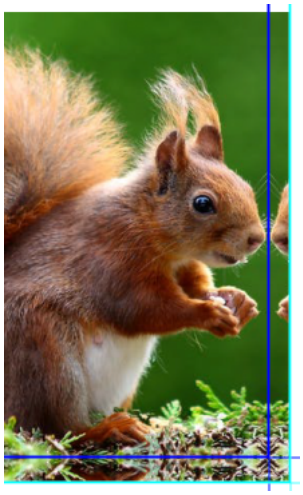
Example 1

Bleed is added in the bleed area.



Example 2

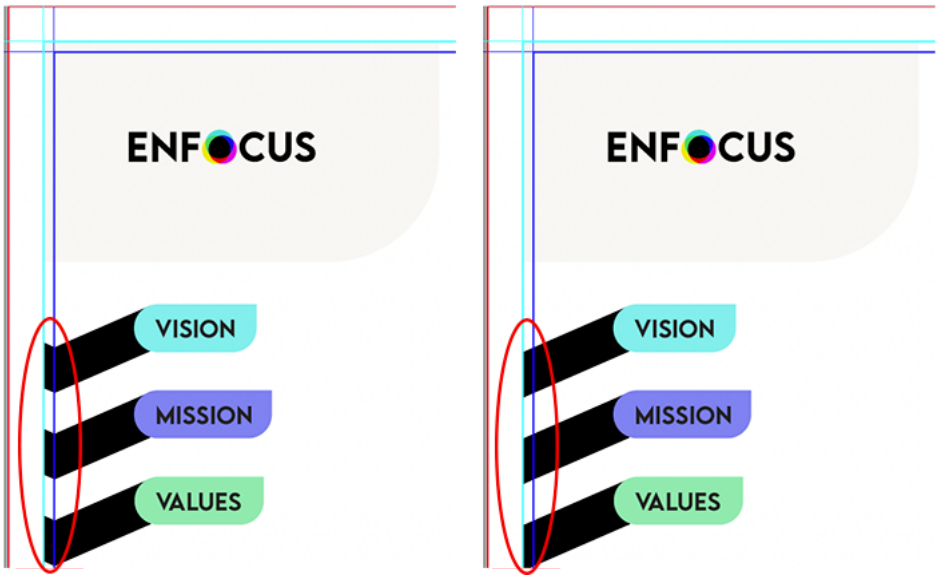
With this kind of image, enabling **Only add bleed by mirroring content** is not recommended.



Example 3

Line art should be extended instead of mirrored.

Running the Action with **Only add bleed by mirroring content** checkbox selected, resulted in line art not extended correctly (= the image on the left). When the **Only add bleed by mirroring content** checkbox was cleared, the result was OK (= the image on the right).



Related Actions

- *Check bleed* on page 247
- *Change bleed box* on page 164

3.1.14.2. Add bleed around contour

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since version:** 2021

What it does

Allows you to add missing bleed around the contour (typically the dieline or cut line) of an object.

Note that this Action only works on selected line art that is not filled. The contour must be closed and it must be a compound path of at least 3 nodes.

Note: You can *detect* missing bleed around contours through the *Check bleed around contour* Action.

Attributes

Attribute	Description
Use trim box as contour	If selected, bleed is added based on the trim box. The amount of bleed is based on the value set in the **Bleed offset** option, so not on the bleed box.
Use inner/outer according to page binding	If the trim box is used as contour, you can add bleed to the inner and/or outer contour based on the page binding. If selected, left and right

Attribute	Description
	are replaced with inner and outer in the **Add bleed for edges** option. Example: In case of magazines, typically "inner" will be cleared.
Add bleed for edges	If the trim box is used as contour, this option determines the edges where bleed is added.
Add bleed in corners	If the trim box is used as contour, you can add bleed in the corners.
Bleed offset	The desired amount of bleed (starting from the contour).
Trim area margin	Indicates how close/far from the trim area the bleed should start. This is useful for objects near but not crossing the trim box.
Extend line art	Extends line art. See example 2 below. **Note:** This only works for line art that is not in a form. The line art must also not have both a stroke and a fill. If so, first *separate the stroke and the fill*. This option is also useful for *clipped images* (*clip masks*). See example 3 below. If this option is selected, the clip path is extended. The parts for which there is not enough image data can be filled using pixel cloning, if the **Repeat last pixel** option is enabled.
Repeat last pixel	Repeats the last pixel of images if any.
White threshold	The threshold for white makes sure that a color that is "almost white" (and looks white when printed) is considered white. The default value is 10%.
Image output: • Resolution (ppi) • Color space • Compression • Quality • Convert to indexed color space	Desired output properties

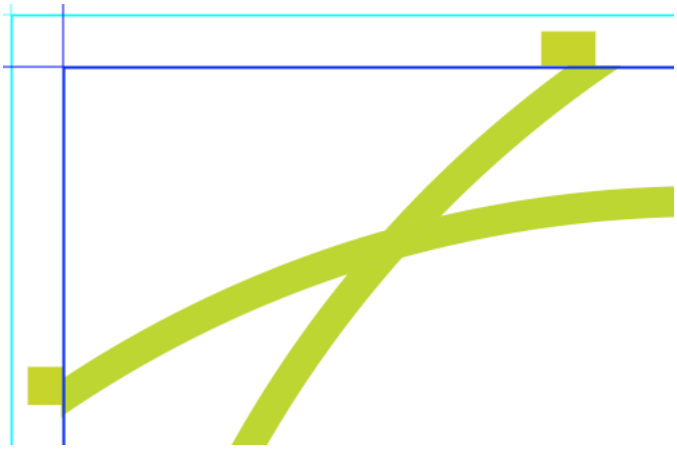
Example 1

Missing bleed is added based on the cutter guide (in orange), both to the inner contour (the white space between the leaves that has to be cut out) and the outer contour.

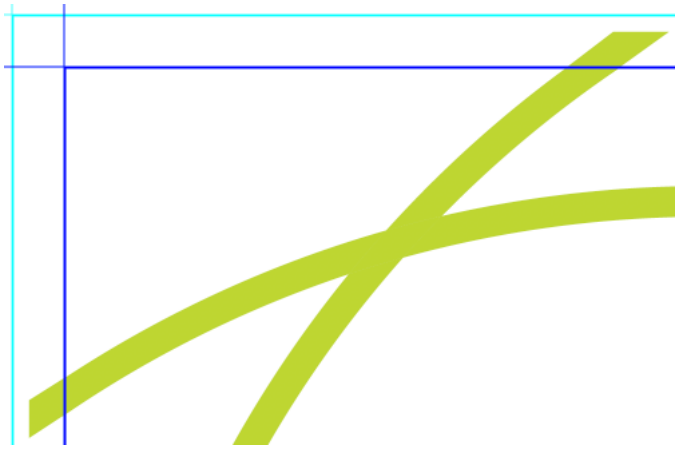


Example 2

Example where the trim box is used as contour, with the **Extend line art** checkbox cleared:

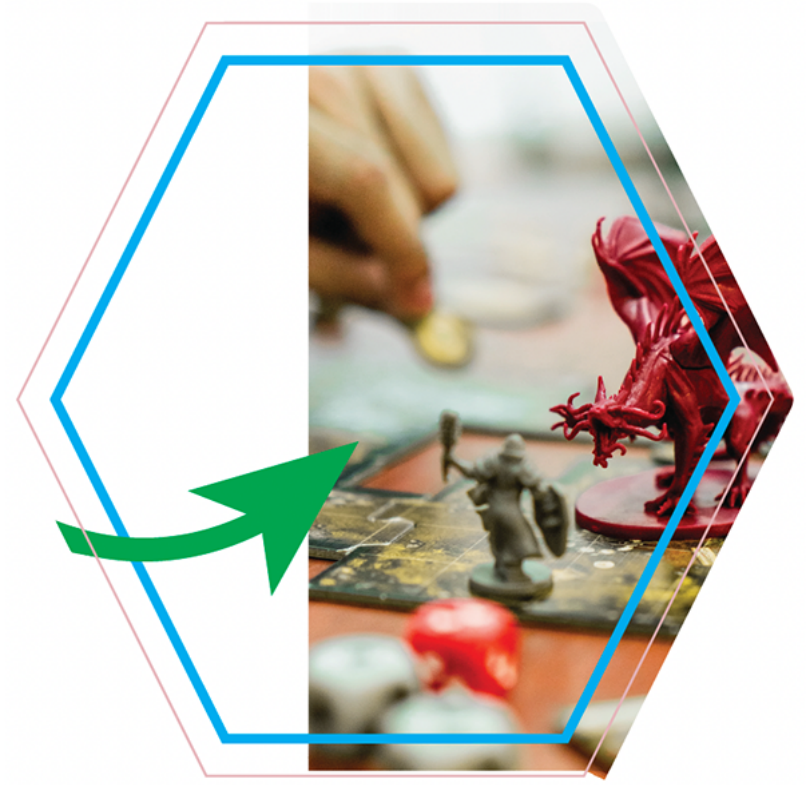


Example where the trim box is used as contour, with the **Extend line art** checkbox selected:



Example 3

Clip mask example. The bleed area is filled with clipped away image data. This is obtained by selecting the **Extend line art** checkbox.



Related Actions

- *Check bleed* on page 247

- *Check bleed around contour* on page 251

3.1.14.3. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

3.1.14.4. Change overprint

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the overprint for a selected object's fill and/or stroke.

How to proceed

Proceed as follows:

1. To change the Fill/Stroke overprint, select the Fill/Stroke overprint checkbox.

   Note: The checkbox only indicates **what** you want to change, **not how** you want it to change. If none of the checkboxes has been selected, the name of the Action will change into "Do not change overprint".

2. To enable or disable Fill/Stroke overprint, click the buttons:
   -  Overprint is off.
   -  Overprint is on.



Tip: Check the Actions field, to see if the Action is configured appropriately. For example, if you selected the Fill overprint checkbox and clicked the button next to it, the name of the Action should change into "Set fill overprint to off."

Related Actions

- *Check if object is set to overprint* on page 343
- *Select by overprint* on page 433

3.1.14.5. Change overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to change the overprint mode of a selection to Standard overprint (OPM 0) or Illustrator overprint mode (OPM 1).

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

Related Actions

- *Select by overprint mode* on page 433

3.1.14.6. Change rendering intent

Belongs to

- **Category:** Prepress;Color
- **Type:** Changes

What it does

Modifies the rendering intent of an object to one of the following:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96

3.1.14.7. Change rendering parameter

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the rendering parameter of your choice to the corresponding rendering parameter of the grabbed object.

Example

To apply a transfer curve from an object to the objects of your selection in the Action List

1. Select an object in your PDF document, by using the PitStop Select Objects tool .
2. In the attributes of the Change rendering parameter Action, select Change **transfer**.
3. Click **Grab Transfer From Selection**.

3.1.14.8. Change smoothness

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the value of smoothness of a selected PostScript curve.

A value of 1 is a good default.

3.1.14.9. Change transparency

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to modify the transparency of the objects in a PDF file.

You can:

- Modify the alpha channel of a fill and/or stroke, by moving the sliders to the desired percentage. Note that, to gain full opacity, you should move the slider to 100%.
- Change the blending modes.

  This will change the way in which the colors of a transparent object on top blend with the colors of underlying objects.

  To select the blending modes you want to apply, proceed as follows:

  1. Select a blending mode under **Available**.
  2. Click **Add** to move it to the **Selected** list.
  3. Repeat steps 1-2 as required.

     The blending modes will be applied in the order as they appear in the Selected list.
- Turn on or off **Alpha is Shape** as required. This may affect anti-aliasing. (Do not turn it on, unless you really need it.)
- Turn on or off **Text Knockout**.

  If Text Knockout is enabled, the inks of underlying objects, if any, will be cut out on the other separations. This option may be useful in case of overlapping characters.



Note: As of PitStop 2022, this Action also works on transparent annotations.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Remove transparency* on page 228

3.1.14.10. Change transparency group settings

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since:** 2020

What it does

Allows you to to modify the transparency group settings, on form or page level.

Remember that you can also change (and view) the transparency group settings in PitStop Pro using the Enfocus Inspector.

About transparency groups

A transparency group is a group of objects that belong together; the group can be defined on form level (a so-called XObject form) or on page level. Checking the transparency group

properties may be useful to know whether an object's visual appearance has changed because it's part of a group.

About the transparency group settings that can be changed using this Action

Setting	Meaning
Change forms or pages to transparency groups	• **On**: The page or form is converted to a transparency group. If it is already a transparency group, nothing changes. The other transparency settings (knockout flag, isolated flag, blending color space) are used to render the transparency group. • **Off**: The page or form will not/no longer be a transparency group. The objects will be rendered as if they were placed directly on the page. The other settings in this Action are grayed out (as they are not relevant if there is no transparency group).
Change the knockout flag to	• **On**: If the knockout flag is on, the objects in the transparency group are rendered as one object. Overlapping parts cannot interact with each other: the objects on top fully overwrite the objects underneath. • **Off**: The objects are not rendered as one object.
Change the isolated flag to	• **On**: If the isolated flag is on, the objects in the transparency group are not affected by the objects underneath. • **Off**: If the isolated flag is off, the objects in the transparency group can be affected by other objects.
Change the blending color space to <select from a list>	This is the blending color space that will be used to render the transparency group. Note that this option is only active in case of an isolated group (isolated flag set to On).
ICC Profile	If the blending color space is Gray, RGB or CMYK, you should select the appropriate ICC Profile.

3.1.14.11. Clean up unused resources

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does
Removes resources that are not used, for example embedded images or fonts, to reduce the file size.

3.1.14.12. Convert PDF/X-4p Output Intent to PDF/X-4

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Converts PDF/X-4p Output Intent to PDF/X-4.

PDF/X-4p is used when the ICC profile in the Output Intent is supplied externally.

In PDF/X-4, the ICC profile in the Output Intent must be supplied internally, so this Action embedds the external ICC profile.

3.1.14.13. Convert shading to images

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since Version:** 13 update 2

What it does

Converts shadings and shading color spaces to images, in order to improve the performance of RIPs that have difficulties handling shadings.

This Action is able to handle *objects, text and masks* with shadings, as well as *shaded color spaces in the fill and stroke* of paths, text, and image masks. In case of image masks, the *combined visible area* of all selected objects that use shading is converted to an image which is used as a coloured tiling pattern.

If the shading is tagged with an ICC profile, the resulting image will be tagged with the same ICC profile; if the shading does not have an ICC profile attached, the resulting image won't have one either.



Tip: As only the *visible content* of the shading is replaced, we recommend performing all conversions that change the bounding box (e.g. changes to the font size or the width of the stroke) BEFORE running this Action.

Note that due to this conversion, the file size will increase.

Options

In the attributes of this Action, you can determine:

- The preferred **resolution** of the resulting images (by default: 300 ppi)

- The **compresssion type** (JPEG, JPEG2000, ZIP or none)
- The **quality** of the images.

3.1.14.14. Make mask

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Creates a mask from at least two selected objects (line art or text).

Related Actions

Release mask on page 225

3.1.14.15. Overprint on all separations

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Ensures that if an object is set to overprint, it overprints on all separations. You can apply the overprint to the fill color and/or the stroke color.

The overprint rules in PDF are clearly defined but sometimes very surprising. For example, a gray object that is set to overprint will overprint on underlying Pantone colors, but it will not overprint on Cyan, Magenta and Yellow. This Action will ensure that the document will still print as Black, but with overprint on CMY.

3.1.14.16. Release mask

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes a selected mask.

In PitStop masks refer to clipping paths, i.e. objects (line art or text) of which the shape (partly) masks other artwork. Only areas inside the clipping objects are visible. This Action allows you to remove the mask, so that the different objects become visible again.

Related Actions

Make mask on page 225

3.1.14.17. Remove black generation

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to remove black generation settings.

Black generation is a custom setting that tries to replace CMYK-mixed blacks and grays with a greater percentage of black to save on colored ink and give a clearer black. As many printers prefer to set these settings themselves, they can use this Action to remove them from a PDF.

Related Actions

Check for custom black generation on page 343

3.1.14.18. Remove custom transfer function

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Remove a custom transfer function applied to an object in a PDF.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Apply transfer function* on page 83
- *Remove custom transfer function* on page 226

3.1.14.19. Remove halftone

Belongs to

- **Category:** Prepress

- **Type:** Changes

What it does

Removes any custom halftone information from a document.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Custom halftones are mostly used for screening frequency and angles.

Associated with every output device is a default halftone definition that is appropriate for that device. Only relatively sophisticated documents need to define their own halftones to achieve special effects. In general, when a PDF document provides its own halftone specifications, it sacrifices portability: they may lead to unpredictable printed output when the same document is sent to different printers. This is why they are generally undesirable.

Related Actions

Check for custom halftone on page 344

3.1.14.20. Remove halftone phase

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes all halftone phases from a PDF document.

A halftone phase is a shift in the alignment of halftone and pattern cells in device space, to compensate for window system operations that involve scrolling. It is no longer used, but may still be found in documents containing artwork from older source applications.



Note: It may be interesting to remove halftone phases, because halftone curves, when defined, overrule general transfer curves.

Related Actions

Check halftone phase on page 342

3.1.14.21. Remove non-PDF/X compliant halftone

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any instances of halftones that are not compliant with the PDF/X specification.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Some of these halftones are not allowed according to the PDF/X specification, which is why you might want to remove them.

Related Actions

Check for non-PDF/X compliant halftone on page 345

3.1.14.22. Remove rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Changes

What it does

Strips rendering intents from color managed objects in a PDF.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Change rendering intent* on page 86

3.1.14.23. Remove transparency

Belongs to

- **Category:** Remove; Prepress
- **Type:** Changes

What it does

Removes transparency from the objects in a PDF file.

You can remove transparency from **all** objects in the PDF, or from objects for which:

- Fill is set to overprint, and/or
- Stroke is set to overprint, and/or
- Spot colors are used.



Note: As of PitStop 2022, this Action also removes transparent annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Change transparency* on page 221

3.1.14.24. Remove undercolor removal

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any custom undercolor removal information from a PDF.

Undercolor removal is the process of removing large percentages of cyan (C), magenta (M), and yellow (Y) ink prior to printing, and replacing them with black (K) ink, in order to achieve a clearer black color in print, and to save on color inks.

Related Actions

Check for custom undercolor removal on page 345

3.1.15. Remove

3.1.15.1. Remove Certified PDF workflow information

Belongs to

- **Category:** Remove

- **Type:** Changes

What it does

Removes Certified PDF workflow information from a PDF.

Certified PDF workflow information is extra information that is added to a PDF when it's processed as part of an Enfocus Certified PDF workflow. This information can include save states of previous versions, a PDF Profile and other metadata.

For more information and examples, refer to *the Reference Guide* (Chapter: Working with Certified PDF documents).

Related Actions

See also *Check Certified PDF state* on page 270

3.1.15.2. Remove empty layers

Belongs to

- **Category:** Remove; Layers
- **Type:** Changes

What it does

Removes empty layers selected by another Action in the same Action List.

Example
The following Action List will remove **all** empty layers in the PDF:

```
Select layers <!-- Select layers on page 389 -->
Remove empty layers
```

To remove Layer1 and 2, if they are empty:

```
Select layers by name <!-- Select layers by name on page 390 - Choose "equals Layer
 [12]" and "Use regular expressions" -->
Remove empty layers
```

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.

- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Remove objects from layers on page 125

3.1.15.3. Remove invisible objects without fill and stroke

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes objects that have no fill or stroke color associated with them.

Designers sometimes leave such objects in a document rather than deleting them.

Related Actions

- *Check for invisible objects without fill and stroke* on page 280
- *Select invisible objects without fill and stroke* on page 382

3.1.15.4. Remove object compression

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes the object compression from a PDF.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to remove this compression.

Related Actions

- *Check object compression* on page 276

- *Check optimal compression* on page 283

3.1.15.5. Remove processing steps - ISO 19593-1

Belongs to

- **Application:** PitStop Pro
- **Category:** Packaging
- **Type:** Changes
- **Since Version:** 13 update 2

What it does
Allows you to remove processing steps metadata from the layers of a PDF. Processing steps metadata is defined by ISO standard 19593-1. For more information, refer to *the website of ISO (International Organization for Standardization)*.

Related Actions

- *Select layers by processing steps - ISO 19593-1*
- *Check processing steps - ISO 19593-1* on page 318
- *Change layer processing steps - ISO 19593-1* on page 159

3.1.15.6. Remove pages

Belongs to

- **Application:** PitStop Pro
- **Category:** Remove
- **Type:** Changes
- **Since Version:** 2017

What it does
Deletes pages.

This Action has no attributes of its own; it needs to be preceded by a *Select pages* Action to define the pages you wish to remove.

Example
The following Action List will delete all even pages from the PDF:

```
Select pages  (attributes: All pages - even)
Remove pages
```

Related Actions

- *Select pages* on page 416

3.1.15.7. Remove selection

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes any currently selected object in a PDF.

Note: If forms are selected (for example with the "Select forms" Action), they are not removed, unless they are empty.

3.1.15.8. Remove transparency

Belongs to

- **Category:** Remove; Prepress
- **Type:** Changes

What it does

Removes transparency from the objects in a PDF file.

You can remove transparency from **all** objects in the PDF, or from objects for which:

- Fill is set to overprint, and/or
- Stroke is set to overprint, and/or
- Spot colors are used.

Note: As of PitStop 2022, this Action also removes transparent annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Change transparency* on page 221

3.1.16. Text

3.1.16.1. Add font metadata

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Adds font information to the PDF's metadata (based on the font resource).

About font metadata

Font metadata is descriptive information about the fonts used in a PDF, for example the name of the font, its type and encoding. You can find the font metadata of a file in Adobe Acrobat by selecting **File** > **Document Properties** and switching to the **Fonts** tab.

Related Actions

Check font metadata on page 351

3.1.16.2. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

3.1.16.3. Change character spacing

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the amount of space between two characters in a selected text string.

The amount of space is expressed in 'em' units. An 'em' refers to the width of the capital M in the current font.

3.1.16.4. Change corrupt font widths

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes corrupt font widths.

Corrupt font widths may occur in a PDF, when "artificial" bold or italic was used instead of the "bold" or "italic" version of the font concerned. For example, if "Futura" is used in your PDF, the "Futura-Bold" and "Futura-Oblique" fonts should be used instead of applying bold and italics on the regular Futura font. Artificial font may cause problems when printing the PDF.

Related Actions

- *Check corrupt font widths* on page 349
- *Select corrupt font widths* on page 437

3.1.16.5. Change fill and/or stroke

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to turn on or off the fill and/or stroke for the selected objects.

3.1.16.6. Change fill type

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to change the fill type of the selected objects to either Non-Zero Winding (Fill) or Even-odd (Eofill).

About the fill type

The fill type is an attribute of polygons and loops: compound paths with intersecting lines. To determine whether a point is part of the shape, two different rules can be applied:

- The **Non-Zero Winding** rule (or standard rule). This rule supposes that you draw a line from a point inside the shape to the outside of the shape, without passing through a vertex. You must now count the number of times edges wind around the point inside the shape, in a counter-clockwise direction:
  - For every edge that crosses the line from the point inside the shape in one direction, add 1 to the winding number.
  - For every edge that crosses the line in the opposite direction, subtract 1.

  If the winding number is not equal to zero, the shape area to which the point belongs, is filled. For more information, refer to *http://www.wikipedia.org/wiki/nonzero-rule*.

- The **Even-odd rule**: This rule also supposes that you draw a line between a point inside the shape outline and a point outside its outline.
  - If that line crosses the line of the shape an odd number of times, the shape area to which the point belongs, is filled.
  - If the number of crossings is even, the area is not filled.

Checking the fill type of line art

To see which rule is applied, check the object's fill attributes:

1. Select the object, using the Enfocus Select tool .
2. Click to display the Enfocus Inspector and select > .
3. At the bottom, check which button is selected:
   - If **Fill** is selected, the **Non-zero Winding rule** applies.

- If  **Eofill** is selected, the **Even-odd** rule applies.

3.1.16.7. Change flatness

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to set the flatness of a PostScript curve.

The flatness determines how the objects in a document are printed on a PostScript printer.

The default setting for flatness is 1. Increasing this value will speed up printing, but can reduce the print quality (resulting in visible segments in the curve). Decreasing this value will slow down printing, but will improve the print quality.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

3.1.16.8. Change font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to replace the current font with another one.

Choose the font that should replace the current font:

- To combine a font name with the preferred type and subtype, select **Search for a font by name**:
  1. Click **Select Font Name** and select the appropriate font. Click **OK**.
  2. Select the preferred type and subtype.
  3. Select the **Embed** checkbox as required.
- To use an existing font, select **Select an existing font**.
  1. Click **Create Font Resource**.
  2. Select the appropriate font.
  3. Select **Embed**, **Don't embed** or **Embed Subset**.
  4. Click **OK**.

You should also indicate how the embedded composite font should be handled.

3.1.16.9. Change line cap

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes how the end of a vector line looks like.

How to proceed

- To have the line end exactly, click  **butt**.
- To put a round end on the line, click  **round**.
- To have corners projected beyond the length of the line, click  **projecting square**.

3.1.16.10. Change line join

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes how a corner on a vector line looks like.

How to proceed

- To have a sharp corner, click  **miter**.
- To put a round corner on the line, click  **round**.
- To flatten the corners, click  **bevel**.

3.1.16.11. Change line weight

Belongs to

- **Category:** LineArt;Text

- **Type:** Changes

What it does

Changes the thickness of a selected line to the desired line weight.

Related Actions

- *Select by line weight* on page 392
- *Check line weight* on page 296

3.1.16.12. Change miter limit

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes the length of the extension of a corner on a vector line.

The miter limit is the limit when a join switches from mitered (pointed) to beveled (squared-off). To allow “pointier” angles, you can increase the miter limit.

3.1.16.13. Change point size

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the point size of a selection by or to a given amount.

3.1.16.14. Change stroke adjustment

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Allows you to enable or disable stroke adjustment.

Stroke adjustment takes care of the rendering of paths on a raster device (printing device, computer monitor, etc.).

Example

If stroke adjustment is **turned off**, the device will draw the pixel only if it covers the path for more than 50%.

This means that a 1 pixel wide line can be drawn in different ways:

- If the line is drawn nicely on top of a pixel of the screen, the line will look fine.
- If the line is spread over 2 pixels of the screen, the width will be 2 pixels on some places and 1 pixel on other places, turning the line into an ugly, jaggy line.

If stroke adjustment is **turned on**, a correction will be made in such a way that the line looks nice and has the same width (1 pixel) everywhere.

3.1.16.15. Change word spacing

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the word spacing of a selected text string to a given value (in em).

3.1.16.16. Consolidate fonts

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2021

What it does

Removes duplicate font information that increases the size of a PDF file.

Multiple subsets of the same font can be created by the generating application, or when multiple PDF files are combined into a single file. Multiple subsets make the file overly complex and can impact the output RIP time.



Note: There's one important limitation: for this Action to work properly, all fonts must be installed on your system! Fonts that are not present, will remain untouched. This is also the case for fonts of which the license does not allow embedding.

The Action works as follows:

1. First, all fonts are unembedded (on condition they can be re-embedded afterwards, this is checked first, to avoid font issues).
2. Next, all font dictionaries are compared and duplicate dictionaries are removed, to make sure that the same fonts share one and the same font dictionary.
3. Finally, the fonts are subset or embedded again, depending on the chosen embedding type in the attributes of this Action.

Note: The option to use subsetting or embedding will only work for fonts that were originally subset or embedded. Otherwise, this Action would increase (instead of reduce) the file size.

3.1.16.17. Convert text to outlines

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to outline the text segments in your selection.

This means you turn the text characters into a set of compound paths. In other words, your text will no longer be a true font, but it will be replaced with a graphical representation of the characters. You can then for example change the fill or stroke color as required.

This can be useful to make sure that your text is printed exactly "as is" or, if you cannot embed the font, for example due to font licensing restrictions.

Note: By default, invalid characters (often represented as a small box containing an X or a question mark) are not converted, unless you select the **Outline invalid characters (.notdef glyph)** checkbox.

3.1.16.18. Embed font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Embeds a selected font if it is available on the system of the machine PitStop is running on.

You can include the entire font or only embed a subset.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

- *Unembed font* on page 247
- *Select embedded fonts* on page 438

- *Check font embedding* on page 350

3.1.16.19. Find and replace text

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2020

What it does

Enables you to find a particular string and replace it with another string, optionally using variables.

You can carry out a case sensitive search by selecting the **case sensitive** checkbox: in that case, PitStop takes into account the case (upper case/lower case) of the search string.

Note that font license restrictions may disallow font editing, hence block the text replacement. However, if you're sure that it's allowed to manipulate the font or if you have an agreement with the print vendor, you may consider selecting the **Skip font license restrictions** checkbox in the PitStop Pro user preferences (Fonts category).



Note:

- Find and replace is suitable for replacing words or small lines of text. It's not suitable for replacing text involving reflow of lines.
- Find and replace also works on text that is split in characters, as long as all characters are put on the same line.
- Find and replace does not work on subset fonts if not all characters of the matching search string are embedded.
- Non-Latin characters are also supported.

Example 1

```
Replace "MyCompany" with "MYCOMPANY"
```

- with "case sensitive" cleared, all versions of the string regardless of the case will be replaced (Mycompany, mycompany, myCompany, etc).
- with "case sensitive" selected, only the exact match ("MyCompany") will be replaced.

Example 2

```
Replace "Configurator Module" with "CONFIGURATOR MODULE"
```

When executed on the text below, only one instance (in blue) is replaced. The matching string in the left column is not replaced, because it's divided over two lines.

Configurator Module	• Allows you to use a number of third-party applications in a Switch flow, such as the Adobe Creative Suite and other applications that are often used in the graphical industry. For a list of all supported applications, refer to the *CONFIGURATOR MODULE documentation*. • For each of the supported applications, Switch offers a configurator which streamlines the connection between Switch and the application concerned, and controls the output destination of the processed files.

3.1.16.20. Fix bounding box values of Type 3 fonts

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2020

What it does

Fixes embedded Type 3 fonts that have very small bounding box values.

Such Type 3 fonts are usually wrongly converted SVG fonts, i.e. fonts that are used in Illustrator, Indesign, Photoshop, ... but that are not supported by the PDF specs and most RIPs, and therefore converted to Type 3. PitStop recalculates the bounding box values, so the font can be handled by most RIPs.

Related Actions

Flatten Type 3 fonts on page 244

3.1.16.21. Fix inconsistent Type 3 font width information

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2022

What it does

Fixes inconsistent Type 3 font widths (Type 3 glyphs d0 or d1 values that are inconsistent with the font's widths array).

Type 3 fonts are usually wrongly converted SVG fonts, i.e. fonts that are used in Illustrator, Indesign, Photoshop, ... but that are not supported by the PDF specs and most RIPs, and therefore converted to Type 3. PitStop fixes this, so the font can be handled by most RIPs.

Related Actions

- *Check for inconsistent Type 3 font width information* on page 353

- *Select by inconsistent Type 3 font width information* on page 436

3.1.16.22. Fix invalid characters (.notdef usage)

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Fixes invalid .notdef glyphs in a PDF.

.notdef glyphs are replacement characters for undefined characters in a PDF; they often look like a small box containing an X or a question mark and are not PDF/X compliant.

Related Actions

Check if invalid character (.notdef glyph) is used on page 355

3.1.16.23. Fix non well-formed XMP metadata

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Corrects badly formed XMP metadata and optionally removes it, if it cannot be fixed, ensuring that PDF files can be made PDF/X-4 compliant.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

Check if XMP metadata is well-formed on page 310

3.1.16.24. Flatten Type 3 fonts

Belongs to

- **Category:** Text
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Flattens Type 3 fonts, i.e. converts these fonts (that are often not rendered correctly in PDF) to normal page content so that they can be successfully output.

About Type 3 fonts

Type 3 fonts are actually bitmaps, typically emoji fonts or colorful fonts with graphic properties within a glyph.

Related Actions

Fix bounding box values of Type 3 fonts on page 243

3.1.16.25. Merge into text lines

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to merge text into text lines.

This Action merges all text that occurs on one line and has the same font into one text object. This is useful if you want to change text (e.g. the font) on a line by line basis.

Related Actions

- *Split in words* on page 246
- *Split in characters* on page 246

3.1.16.26. Remove CharSet or CIDSet

Belongs to

- **Category:** PDF 2.0, Text
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the CharSet or CIDSet if present in the PDF.

If a font is subset, only the characters of the font that are actually used are embedded in the document. They are held in a CharSet (simple fonts) or a CIDSet (composite fonts).

CharSets and CIDSets are deprecated in PDF 2.0. That means that they are allowed, but not needed, so they can as well be removed.

Related Actions

Check if a subset font contains a complete CharSet or CIDSet on page 354

3.1.16.27. Split in characters

Belongs to

- **Category:** Text
- **Type:** Changes

What it does
Allows you to split text objects in a PDF in separate characters.

This allows you to change for example the font or format of single characters (e.g. increase the size of capital letters).

Related Actions

- *Split in words* on page 246

3.1.16.28. Split in words

Belongs to

- **Category:** Text
- **Type:** Changes

What it does
Allows you to split the text objects in a PDF in separate words, for example to modify the spacing.

Related Actions

- *Split in characters* on page 246

3.1.16.29. Strip OpenType embedded fonts

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to remove the font's OpenType **info** from the PDF.

An OpenType embedded font is a PDF font resource that has its font embedded in the 'FontFile3' key with as 'SubType' the value 'OpenType'. This is not supported by older software. Running this Action will convert the PDF font resource to a format that is supported by older software as well.

3.1.16.30. Unembed font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Removes embedded fonts from a document.

This can make the PDF lighter for internet distribution but risks messing up formatting if the font is not present on the end user's machine.

Optionally, you can choose not to execute this Action if the resulting font is unsafe.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

Embed font on page 241

3.2. Checks

The following Actions allow you to check various properties in PDF documents (for example font-related properties) or detect specific objects or elements (for example empty pages).

Each of these Actions can be logged as "Warning", "Sign-Off" or "Error" in the Preflight report.

3.2.1. Color

3.2.1.1. Check bleed

Belongs to

- **Category:** Prepress
- **Type:** Checks

- **Since version:** 2020

What it does

Allows you to check if bleed is missing. You should indicate the areas to be checked, that is the region(s) between the left, right, top or bottom corner of the trim box and the bleed box.

You should also specify where the bleed should start (= distance from the inside of the trim box).

Optionally you can enable the **Mirror margins according to page binding** checkbox and set a **white threshold for white** (by moving the slider or entering a value (in %)). The threshold for white makes sure that a color that is "almost white" (and looks white when printed) is considered white.

New as of PitStop 2021 is the slider to increase or decrease the **detection sensitivity**. A high bleed edge sensitivity will report missing bleed for e.g. tapered objects (because of the small gaps between them). A lower sensitivity value won't. The default value (which usually gives the best results) is 30%.



Note: When upgrading from older PitStop versions, existing Check bleed Actions get a detection sensitivity of 100%, because that best matches the old behavior.

The last option (**Ignore missing bleed smaller than**) allows you to ignore extremely small areas.



Note:

- This is a page-based, pixel-based check: it doesn't look at individual objects, but it renders the whole page and checks the pixels.
- Text objects that cross the trim box but don't reach the bleed box do not trigger bleed errors.

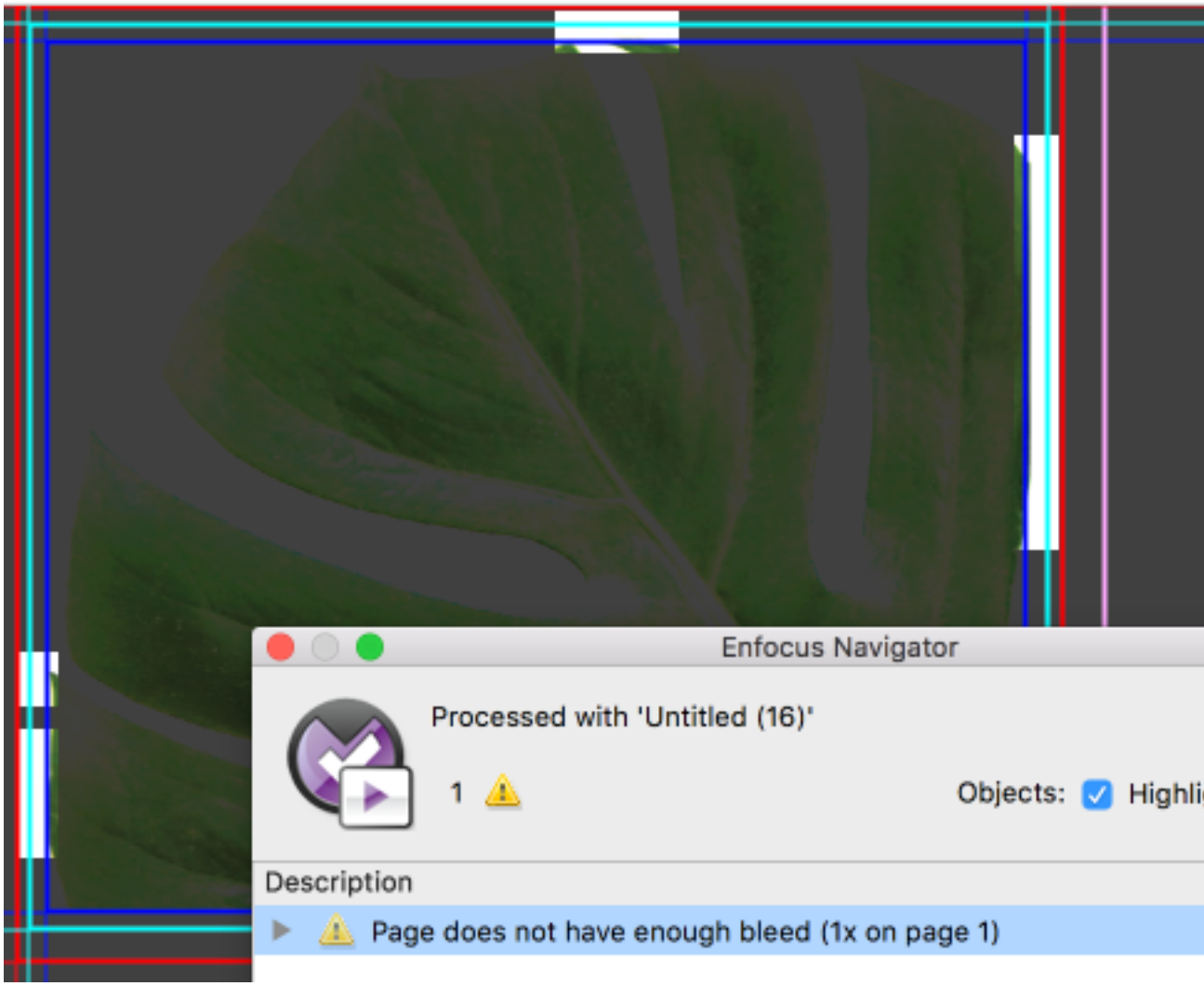
Important remark: The document must have a *valid trim and bleed box*. This is required for PitStop to know where the bleed should start and how big it should be.

Example

Example file with page boxes (media, bleed, trim box) shown:



When 'Highlight' is enabled in the Enfocus Navigator, the white areas show where bleed is missing:



Remark about the corners

By default, corners are checked for bleed if one of the touching sides is being checked. For example, if only the left side of the page should be checked, the upper and bottom left corner of the page will also be included in the bleed check.

There is one exception: if the Action is configured to NOT check the *inner* sides and the check depends on page binding (**Mirror margins according to page binding** selected), the inner corners (the bleed areas of the top and bottom that extend into the inner side) are NOT checked. This is not needed, because in that case, the corners are cut off anyway, so there's no need to check them.

Related Actions

- *Check bleed around contour* on page 251
- *Check bleed contours* on page 253
- *Add bleed* on page 212
- *Add bleed around contour* on page 215

3.2.1.2. Check bleed around contour

Belongs to

- **Category:** Prepress
- **Type:** Checks
- **Since version:** 2021

What it does

Allows you to check if bleed is missing around a contour (typically a dieline or a cut line).

Note that this Action only works on *selected* line art that is not filled. The contour must be closed and it must be a compound path of at least 3 nodes. You must also indicate the color of the contour.



Tip: If the line art you want to check is not a closed or compound path, you can use *Close path* on page 132 and/or *Combine subpaths* on page 132 to create one.

Note that text objects that cross the trim box but don't reach the bleed box do not trigger bleed errors.

Attributes

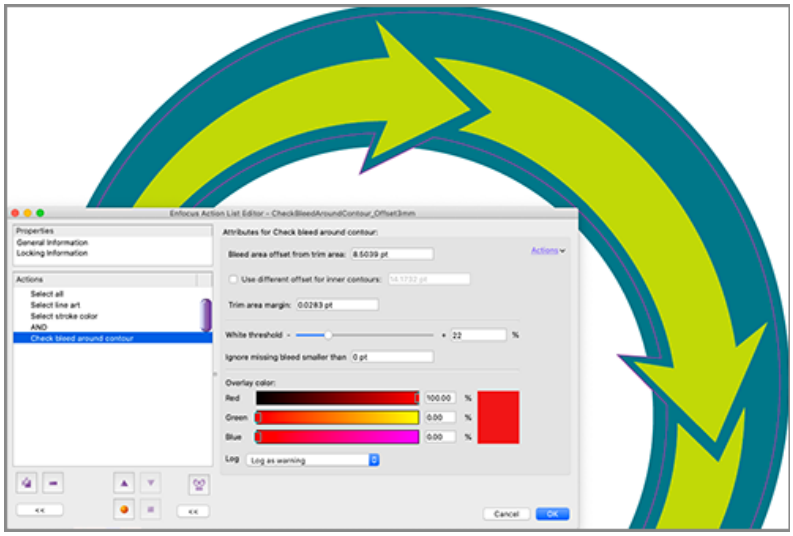
Attribute	Description
Bleed offset	The desired amount of bleed (starting from the contour).
Use different offset for inner contours	Optionally, if you want a different bleed distance value for the outside and inside of a compound shape, you can select this checkbox and enter the value of your choice for the inner contours.
Trim area margin	Indicates how close/far from the trim area the bleed check should start.
White threshold	The threshold for white makes sure that a color that is "almost white" (and looks white when printed) is considered white. The default value is 10%.
Ignore missing bleed smaller than	This option allows you to ignore extremely small objects, like jpeg artefacts.
Overlay color	The color used to highlight where bleed is missing (when viewing the result of the Action List through the Navigator). You could use this option to distinguish between 'missing bleed' (critical error, highlighted in red) and 'not enough bleed' (not critical, highlighted in orange). To get this, you need to add two instances of this Action to your Action List; one with the minimal bleed value (e.g. 2 mm) and red as overlay color, and

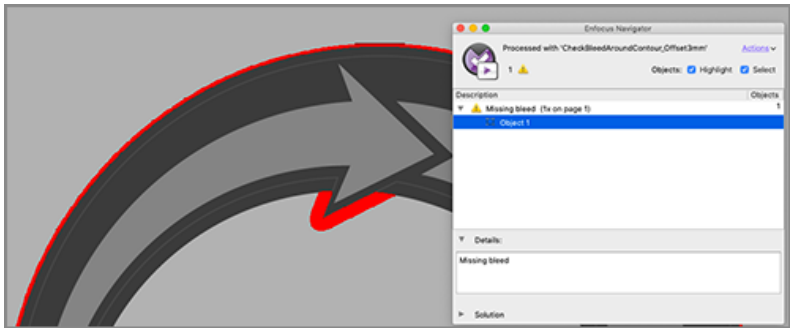
Attribute	Description
	one with the preferred bleed value (e.g. 4 mm) and orange as overlay color.

Example Action List

```
Select line art
Select spot color <!-- color of the contour -->
AND
Check bleed around contour
```

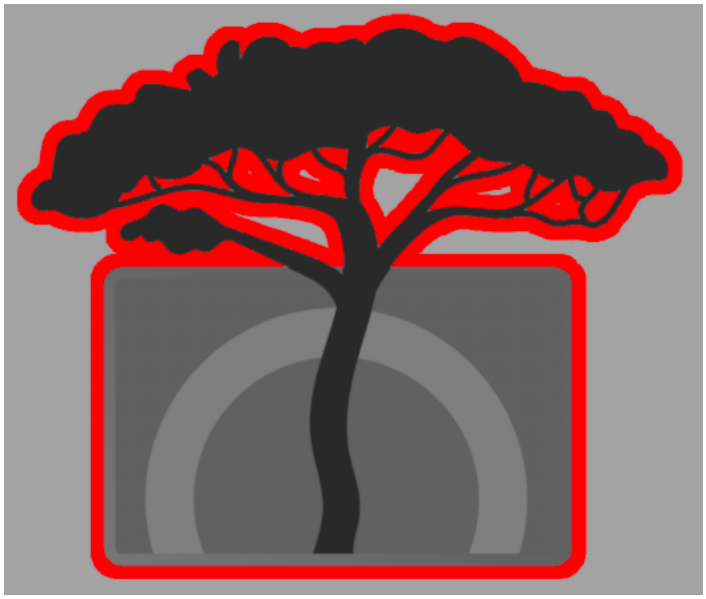
Example 1





Example 2

This Action also works with irregular shapes. Both internal and external missing bleed are highlighted in red (= the chosen overlay color).



Related Actions

- *Check bleed* on page 247
- *Check bleed contours* on page 253
- *Add bleed* on page 212

3.2.1.3. Check bleed contours

Belongs to

- **Category:** Prepress
- **Type:** Checks
- **Since version:** 2021

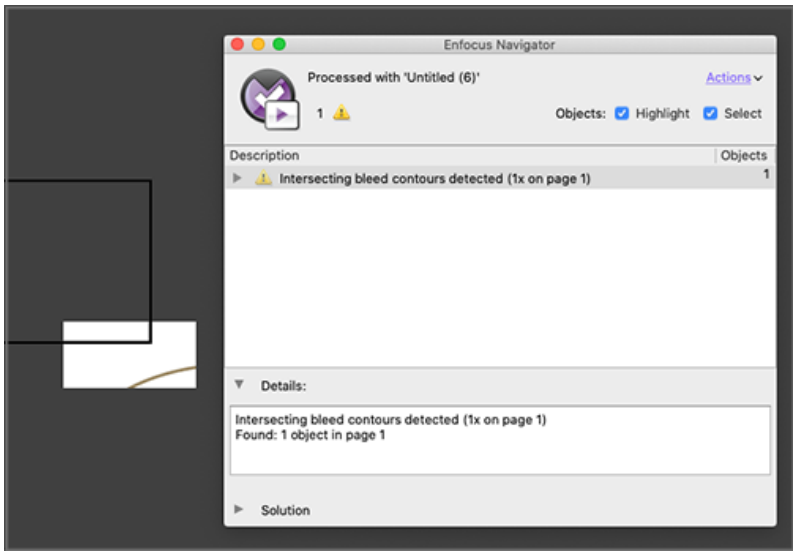
What it does

Allows you to check if bleed contours (typically dielines or cut lines) overlap. That way you can detect if there are objects that come too close to each other. That may for example happen when several different files are merged into one document.

Note that this Action only works on selected line art that is not filled. The contour must be closed and it must be a compound path of at least 3 nodes.

Tip: If the line art you want to check is not a closed or compound path, you can use *Close path* on page 132 and/or *Combine subpaths* on page 132 to create one.

Example



Related Actions

- *Check bleed* on page 247
- *Check bleed around contour* on page 251
- *Add bleed* on page 212

3.2.1.4. Check color type

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if a particular color space is used for particular objects.

For example, check if the **device-specific color space** is used for **text and line-art**.

You can ignore process colors in DeviceN color spaces, as required. (It may not be required to check for the presence of process colors, as they are by default available on the printer.)

In case of ICC Profile Colors, you can either check for all types or for one particular ICC space (ICC based gray, ICC based RGB, ICC based CMYK or ICC based Lab).

3.2.1.5. Check default color spaces

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether default color spaces are used and whether or not they are PDF/X-3 compliant.

3.2.1.6. Check DeviceN attributes

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the PDF's color space is DeviceN or NChannel with a particular attribute.

You can check the following attributes:

- Spot color definitions
- Process color mapping
- Mixing hints
- Solidities
- Printing order
- Dot gain

Related Actions

Select DeviceN with attributes on page 371

3.2.1.7. Check DeviceN colorants

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the non-process colors used in the DeviceN color space are defined in the colorants dictionary, so that they can be used on other devices.

About the DeviceN color space

The DeviceN color space is defined as a list of names. These names can refer to the process colors (CMYK, RGB or Gray) or spot colors. Spot colors can have an alternate in CMYK for output devices that do not recognize their name, or they can just be a name without color definition. If the color is just a name (for example: "Silver" or "MySpot"), it cannot be used on other devices.

Checking the colorants dictionary

You can use the Enfocus PitStop Inspector to check whether a particular spot color has been defined in the colorants dictionary. The colorants dictionary describes the colorants used in the DeviceN color space. Proceed as follows:

1. Select an object with the color you want to check (using the Enfocus Select Object Tool).

2. Click to display the Enfocus Inspector and select  > . Next to the Fill icons, you will see "DeviceN (Spot + process colors)". Below you will see the number of components and their names.
3. Click the **Actions** link (in the top right corner) and select **Color Picker**.
4. In the left part of the Color Picker dialog, navigate to the **Document Spot Colors** folder. This folder contains all spot colors used in the document (not only the ones used for the selected object).
5. Select the spot color you want to check. If the color is just a color name, without a color definition, the Alternate Color Space is Gray.

Related Actions

Select undefined DeviceN colorants on page 379

3.2.1.8. Check DeviceN for process color spaces

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the DeviceN process color space matches the PDF/X Output Intent color space, i.e. whether the DeviceN color space contains only process colors.

About the DeviceN color space

The DeviceN color space is defined as a list of names. These names can refer to the process colors (CMYK, RGB or Gray) or spot colors. Spot colors can have an alternate in CMYK for output devices that do not recognize their name, or they can just be a name without color definition. If the color is just a name (for example: "Silver" or "MySpot"), it cannot be used on other devices.

3.2.1.9. Check for NChannel colors with non-trivial process dictionary

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the PDF contains NChannel colors with non-trivial process dictionary.

About NChannel

NChannel is an extension of the DeviceN color space, a multi-component, device-dependent color space. NChannel color spaces give applications greater flexibility when representing colors that are not available on a target device.

NChannel is supported from PDF 1.6 (Acrobat 7.x) onwards. If you are opening a PDF in an earlier version of Adobe Acrobat, colors can print or display incorrectly.

About process dictionaries

NChannel requires a process dictionary which maps the names used in the colorants list to device colors. This allows giving aliases for process colors.

A "trivial" process dictionary uses aliases that are easy to understand, e.g. maps "Cyan" to the process color "Cyan".

A "non-trivial" process dictionary would use custom aliases, such as "My Process color".

Related Actions

- *Make DeviceN without NChannel information* on page 90

3.2.1.10. Check for pre-separated pages

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the PDF document contains any pages that already have been separated.

A pre-separated PDF contains pages that have been separated into their CMYK components. In offset printing each of these colors is printed with a separate plate. This means that each page in a PDF document is separated into its four constituent colors: cyan, magenta, yellow and black. For example, a pre-separated PDF file for a two-page CMYK print job, results in a PDF file with 8 pages.

This separation process is usually carried out by the RIP, and not in the source PDF document.

3.2.1.11. Check for solids and tints

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

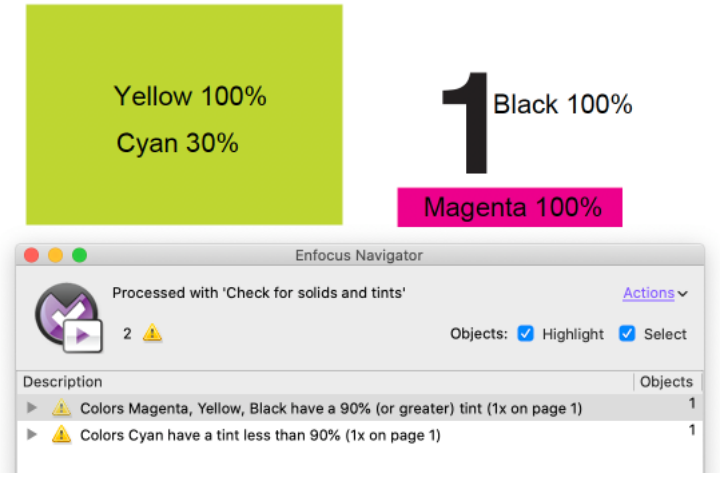
Checks if the PDF document contains any colors that have a tint below or above a set threshold.

The threshold is set in the **Effective solidness threshold** field. The default is 100%.

It's also possible to define a threshold for considering a colorant as a tint, by selecting the **Ignore tints that cover a surface area below** checkbox and entering a value of your choice (in ppm). You can take into account the printable surface area, the surface area of the own channel, or the surface area of all channels. This option is useful to avoid that colorants on pages with for example only 1 non-solid pixel in the rendered page would be marked as a tint.

Example

In this example, the threshold was set to 90%.



3.2.1.12. Check for spot color ambiguity

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Searches for ambiguous spot colors. Spot colors are considered ambiguous if the name of the spot color refers to more than one set of color values.

You can set a number of options, to make the check less strict. You can also include a check on DeviceN color spaces.

3.2.1.13. Check ICC tagging

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks objects to see whether or not they are ICC tagged or tagged with a particular ICC profile in a particular color space. You can check if the fill and/or stroke of the objects are ICC tagged.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Tag object with an ICC profile* on page 99
- *Check ICC profile version* on page 259

3.2.1.14. Check ICC profile version

Belongs to

- **Category:** Color
- **Type:** Checks

What it does
Checks if the ICC profile version is equal to or lower than a particular version number.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99

3.2.1.15. Check if DeviceN printing order is consistent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Check whether the DeviceN printing order is consistent and whether all colorants are defined in the DeviceN printing order.

3.2.1.16. Check if ICC profile differs from ICC profile in PDF/X Output Intent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the fill and/or stroke ICC profile differs from the ICC profile in the PDF/X Output Intent.

As of PitStop 2022, it's possible to compare the ICC profile either with the document Output Intents or with the effective Output Intents. The effective Output Intent is the intent that is actually used. For example, if different Output Intents are applied on different levels (document/page/object), the most specific one is applied.

You can either check the ICC profile of the fill or the stroke, or both.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

About PDF/X Output Intents

Output intents specify the intended printing process and paper type as described by a corresponding ICC profile. The PDF/X Output Intents are defined by the Ghent Workgroup; only printer profiles are allowed as Output Intents, whereas PDF/A also allows monitor profiles.

Output intents are generally specified by the print service provider, but there are also a number of standard Output Intents available, which can be found in the Enfocus Output Intent Panel. For more information, refer to the PitStop Reference Guide.

Note that as of PDF 2.0 it is possible to define Output Intents on page level, whereas before, only document Output Intents were allowed.

Related Actions

- *Remove ICC tag* on page 95
- *Select by tagged ICC Profile* on page 369

- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99
- *Select objects of which ICC profile is equal to ICC profile in PDF/X output* on page 373
- *Check ICC profile version* on page 259

3.2.1.17. Check if blending color space is defined

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the page blending color space has been defined in the PDF document.

You must set the required blending color space and the required luminosity softmask blending color.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The **page blending color space** is the blending color space assigned to a page; it is used when individual artwork does not have a blending color space.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85
- *Select by blending color space* on page 364

3.2.1.18. Check if solidities of DeviceN colorants are consistent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Check if solidities of DeviceN colorants are consistent.

Solidity refers to how spot colors are shown on screen. 100% solidity means that the colors are completely opaque on screen in areas where it is printed at 100% ink density. This Action checks if the solidities are the same for all colors in the DeviceN color space.

3.2.1.19. Check if the color spaces used match the blend colorspaces

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the color spaces used in the PDF match the blend colorspaces.

3.2.1.20. Check ink coverage (basic object check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Checks the total CMYK ink coverage of the color of the **objects** in the PDF.

You can for example check if the ink coverage is at least 300%.

When including images in the ink coverage check, the threshold will determine the minimum area in which the ink coverage has to be exceeded before reporting an error or warning. For example, when entering '0', even 1 dot exceeding the maximum ink coverage will be reported.

Related Actions

Select by ink coverage (basic object check) on page 366

3.2.1.21. Check ink coverage (total page check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Allows you to check the CMYK ink coverage either of all colors combined or per separation on a page (inside a particular page box).

You can for example check if the ink coverage in the media box is at least 300%.

In case of a separation-based check, you may exclude separations with 0% ink coverage (i.e. empty areas without content).

It's also possible to ignore small areas, for example areas smaller than 1 inch.

3.2.1.22. Check number of color plates (basic object check)

Belongs to

- **Category:** Color
- **Type:** Checks
- **Since Version:** 13 update 2

What it does

Checks if the PDF contains *objects* that occur on a certain number of color plates (separations). You can check the object's fill and/or stroke as required.

Related Actions

- *Check number of separations (total page check)* on page 263 (checks everything on a page)

3.2.1.23. Check number of separations (total page check)

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks the number of separations that occur in a PDF file. You can set a precise number (e.g. 5 separations) or a range (e.g. less than 5) and choose whether or not to exclude certain colors (e.g. CMYK plates, spot color All ...). You can also use regular expressions to indicate which separations should not be counted.



Note: From PitStop 2019 onwards, you can exclude C, M, Y and K separately. This is useful when checking black and white jobs, or jobs that have K and a spot color.

You can check the number of separations for the complete document, or for each page separately. The new page-based option allows you to work with a selection, so you can check specific pages, page ranges or other page based selections, for example, you could check if every even page has two color separations.

Note that this option is also useful if you want to know on which page an issue occurs, because the page number is mentioned in the Preflight Report and in the Navigator.

Checking ICC tagged objects

ICC tagging is a way to specify colors independent from the output device: objects are tagged with an ICC profile that contains the transformation from the object's color to a device-independent color. When outputting this on a specific device, that device-independent color is in turn converted to the output device's color space.

Because this conversion depends on the output device, and because it will rarely (if ever) result in less than 4 color plates being used, checking the number of separations on an ICC tagged object will always result in 4 separations.

For example, if you have a black (100% K) ICC tagged object, the number of separations reported by this Action will be 4 (C, M, Y, K) instead of 1 (only K) because some ink will be used on all plates in order to reproduce the color correctly.

3.2.1.24. Check number of spot colors

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks the number of spot colors in a document.

You must enter the number of spot colors the document must have.

If you select the option **Spot colors whose names differ only by their suffix are counted as one**, spot colors with the same name but with a different suffix (e.g. PANTONE 3258 C, PANTONE 3258 U, PANTONE 3258 M) are counted as one color instead of different (3 in this example) colors. For more information about suffixes, refer to *Change spot color suffix* on page 86.

Note that spot color "All" is also counted. This spot color appears on all printing plates (hence the name) and is used for registration and printer marks that lie outside the trim and bleed boxes.

Related Actions

- *Check number of separations (total page check)* on page 263 (this Action has an option to not count Spot Color All)

3.2.1.25. Check objects by tiling pattern

Belongs to

- **Category:** Color
- **Type:** Checks
- **Since version:** 2020

What it does

Allows you to check for tiling patterns in the fill or stroke of text and line art, or in the fill of image masks. You can search for colored or uncolored tiling patterns or both.

Note: You should select at least one checkbox above the divider and one below the divider.

Related Actions

- *Select by tiling pattern* on page 369

- *Select tiling pattern contents according to parent object selection* on page 379

3.2.1.26. Check Output Intent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the desired color management Output Intent is used on page or document level. Note that the document can only have one Output Intent, whereas different pages in the document can have different Output Intents.

You can check for compliance with a particular PDF/X version and/or check if a particular ICC profile or ICC characterization is used.

Related Actions

Change Output Intent on page 85

3.2.1.27. Check rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Checks

What it does

Allows you to check the rendering intent of particular objects (Paths, Text, Paths or Text, Images, or all Rendering objects) in a PDF.

You can check whether or not they use rendering, and if they do, which type:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Change rendering intent* on page 86
- *Remove rendering intent* on page 96

3.2.1.28. Check required color set

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks for a restrictive range of tints in a PDF.

How to proceed

Define the color set to be checked:

1. To allow the use of 100% black, select **Black**.

   Note: If only black is allowed in the PDF, **only** select the **Black** checkbox. Do not add any other color.

2. To add another color that is allowed in the PDF:
   a. Click **New**. A new entry will appear in the text box.
   b. To allow a spot color (optionally), select the **Spot color** checkbox and type the name of the spot color in the text field. You should define a CMYK equivalent too (see next step). The name of the spot color will be shown in the text box.
   c. Enter the required values for CMYK (expressed in %) in the fields below the New/Remove button. Your changes will be shown in the text box.
3. If only one color should be used for images, select that color from the **Images must use only** list.

Related Actions

Snap color to color set on page 98

3.2.1.29. Check spot color by alternate color space

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Searches for spot colors with an alternate color space definition.

You can search for the following alternate color spaces:

- Device CMYK
- Device gray
- Device RGB
- ICC tagged gray
- ICC tagged RGB

- ICC tagged CMYK
- ICC tagged Lab
- Calibrated gray
- Calibrated RGB
- Lab

3.2.1.30. Check spot color by PANTONE library

Belongs to

- **Category:** Color
- **Type:** Checks
- **Since Version:** 2018

What it does

Checks if the spot colors in the PDF are (are not) part of the selected PANTONE library.

The PANTONE libraries are by default installed with PitStop Pro and PitStop Server.

Extra options are:

- **Ignore non PANTONE spot color names** (to only consider the color type and to ignore differences with respect to the subcategory)
- **Check alternate color values** (to take into account the CMYK/LAB values)

Use case

You can use this Action to identify any "strange" colors of which you do not know how to print them.

Related Actions

- *Normalize PANTONE library names* on page 91
- *Select spot color* on page 376

3.2.1.31. Check spot color by name

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if one or more particular spot colors are present in the document.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the spot color name.
- From version 13 update 1 onwards, there is an extra option to search for spot color(s) based on a list of names. This new option is useful if different spot color names refer to the same color. It also allows you to check for different spot colors in one go.

How to proceed

In the attributes of the Check spot color Action, proceed as follows:

1. Select the appropriate option from the list:
   - If you choose **Check all spot colors**, no other options have to be set.
   - If you choose one of the other options, you have to specify the name of the spot color(s) that have to be checked. Proceed with step 2.
2. Enter the name of the spot color(s) concerned:
   - In case of **Check spot color by regular expression**, you can use regular expressions. PitStop supports Boost Regular Expressions. For an overview of the options, refer to *http://www.boost.org/doc/libs/1_55_0/libs/regex/doc/html/boost_regex/syntax/perl_syntax.html*.
   - In case of **Check spot color by name** or **Check spot color by name from list**, you can simply type the name of the spot color(s) concerned or use the color picker  or the Grab color button . Note that, in case of a list, you must enter the names one by one, each on a separate line. It is for example not possible to select two colors in the document, and select them in one go, using the Grab color button . Instead, you must select the first color, grab it, then select the second color, and grab it and so on.
3. If the case of the spot color name (upper or lower case letters) does not matter, select the **Ignore case** checkbox.

Related Actions

Select spot color on page 376

3.2.1.32. Check spot color suffix

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the spot colors in the PDF have a given suffix. It's also possible to check for unknown suffixes.

You can find an overview of the available suffixes in the table below.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types. For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Change spot color suffix* on page 86

3.2.1.33. Check usage of device color spaces for PDF/X

Belongs to

- **Category:** Color
- **Type:** Checks
- **New since:**PitStop 2022

What it does

Checks whether the device color space maps to the document Output Intent for the chosen PDF/X version (PDF/X-4 or PDF/X-6).

3.2.2. Document

3.2.2.1. Check access control

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the document is protected in any way, for example with passwords, certificate IDs or file permission settings.

As of PitStop 2022, this Action has a number of attributes. You can now either check for the presence of a permission dictionary or for the presence of certain permission types (UR, UR3, DocMDP, DocMDP with a Signature references dictionary containing DigestLocation, DigestMethod or DigestValue).

Note that this check is useful to check for PDF/X-6 compliance (which allows UR3 and DocMDP).

3.2.2.2. Check Certified PDF state

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the Enfocus Certified PDF status of a PDF.

You can log whether

1. The Certified Preflight Profile matches a particular Profile. You can select a Profile from the database on your computer or from your disk/network (which hasn't been imported yet in PitStop).
2. The PDF being checked is Preflighted or Preflighted without errors.
3. All saved sessions or only the last saved session must be valid.



Note: A session is invalid if it refers to changes made by an external program.

Related Actions

See also *Remove Certified PDF workflow information* on page 229

3.2.2.3. Check contents compression

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF contains streams that are not compressed with some content compression method (CCITT, Flate, DCT or JBIG2). Compression allows you to make the file smaller.

3.2.2.4. Check data format

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the data format of a PDF is either Binary (=non-ASCII) or ASCII.

ASCII-encoding increases the file size, but allows files to be sent through older network protocols that cannot handle non-alphanumeric characters.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Select by document encoding* on page 380
- *Change document encoding* on page 100

3.2.2.5. Check document unique IDs

Belongs to

- **Category:** Doc
- **Type:** Changes

What it does

Allows you to check if the PDF has a unique document ID.

Related Actions

Add unique document IDs on page 99

3.2.2.6. Check file identifiers in document XMP metadata

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the PDF for missing file identifiers in the document metadata, for example: VersionID, DocumentID or RenditionClass.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

- *Check presence of document metadata stream* on page 313
- *Check if date is present in document XMP metadata* on page 307
- *Set XMP file identifiers* on page 156

3.2.2.7. Check for alternate presentations

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the PDF contains alternate presentations.

This mechanism is used for slideshow displays and is therefore not desired in a print document.

3.2.2.8. Check for garbage after the PDF End-Of-File marker %%EOF

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the PDF contains undesired characters after the end-of-file marker EOF.

If this is the case, the PDF is malformed. The last line of a PDF should only contain the EOF marker.

To solve this problem, you can do one of the following:

- Open the PDF in Adobe Acrobat and save it (using **File** > **Save As**).
- Process the PDF with PitStop Server (with the option **Full Save** enabled).

Related Actions

Check for unreadable data in front of the PDF header signature on page 273

3.2.2.9. Check for file structure problems

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the structure of the PDF conforms to the file structure as defined by the PDF specification of your choice.

Options are:

- PDF/A-1
- PDF/A-2
- PDF/X-6

3.2.2.10. Check for unreadable data in front of the PDF header signature

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks for unreadable data in front of the PDF header signature.

Related Actions

Check for garbage after the PDF End-Of-File marker %%EOF on page 272

3.2.2.11. Check if compression filters are PDF/X compliant

Belongs to

- **Category:** Doc

- **Type:** Checks

What it does

Checks whether compression filters used in the PDF are compliant with a specific PDF/X version.

Select the desired PDF/X version:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1
- PDF/A-2

3.2.2.12. Check if document does not need repair

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether a PDF is damaged and needs to be repaired when it is opened.

A PDF file can be damaged, for example, if you downloaded it from the Internet and the file transfer was incomplete.

If a PDF is damaged, you can try to redistill it or save it in Adobe Acrobat, using **File** > **Save as**. If this doesn't solve the problem, you will have to recreate the PDF from the source file, or download it again (if the problem was caused by a corrupt download).

3.2.2.13. Check if document has enough high-ASCII bytes in the PDF header

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF header contains at least 4 high-ASCII bytes in the PDF header.

There are three checkboxes:

- **Check header has at least 4 high-ASCII bytes**

- **Check for single EOL character after version header**
- **Check version header format**

The PDF specs require that there should be 4 contiguous high-ASCII bytes in the PDF header, so to check the compliance with the PDF specs, the first checkbox should be selected.

The PDF/A specs require that the 4 contiguous high-ASCII bytes in the PDF header should be the first bytes immediately after the header line, so to check the compliance with PDF/A, checkbox 1 and checkbox 2 should be selected.

For PDF/A-2 and PDF/X-6, all three checkboxes should be selected.

For a check for PDF/A-1, only the first checkbox should be selected.

3.2.2.14. Check if document is optimized for Fast Web View

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Verifies if the document is optimized for the Web.

A document that has been optimized for the Web often has a significantly smaller file size. This is achieved by replacing images that occur more than once in the document with pointers to the first instance of these images. Also, the PDF document is restructured to allow page-at-a-time downloading over the Internet: only the page viewed by the user is downloaded, thus avoiding long loading times for larger PDF documents.

3.2.2.15. Check if document requires PostScript LanguageLevel 3

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks a PDF to see if it contains PostScript Level 3-specific features such as transparency or smooth shadings.

About Adobe PostScript

Adobe PostScript is a page descripting language developed by Adobe in 1985. The language has changed over the years, resulting in different versions:

- Adobe PostScript Level 1: first, original version.
- Adobe PostScript Level 2: enhanced version; added support for different page sizes and better color printing.
- Adobe PostScript LanguageLevel 3: improved handling of graphics, supports more fonts, and speeds up printing.

For more information, refer to *http://www.adobe.com/products/postscript/pdfs/PLRM.pdf*.

3.2.2.16. Check number of pages

Belongs to

- **Category:** Page;Doc
- **Type:** Checks

What it does

Checks the number of pages in a PDF.

You can for example check if there are less/more than x page(s), or if the PDF contains an odd/even number of pages ...

3.2.2.17. Check object compression

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the compression of the PDF structure (possible as of PDF 1.5).

You can also check if the compression is compliant with PDF/X.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to check if the PDF contains such compressed streams, which you can afterwards remove if required.

Related Actions

- *Remove object compression* on page 231
- *Check optimal compression* on page 283

3.2.2.18. Check PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Allows you to check if the text encoding of a PDF complies with a particular PDF version. Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Related Actions

- *Change PDF text string encoding* on page 101

3.2.2.19. Check PDF/X viewer preferences

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF document complies with the viewer preferences as required by the PDF/X specifications.

PDF/X-1a:2001 and PDF/X-3:2002 have no special viewer requirements.

PDF/X-1a:2003, PDF/X-3:2003, PDF/X-4 and PDF/X-4p require the view area, view clip, print area and print clip to be set to the media (or bleed) box. If set to the bleed box, PDF/X-3:2003 requires that at least one page has a bleed box, whereas PDX/-4(p) requires that all pages have a bleed box.

PDF/X-6 and PDF/X-6p do not allow a view area, view clip, print area or print clip.

Related Actions

Make viewer preferences PDF/X compliant on page 102

3.2.3. General

3.2.3.1. Check encoding of name objects

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Allows you to check if the encoding of font names, separation names or structure type names is UTF8.

This may not be the case if you receive PDFs from Japanese or Chinese designers.

Note: This Action verifies if the name *data* is valid UTF8 data. Note that this does not necessarily mean that the name actually is UTF8 encoded. It just checks if it would be a valid string when interpreted as UTF8.

3.2.3.2. Check file specification keys

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches the PDF for file specification keys.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will search for this type of links and check if they contain either the required file specification keys or the PDF 2.0 specific keys.

Related Actions

- *Check for file specifications* on page 279
- *Remove file specification from streams* on page 111
- *Remove file specification keys* on page 193

3.2.3.3. Check for associated files

Belongs to

- **Category:** General, PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if a PDF file contains associated files.

This is a PDF 2.0 feature. If you don't want PDF 2.0 features in your file, you can remove the associated files using a dedicated *Action*.

For more information about associated files, refer to *PDF 2.0 Application Note 002: Associated Files*.

Related Actions

- *Remove associated files* on page 111

3.2.3.4. Check for embedded PostScript fragments

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches for fragments of embedded PostScript in a PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

- *Select embedded PostScript fragments* on page 381
- *Remove PostScript* on page 111

3.2.3.5. Check for external streams

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains links to external data.

3.2.3.6. Check for file specifications

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains URLs or links to embedded or external files in PDF streams.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files, or to websites (URLs). This Action allows you to check if the PDF contains such links.

You can check for either URL or file specifications, and search for embedded, non-embedded, or both types of links.

Related Actions

- *Check file specification keys* on page 278
- *Remove file specification from streams* on page 111

3.2.3.7. Check for invisible objects without fill and stroke

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches the PDF document for any objects that have no fill or stroke color associated with them.

Designers sometimes leave such objects in a document rather than deleting them.

Related Actions

- *Select invisible objects without fill and stroke* on page 382
- *Remove invisible objects without fill and stroke* on page 231

3.2.3.8. Check for reference Xobjects

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks the PDF for the presence of XObjects.

XObjects are PostScript objects, such as background images, that are defined only once in a PDF file, but used several times (e.g. on several pages). Using XObjects can speed up printing but requires extra printer memory.

XObjects are supported as of PDF 1.4.

Related Actions

Select XObjects on page 384

3.2.3.9. Check for unknown objects

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains unknown objects.

Unknown objects in this context are objects that are not defined in the PDF 1.3 standard. The PDF/X standards require all objects in the document to be “known”, or defined in the PDF 1.3 specification.

This avoids differences in output between older and newer RIPs, for example. Older RIPs may not be able to process certain objects, and produce blank pages, whereas a more recent RIP can deal with those objects correctly and will produce the intended output.

3.2.3.10. Check if visual content exists

Belongs to

- **Category:** General
- **Type:** Checks
- **Since:** 2020

What it does

Enables you to check if a group of graphical shapes (e.g. an embedded image, such as a logo or line art) is visible in the PDF document. You can either check if the group of shapes is found, not found or how many times it occurs.

Note that the Action is able to find rotated shapes, partially cropped images, bigger or smaller shapes and shapes that are more or less similar (depending on the configuration, see below).



Note: The Action can detect all types of shapes (vector, raster, pixels, ...) embedded in the PDF. External images and simple geometric shapes are not supported.

How it works

The page the Action is running on is rasterized in the background. This may take a while.When this is finished, PitStop scans the page and searches for control points that are similar to the ones in the shape you want to check and uses this information to detect them.

Simple geometric shapes are not supported, because they do not provide enough control points.

Use cases

- Automatic artwork replacement
- Checking for incorrect or wrongly placed logos
- Checking for missing or invisible logos
- Also useful for packshots (for example to find outdated or old images)

How to proceed

1. Select the group of shapes (e.g. a logo) you want to check using the PitStop Select Objects tool .
2. In the attributes of the Action, click the **Grab selection** button. The selected image will be shown in the field above the button. Note that, if the image is too large (+15 cm) or too small (-1 cm), you'll get a warning.

3. Enter a label (e.g. "PitStop logo"). This is a mandatory field. Note that the label is only used for logging purposes.
4. From the 'Log a message' list at the top, select the appropriate option:

   Log a message ...

   - for each visual object that was found
   - if no visual object was found
   - if amount of visual objects meets criteria (this option allows you to set a threshold, e.g. log a message if more than one logo is found).

   Note: If you run the Action List with the above mentioned options, the check will include rotated shapes, shapes that are somewhat bigger and somewhat smaller and shapes that have a certain visual similarity. The attributes explained below allow you to make the check more precise.

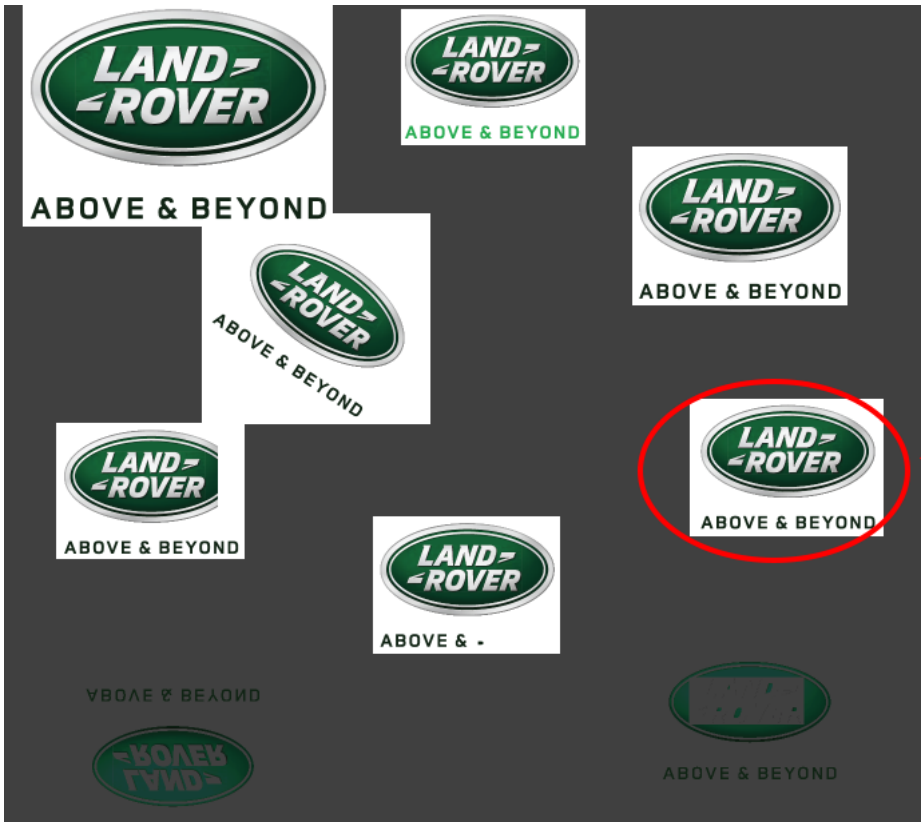
5. Configure the following options as required:

Attribute	Meaning
Scan resolution (ppi)	Default value is 300, the minimal value (to get a good result) is 72. To use the resolution of the visual object in the document, clear this field before grabbing the visual object. The current resolution will be entered automatically. Note that a higher resolution will slow down processing, but increase accuracy (as more control points will be checked), whereas a lower resolution will speed up processing but decrease accuracy. The optimal value also depends on the complexity of the visual object: a very complicated object will be difficult to track on a low resolution.
Restrict size	Make sure to enter the largest side of the visual content in the first field. Note that (specifically in case of a rotated object) the Action considers the sides of the object, not of the bounding box. **Note:** Take into account that there's an error margin; the actual reported shapes may be a bitt smaller or larger.
Restrict rotation	Make sure to set the rotation to 0 degrees if you don't want to report rotated content. In all other cases, enter the value of your choice. Note that you can enter a number of values (separated by a comma) or use a range (using a hyphen) or a combination. **Note:** Take into account that there's an error margin of 2 or 3 degrees.
Restrict visual similarity	This option enables you to find objects that are partly hidden by other objects or to find objects that should not be in the document. It also works on colors, for example to find logos

Attribute	Meaning
	with a color difference; note however that there should be enough contrast for PitStop to be able to detect it. **Note:** Take into account that there's an error margin. We advise playing with the values to find a value that is optimal for the visual content you want to detect.

Example

The image below shows that the Action is able to detect a logo, even if it's slightly different in size or color, or when it's rotated, cropped or partly hidden. The marked logo is the one that was grabbed in the Action. Using the Action's attributes you can restrict the found instances.



3.2.3.11. Check optimal compression

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the latest and most efficient compression mechanisms have been applied in the PDF document.

Previous versions of Adobe Acrobat (2.1, 3.0, 4.0) featured less advanced compression mechanisms.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to check if the PDF contains such compressed streams, which you can afterwards remove if required.

Related Actions

- *Check object compression* on page 276
- *Remove object compression* on page 231

3.2.3.12. Log selection

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Allows you to log the presence or absence of a selection you made with another Action in the same Action list.

This Action is useful if you want to check something for which no "Check" Action is available. For example, if you want to check if the PDF contains red text, you can first select all red text, and then use Log selection to display a message either if the document does or does not contain red text.

Note that you can also log the presence or absence of layers.

How to proceed

1. From the list at the top of the pane, choose the appropriate option:
   - To display a message if the selection was found, select *Log a message if* **objects are selected**.
   - To display a message if the selection was NOT found, select *Log a message if* **no objects are selected**.
2. Indicate whether or not the following information should be logged as well (if applicable):
   - The type of page and document objects
   - The annotation objects



Note: By default, annotations aren't logged. Even if Log selection applies to a selection made by *Select annotations*, nothing will be logged, unless the **Report the annotation objects** checkbox is selected.

3. Enter the message that should appear in the Report if the selection was found/not found (depending on the choice made in step1).



Note: You can configure different descriptions for different languages (for example: *JPEG images* in English versus *JPEG afbeeldingen* in Dutch). The language shown in the log file depends on the language (See **Edit** > **Preferences** > **Preferences**).

4. Select the desired log level.



Note: In this case, it doesn't make sense to choose "Don't log", since the result of this Action is always shown in the Enfocus Navigator.

Example

To check for the presence of red text in a document, you could create the following Action List:

```
Select fill and stroke color
        <!-- Add Select color on page 370. Select fill and stroke and determine the
 color you want to check for, for example using the Grab fill and Grab stroke icon -->
Select text segments
        <!-- Select text segments on page 445 -->
AND
        <!-- AND on page 405 : necessary to combine the two previous Actions -->
Log selection
        <!-- Choose "Log a message if objects are selected".
             Configure an English message, for example "This document contains some
 text in red".
             Select "Log as warning". -->
```

If you run this Action List, all red text will be selected and logged as a warning. In the Enfocus Navigator, if you select an object in the Description field, you will see the description ("Red text") under Details. You will also find a warning in the Preflight Report (e.g. "This document contains some text in red (x times on pages y-z)").

Alternatively, if you only want a warning if no red text is found, in the attributes of **Log selection**, choose "Log a message if no objects are selected" and configure a message such as "This document does not contain any red text".

3.2.4. Image

3.2.4.1. Check for alternate images

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Searches a PDF for alternate images.

Alternate images are low resolution versions of images that are used for on-screen proofing because they render more quickly. PitStop can check for the presence of all alternate images or only those that are set to print as default.

Related Actions

- *Add alternate images* on page 112
- *Select by alternate images* on page 384
- *Remove alternate images* on page 116

3.2.4.2. Check for corrupt images

Belongs to

- **Category:** Image
- **Type:** Checks
- **Since version:** 2020

What it does
Detects images with corrupt image data.

This Action enables you to find corrupt images early in the production process, so you can take corrective action.

3.2.4.3. Check for images with 16 bits per channel

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Searches a PDF for images with 16 bits per channel.

These images have a much larger color range than standard 8 bit images. Note that not all of these colors can be accurately reproduced on press.

3.2.4.4. Check if JPEG2000 compressed images are PDF/X compliant

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Check if JPEG2000 compressed images are PDF/X-4 or PDF/X-6 compliant.

You might want to remove or replace non-compliant images.

3.2.4.5. Check image compression

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks image filters to ensure that the images in the PDF are not compressed using a particular compression method.

You can check for the following compression methods:

- CCITT
- JPEG
- ZIP
- LZW
- RunLength
- JBIG2
- JPEG2000

By default, soft-mask images are not included, unless you select the **Also check soft-mask images** checkbox.

3.2.4.6. Check image compression ratio

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks the compression ratio of the images in a PDF against a particular threshold.

You can check the compression ratio of images compressed with one of the following compression methods:

- CCITT
- JPEG
- ZIP
- LZW
- RunLength
- JBIG2
- JPEG2000

Example

If the JPEG images in your PDF should not be compressed at all, use the following values:

```
Compression ratio of JPEG images must be        <!-- Choose JPEG -->
```

```
equal to 100                                    <!-- Choose  "equal to" and "100" -->
```

A compression ratio of "100" means "no compression"; a compression ratio of "50" means "50%" , ...

3.2.4.7. Check image interpolation

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks if images in the PDF have been resampled.

3.2.4.8. Check inline image syntax

Belongs to

- **Category:** Image; PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks the presence and/or validity of the L key (or Length key) of a PDF.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Inline images must not have the Length key
- Inline images must have the Length key
- Inline images must have a valid Length key.

Note that PDF 2.0 allows (but does not impose) the presence of an L key, but if it's present, it must match the actual inline image data length.

Related Actions

- *Select inline image syntax*
- *Change inline image syntax*

3.2.4.9. Check number of images on page

Belongs to

- **Category:** Image
- **Type:** Checks

- **Since:** 2020

What it does

Checks the number of images on a page.

Use case

Badly created PDF files can have hundreds of images, which can take a long time to rip. This Action can help you detect the pages with more images than expected. Such pages can then be simplified using *Rasterize selection* or similar tools.

Related Actions

- *Select page by number of images* on page 388
- *Rasterize selection* on page 109

3.2.4.10. Check OPI path

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

If your document contains objects with OPI information, you can use this Action to detect images that cannot be found in the location specified in the OPI pointer.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Change OPI info* on page 115
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

3.2.4.11. Check OPI type

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks which OPI types are allowed in a PDF.

You can check for the following OPI types:

- None
- 1.3
- 2.0
- both 1.3 and 2.0

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Change OPI info* on page 115
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

3.2.4.12. Check resolution

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks the resolution of particular image types (color or grayscale images, 1-bit images or any images) against a particular value, e.g. checks if the resolution is not more/less/... than x ppi.

This Action checks for the **effective** resolution; if the image has been resized, this is the resolution after scaling.

As of PitStop 2018 you can disregard any soft-mask images that are used in the PDF, by selecting the **Ignore soft-masks** option. The resolution of a soft-mask image can be lower than what it acceptable for images, but as this does not affect the end result, it's safe to exclude them from the resolution check.

Note that the log message also mentions the resolution of the matching images.

Related Actions

Select by image resolution on page 385

3.2.5. Layers

3.2.5.1. Check for empty layers

Belongs to

- **Category:** Layers
- **Type:** Checks
- **Since version:** 12 update 3

What it does

Allows you to check if the selected layers are empty. The Action must be preceded by another Action that selects the layer(s) concerned.

Example

To check if the PDF contains any empty layers:

```
Select layers <!-- Select layers on page 389 selects ALL layers -->
Check for empty layers
```

Related Actions

Remove objects from layers on page 125

3.2.5.2. Check if layer is PDF/X-4 compliant

Belongs to

- **Category:** Layers
- **Type:** Checks

What it does

Checks if the layers in a PDF document comply with the PDF/X-4 specification.

About layers in PDF/X-4

The PDF/X-4 standard allows the use of layers (OCGs = Optional Content Groups) in PDF. These layers can have different states (ON or OFF). The state of all OCGs must be defined in an Optional Content Configuration Dictionary (OCCD). This dictionary must be used by compliant readers to switch on or off the layers.

3.2.5.3. Check layer print state

Belongs to

- **Category:** Layers
- **Type:** Checks

- **Since Version:** 2018

What it does

Allows you to check the print state of a layer, which determines whether or not objects on the layer are printed.

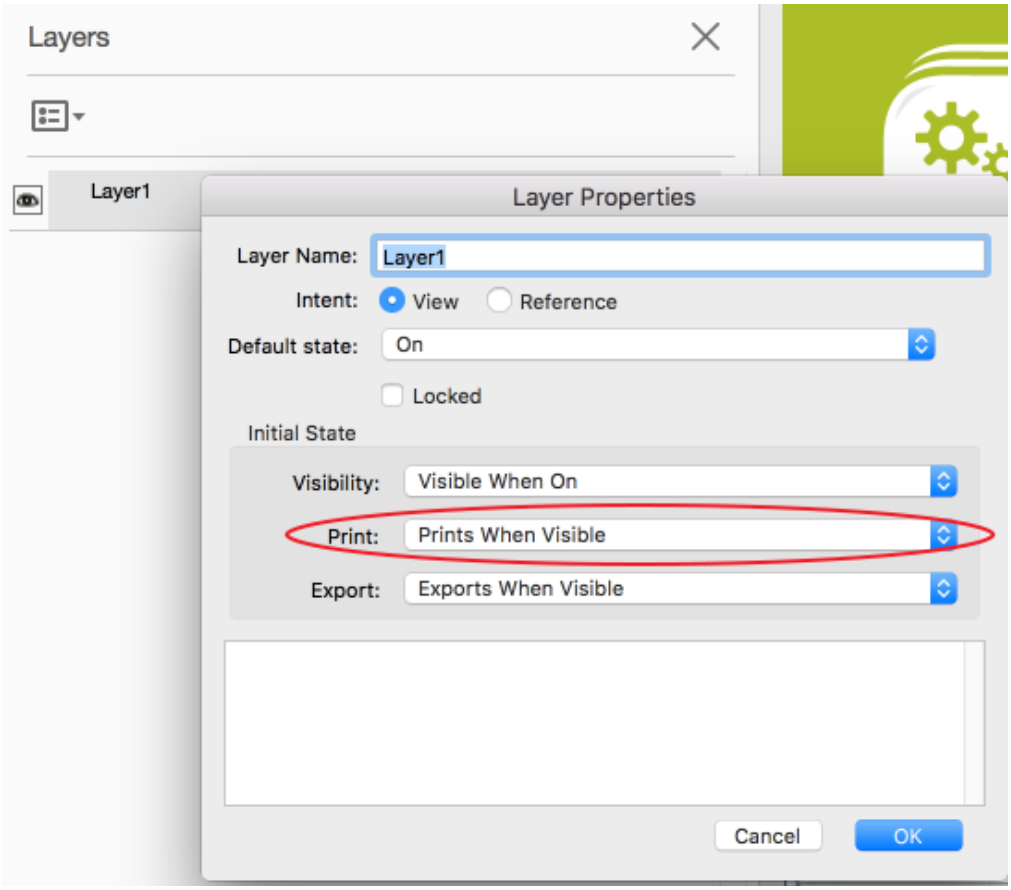
Print state options are:

- Always prints
- Prints when visible
- Never prints

Example

If you never want to print content on layers, check if all layers have the print state set to 'Never prints'. Using the following Action List, you'll get a warning if that's not the case.

```
Select all
    Check layer print state <!-- with the option Print State must be: Never prints -->
```



Related Actions

- *Check layer properties* on page 293
- *Change layer print state*
- *Select layers by print state*

3.2.5.4. Check layer properties

Belongs to

- **Category:** Layers
- **Type:** Checks

What it does

Checks certain properties, i.e. default visibility and presence in the Layers panel ("layer configuration") of the layers selected by another Action in the same Action List.

Example
To check the properties of **all** layers in the PDF, create the following Action List:

```
Select layers <!-- Select layers on page 389 -->
Check layer properties
```

Related Actions

- *Change layer properties* on page 120
- *Select objects in layers by layer properties* on page 390

3.2.5.5. Check layers

Belongs to

- **Category:** Layers
- **Type:** Checks

What it does

Checks the layers in a PDF.

You can set a number of different checks, such as:

- Document must not have layers, i.e. optional content is not allowed.
- The document catalog dictionary must not contain OCProperties key.
- Document must not have alternate layer configurations, i.e. only one Layers panel ("layers palette") is allowed.
- Layer configuration (i.e. the Layers panel) must have a name.
- Multiple layer configurations (i.e. Layers panels) must not have the *same* name.
- Layer group must not be missing from order, i.e. the Layer group must be present in the order of the Layer panel.
- Layer configuration (i.e. the Layers panel) must not contain application specific usage entry.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat.

However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

3.2.6. Line Art

3.2.6.1. Check for objects with negative dash pattern phase

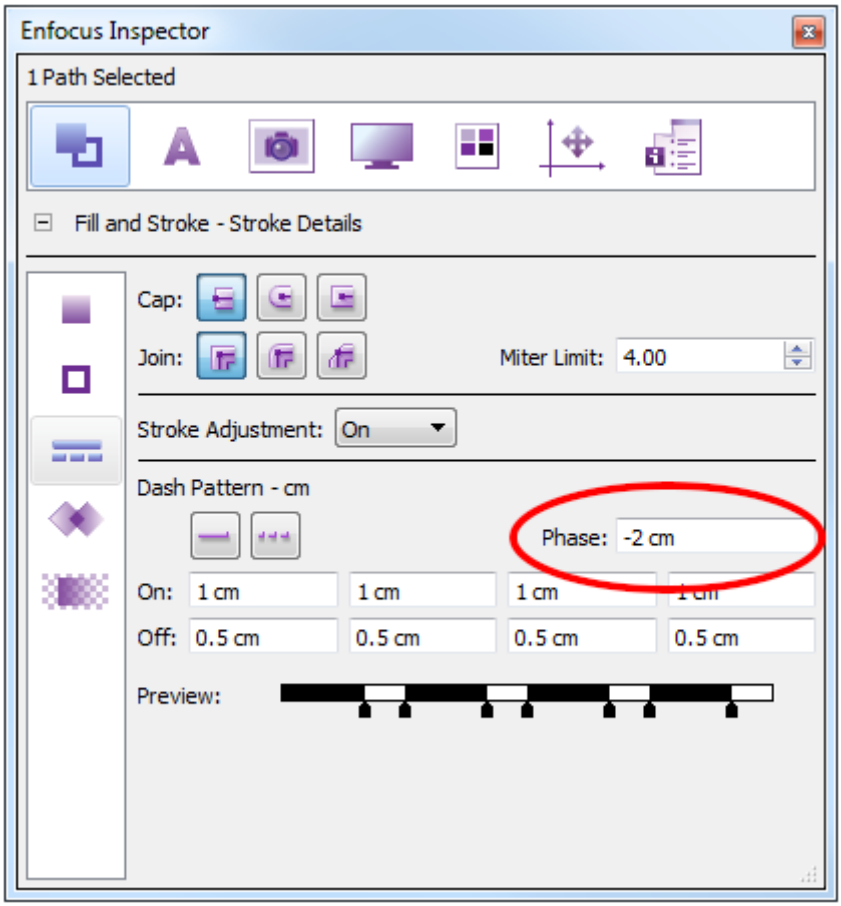
Belongs to

- **Category:** LineArt
- **Type:** Checks
- **Since version:** 13

What it does

Detects if the document contains a dash pattern phase with a negative value.

The dash pattern phase specifies the distance into the dash pattern to start the dash. Negative values may not be supported by the RIP.



Related Actions

- *Select objects with negative dash pattern phase* on page 394
- *Fix negative dash pattern phase* on page 137

3.2.6.2. Check for zero fill line art

Belongs to

- **Category:** LineArt
- **Type:** Checks
- **Since version:** 2020

What it does

Detects if the document contains line art of which the fill is empty ('zero-width filled lines').

This type of line art may be visible in a PDF but usually it doesn't print or rasterize, so it's important that it is detected in advance.

Note: Zero fill clip paths are also detected.

3.2.6.3. Check line art by length

Belongs to

- **Category:** LineArt
- **Type:** Checks
- **Since Version:** 2019

What it does

Checks if the line art has a particular length. You can either check the length of individual line art or the total length of all line art in the document.

The exact length is mentioned in the Preflight Report and the Navigator.

Use case

Users with a cutting table may want to know the length of a cut path so they can estimate how long the job will take to cut on the table.

3.2.6.4. Check line weight

Belongs to

- **Category:** LineArt; Prepress
- **Type:** Checks

What it does

Checks if the line weight of the selected objects is higher or lower than a particular value.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392

3.2.6.5. Check maximum path length

Belongs to

- **Category:** Line Art
- **Type:** Checks

What it does

Checks for a maximum amount of nodes in a path.

3.2.6.6. Check number of paths on page

Belongs to

- **Category:** Line Art
- **Type:** Checks

What it does

Checks the number of paths on one page.

You can for example log a warning if the PDF contains more than 4 paths on a page.

Related Actions

Select page by number of paths on page 395

3.2.6.7. Check thin objects

Belongs to

- **Category:** Line Art
- **Type:** Checks
- **Since version:** 2019

What it does

Allows you to check if the document contains objects with a stroke smaller than a set threshold.

If desired, you can indicate that for objects of which stroke and fill have the same color, the width of the fill and stroke should be added together.

This Action is typically used to check for thin white lines that may be visible on small screens (e.g. on an iPad screen).

Related Actions

Select thin objects on page 396

3.2.6.8. Check total number of nodes on page

Belongs to

- **Category:** Line Art
- **Type:** Checks
- **Since version:** 13 update 1

What it does

Checks how many nodes are present on each page, depending on the set threshold (e.g. less than/more than (...) the set number of nodes). This Action is useful to detect complex pages, which may take a considerable amount of time to rip and therefore may cause a production bottleneck.

Related Actions

- *Select page by total number of nodes* on page 395

3.2.7. Metadata

3.2.7.1. Check annotation flags settings

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Allows you to check if particular annotation flags are enabled or disabled.

Flags that can be checked:

- Invisible
- Print
- NoRotate
- ReadOnly
- ToggleNoView
- Hidden
- NoZoom
- NoView
- Locked

How to proceed

1. Select all flags you want to check.
2. Choose the appropriate option:
   - If **The flag must be on** is enabled, a message will be displayed if the selected flags are disabled.
   - If **The flag must be off** is enabled, a message will be displayed if the selected flags are enabled.

Related Actions

- *Check annotations print setting* on page 299

- *Use flags to select annotation* on page 404

3.2.7.2. Check annotations print setting

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Check annotations' print settings allows you to log annotations with a particular print setting (print or non-printing).

Related Actions

Check annotation flags settings on page 298

3.2.7.3. Check annotations type

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Check annotations' type allows you to log the occurrence of particular types of annotations in a PDF, for example: text, hyperlinks, movies,...

3.2.7.4. Check appearances of annotations and interactive form fields

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the document contains annotations and interactive form fields according to the specifications of a particular PDF/X version.

This is useful if you want to print the document (as annotations and interactive form fields cannot be printed) or if your output device or PDF renderer does not support form fields.

Related Actions

- *Check form fields* on page 304
- *Flatten form fields* on page 150

- *Remove form fields* on page 152
- *Check for annotations inside art box or trim box* on page 318

3.2.7.5. Check article threads

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks for the existence of article threads in a PDF file.

Article threads are electronic threads defined by the author of the PDF. They indicate which elements in a PDF belong together as part of a single story, even if they do not follow each other sequentially in the layout of the document.

3.2.7.6. Check binding

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if binding is left or right.

Most European language documents are bound on the left.

Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Select by binding* on page 399
- *Change binding* on page 143

3.2.7.7. Check bookmarks

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains bookmarks.

Bookmarks are links in the left hand side bar of a PDF that take you to different sections.

3.2.7.8. Check creation and modification date

Belongs to

- **Category:** Metadata
- **Type:** Check

What it does

Checks the creation and modification date.

You can indicate which metadata location should be checked, for example only the most recently changed one, or "any" metadata location (if it doesn't matter), ...

About metadata locations in a PDF file

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

Add missing creation and modification date on page 141

3.2.7.9. Check document info

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Searches for the requested document info in the document properties of the PDF.

You can check:

- Title
- Subject
- Author
- Keywords
- Producer
- Creator

Use the **Compare with** field to enter (part of) the name of the document info you are looking for.

Use the operator methods **equals** and **doesn't equal** if you are looking for an exact match; use **contain** or **doesn't contain** if the entered value is just part of the document info you are looking for.

Select the **Match case** checkbox if you want the search to take into account the lower and upper cases of the entered value.



Note: From version 12 update 2 onwards, you can use regular expressions to define the value in the **Compare with** field (if you select **Equals/Does not equal** as operator method).

Related Actions

- *Change document info* on page 143
- *Select by document info* on page 400

3.2.7.10. Check document information dictionary compliance

Belongs to

- **Category:** Metadata; PDF 2.0
- **Type:** Checks
- **Since:** 2022

What it does

Checks if the information dictionary is compliant with the chosen PDF version (PDF/X-6 or PDF 2.0).

For more information about the information dictionary, refer to *Change document information dictionary compliance* on page 144.

Related Actions

- *Change document information dictionary compliance* on page 144

3.2.7.11. Check document permissions

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Allows you to check the permission settings of a PDF, such as (low/high resolution) printing, copying, editing, ...

About document permissions

The table below gives an overview of the permissions that can be set in a PDF.

Document permission	If enabled...
Assembly	Users can insert, delete and rotate pages, and create bookmarks and thumbnails.
Content accessibility	Accessibility software (such as a screen reader) is allowed to use the content of the document.
Fill-in or changing	Users can fill in and change forms.
Annotating	Users can make annotations.
Copying	Users can select and copy contents to the clipboard.
Editing	Users can make modifications to the document.
Low resolution printing	Users can print a low-resolution bitmapped image of the pages (for personal use).
High resolution printing	Users can print the document with a high resolution output.
Printing	Users can print the document.

To view a summary of the document permissions, proceed as follows:

1. Open Adobe Acrobat.
2. Select **File** > **Properties**.
3. Switch to the **Security** tab. The document restrictions are displayed in the lower part of the dialog.

3.2.7.12. Check document security

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Checks if a particular encryption was used to secure the PDF file.

Options:

- A PDF version (1.3 - 2.0)
- A combination of "none" and a PDF version (1.3 - 2.0)
- None
- None or Standard (= no custom security)
- Custom (enter a custom name in the text field)

3.2.7.13. Check document trapped flag

Belongs to

- **Category:** Metadata

- **Type:** Checks

What it does

Allows you to check the value of the trapped flag in a PDF.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

The trapped flag is stored in the info dictionary and/or in the XMP metadata stream, but the data can be inconsistent; that's why you must indicate where the trapped flag must be taken from, e.g. from the most recent metadata location.

Related Actions

- *Change trapped flag* on page 148
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

3.2.7.14. Check external hyperlink annotations

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the annotations in the PDF contain hyperlinks to files, applications, and/or web pages.

3.2.7.15. Check form fields

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Looks for the presence of form fields in a PDF.

Related Actions

- *Remove form fields* on page 152

3.2.7.16. Check for action dictionaries

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains particular action dictionaries, i.e. action types.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

You may want to remove these actions, as they are not allowed in a PDF/X file. The Remove action dictionaries Action will remove the action only; the object (the bookmark, annotation) the actions are linked to will not be removed. For example, if you remove the action from a bookmark, the bookmark is still visible, but not clickable anymore.

Related Actions

- *Remove action dictionaries* on page 151

3.2.7.17. Check for additional actions

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains action dictionaries, i.e. action types, other than the standard ones.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

Related Actions

- *Remove action dictionaries* on page 151

- *Check for action dictionaries* on page 305

3.2.7.18. Check for annotations inside printable area

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Searches a PDF for any annotations that appear in the printable area of the PDF.

3.2.7.19. Check for deprecated attributes in XMP metadata

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the XMP metadata streams in the PDF contain attributes that are outdated.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

Check if XMP metadata is well-formed on page 310

3.2.7.20. Check for Javascript

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains instances of the JavaScript programming language.

This language is often used to add interactive functionality to PDF files. However, in a print production environment, these scripts serve no purpose and may result in increased file sizes.

Related Actions

Remove Javascript on page 152

3.2.7.21. Check for XFA forms

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks whether the PDF contains XFA forms.

An XFA form is a web form and is not suited for printing documents. XFA stands for XML Forms Architecture. It's an XML specification, which is rather vague and does not specify any rendering.

Optionally, you can also check if a NeedsRendering key is present in the PDF document (**log if NeedsRendering key is present**).

3.2.7.22. Check for XMP schema definitions as required by PDF/A

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks whether the PDF contains XMP schema definitions for identifying the document, as required by the PDF/A specification.

3.2.7.23. Check if date is present in document XMP metadata

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks for the date in the XMP metadata of a PDF.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

- *Check file identifiers in document XMP metadata* on page 272
- *Check presence of document metadata stream* on page 313

3.2.7.24. Check if document is produced by PDFWriter

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF was produced by PDFWriter.

PDFs created with PDFWriter are not suitable for high-end printing.

3.2.7.25. Check if document metadata is consistent

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if metadata that is present in different metadata locations is identical.

How it works

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Extra checks

Optionally you can check if metadata in one location (selected from the list) is also present in the other location; if all metadata should be present in both locations, select **any metadata location**.

If multiple creators are not considered an inconsistency, select the **Allow multiple creators** checkbox.

Related Actions

- *Make document metadata consistent* on page 151

- *Select if document metadata is inconsistent* on page 403

3.2.7.26. Check if document XMP metadata types are valid

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if metadata streams defined in a PDF conform to the XMP schema.

About XMP metadata streams

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

- *Check if XMP metadata is well-formed* on page 310
- *Make document metadata consistent* on page 151
- *Select if document metadata is inconsistent* on page 403

3.2.7.27. Check if document XMP name space uses correct prefix

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

The XMP metadata standard (used for labeling metadata in PDFs) defines namespaces for defined sets of core properties. This Action checks if the correct prefixes are used.

Related Actions

Set correct document XMP name spaces on page 155

3.2.7.28. Check if metadata streams do not have a compression filter

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if metadata streams do not have a compression filter.

A compression filter is used to reduce the file size of a PDF. If no compression filter has been used, you may want to add one; if a compression filter has been used, you may want to check which one (e.g. to see if it complies with certain specifications).

Related Actions

Check presence of document metadata stream on page 313

3.2.7.29. Check if URLs in Link Annotations are valid

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks the validity of the hyperlinks in annotations with hyperlinks to web pages, i.e. checks if the target web page exists.

If you're using a proxy server, you should enter the proxy server address and port, and your user name and password. Otherwise, the check cannot be performed.

Related Actions

Check external hyperlink annotations on page 304

3.2.7.30. Check if XMP metadata is well-formed

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the XMP metadata streams in the PDF conform to the XMP specifications.

If the XMP metadata is not well-formed, the document cannot be made PDF/X-4 compliant.



Tip: PitStop provides an Action to solve these problems: *Fix non well-formed XMP metadata* on page 244.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the Additional Metadata button, then select Advanced).

3.2.7.31. Check marked content

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Logs content that has been identified with a marked content tag in a PDF.

Marked content is content tagged with special messages so that the application that opens it can read it in a particular way.

Related Actions

Remove marked content on page 153

3.2.7.32. Check PDF/Acrobat compatibility

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Allows you to checks if a particular Acrobat or PDF version is used in a PDF document.

You can for example check if the Acrobat version is equal to or higher/lower than a particular version.



Note: As of PitStop 2020, you can check a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). If the versions are different, PitStop uses the

version from the Adobe extension. If there is no version specified in the Adobe extension, the header version or catalog version are considered, and the highest version number is taken.

3.2.7.33. Check PDF/A version key

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks the PDF/A version key.

Related Actions

- *Change PDF/A version key* on page 146
- *Remove PDF/A version key* on page 154

3.2.7.34. Check PDF/X version key

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks the PDF/X version key.

Related Actions

- *Change PDF/X version key* on page 146

3.2.7.35. Check pdfxid prefix in XMP name space

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the pdfxid prefix in the XMP namespace is correct.

The namespace prefix is required for PDF/A.

3.2.7.36. Check presence of document metadata stream

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains metadata, i.e. descriptive information about the file, such as the title, the author, the creation date ...

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

- *Check if date is present in document XMP metadata* on page 307
- *Check file identifiers in document XMP metadata* on page 272

3.2.7.37. Check thumbnails

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains thumbnails.

3.2.7.38. Check Trapnets for PDF/X

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks whether trapnet information in a PDF is compliant with PDF/X-1, PDF/X-3 or PDF/X-6 standards.

About trapping

In printing, even the slightest misregistration of the plates can cause gaps or color shifts between colored objects to appear. **Trapping** is a technique that compensates for misregistration by expanding adjacent colored objects so that they overlap. Trapping can be performed by the source application, in the PDF, by dedicated trapping tools, or during the RIP-process.

If the traps in a document were added before the PDF document was created, they are included in the PDF file as **trap networks**. A page may have more than one trap network, e.g. one for each intended output device, but all the different trap networks are stored in the same trap network, also called **trapnet annotation**. When printed, the trapnet annotation provides all the required trapping information for the page.

About the PDF/X Requirements for trapping

When trapnet annotations are found in the document, **PDF/X-1a:2001** requires that:

- The **trapped flag** in the document is set to either True or False (Unknown is not allowed).
  - If the trapped flag is **False**, the document does not contain trapnet annotations.
  - If the trapped flag is **True**, the document is completely trapped, and the document contains trapnet annotations.
- **Font substitution** is not used.
- The **CMYK** color space is used.

When trapnet annotations are found in the document, **PDF/X-3:2002** requires that:

- Trapping occurs only when all the **fonts in the document are embedded**.
- The **CMYK** color space is used.

In **PDF/X-6 and PDF/X-6p**, trapnet annotations are not allowed.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Change trapped flag* on page 148

3.2.7.39. Check unused destinations

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Destinations identify locations or views in a PDF you can point to using bookmarks or links. As destinations increase the file size, you may want to check for and remove destinations that are not used.

This Action allows you to **verify** if there are any unused destinations in a PDF document.

The Action *Remove unused destinations* allows you to **remove** them from the PDF.

3.2.7.40. Check version compatibility with PDF/A-2

Belongs to

- **Category:** PDF 2.0, Metadata
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the version of the PDF complies with PDF/A-2.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). PDF/A-2 requires that both the version specified in the header and the version specified in the document catalog are 1.x (so the version should be lower than 2.0).

Related Actions

- *Fix version compatibility with PDF/A-2* on page 149

3.2.7.41. Check version compatibility with PDF/X-6

Belongs to

- **Category:** PDF 2.0, Metadata
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the version of the PDF complies with PDF/X-6 or PDF/X-6p.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). PDF/X-6 and PDF/X-6p require that both the version specified in the header and the version specified in the document catalog are 2.0 (or higher).

Related Actions

- *Fix version compatibility with PDF/X*

3.2.8. Packaging

3.2.8.1. Check barcode

Belongs to

- **Category:** Packaging

- **Type:** Checks
- **Since Version:** 2019

What it does

Checks the presence of barcodes in your document. You can either log a message for each barcode found, or a message in case no barcodes were found in the document.

The Action also works on user selections.

Properties Overview

Fields	Meaning
Barcode tab	Select the barcode(s) you want to check for.
Select all	Select this checkbox to check for all barcode types in the list. Clear this checkbox to deselect all types and manually click the ones you want to check for.
Value	Select this checkbox to check for a particular value.
Options tab	Select one or more options. You can use variables as required. **Note:** Extra options (checkboxes) will slow down processing.
Scan resolution (ppi)	Enter the scan resolution. The default is set to 300 dpi. Note that a higher resolution will slow down processing.
Scan for multiple barcodes	When selected, the document is checked until all barcodes are found. Note that this slows down processing! If you know that there's only one barcode in the document, we recommend clearing this checkbox.
Scan for rotated barcodes	When selected, PitStop also searches for rotated barcodes.
Enhanced scan	When selected, PitStop searches for very small barcodes too.

Note:

- If the option **Scan for multiple barcodes** (on the Options tab) is enabled, EAN and UPC barcodes may be reported twice per barcode. This is a known issue.
- MaxiCode barcodes cannot be detected when they are rotated.

Related Actions

- *Check Esko barcode value* on page 317
- *Check Esko barcode type* on page 317
- *Select Esko barcode type* on page 411

- *Add barcode* on page 59

3.2.8.2. Check Esko barcode type

Belongs to

- **Category:** Packaging
- **Type:** Checks
- **Since Version:** 13 update 2

What it does

Checks if the Esko barcode matches a particular type (chosen from a list).

Both the new ArtPro Plus barcodes as well as the old XMP ones are supported.

Related Actions

- *Check Esko barcode value* on page 317
- *Select Esko barcode* on page 411
- *Select Esko barcode type* on page 411
- *Add barcode* on page 59

3.2.8.3. Check Esko barcode value

Belongs to

- **Category:** Packaging
- **Type:** Checks
- **Since Version:** 13 update 2

What it does

Checks if the Esko barcode contains or equals a particular string. You can take into account the case of the string or use regular expressions or Smart Preflight variables as required. The actual value of the Esko barcode is mentioned in the log, in the Navigator and in the Preflight Report, for example: Esko barcode value "1234567890128" does not contain "222".

Both the new ArtPro Plus barcodes as well as the old XMP ones are supported.



Note: The metadata attached to the barcode is checked. If the metadata is absent, the Action won't be able to check the barcode.

Related Actions

- *Check Esko barcode type* on page 317
- *Select Esko barcode* on page 411
- *Select Esko barcode type* on page 411

- *Add barcode* on page 59

3.2.8.4. Check processing steps - ISO 19593-1

Belongs to

- **Application:** PitStop Pro
- **Category:** Packaging
- **Type:** Checks
- **Since Version:** 13 update 2

What it does

Allows you to check if particular processing steps metadata is present in a file. Processing steps metadata is defined by ISO standard 19593-1.

Note that you must select a processing steps group; a processing steps type is optional.

Supported groups:

- Structural
- Dimensions
- Braille
- Legend
- Positions
- White
- Varnish

You can as well define a custom group and/or custom step types.

Related Actions

- *Select layers by processing steps - ISO 19593-1*
- *Change layer processing steps - ISO 19593-1* on page 159
- *Remove processing steps - ISO 19593-1* on page 232

3.2.9. Page

3.2.9.1. Check for annotations inside art box or trim box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Searches a PDF for any annotations that appear inside the art box or trim box - an undesirable location for printing.

3.2.9.2. Check for differences in page boxes

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Allows you to compare a certain page box's size with that of another page box.

Note: As of PitStop 2021, you can use variables to specify the difference in size.

Example

Check if the media box is x inch wider and y inch higher than the trim box.

3.2.9.3. Check for empty pages

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the PDF has pages without content.

Additionally, you can specify that elements outside of a specific page box should be ignored.

It's also possible to ignore visually empty pages (with paper-white and invisible (fully transparent) objects on it).

Related Actions

- *Remove empty page* on page 175
- *Select empty pages* on page 415

3.2.9.4. Check for pre-separated pages

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the PDF document contains any pages that already have been separated.

A pre-separated PDF contains pages that have been separated into their CMYK components. In offset printing each of these colors is printed with a separate plate. This means that each page

in a PDF document is separated into its four constituent colors: cyan, magenta, yellow and black. For example, a pre-separated PDF file for a two-page CMYK print job, results in a PDF file with 8 pages.

This separation process is usually carried out by the RIP, and not in the source PDF document.

3.2.9.5. Check for solids and tints

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

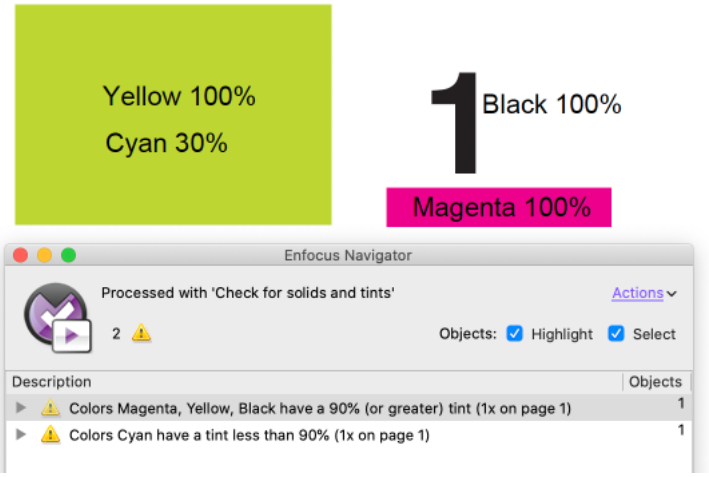
Checks if the PDF document contains any colors that have a tint below or above a set threshold.

The threshold is set in the **Effective solidness threshold** field. The default is 100%.

It's also possible to define a threshold for considering a colorant as a tint, by selecting the **Ignore tints that cover a surface area below** checkbox and entering a value of your choice (in ppm). You can take into account the printable surface area, the surface area of the own channel, or the surface area of all channels. This option is useful to avoid that colorants on pages with for example only 1 non-solid pixel in the rendered page would be marked as a tint.

Example

In this example, the threshold was set to 90%.



3.2.9.6. Check for sub-page navigation support

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the PDF supports sub-page navigation, i.e. the possibility to navigate from one layer to another layer on the same page.

Sub-page navigation support is not desired in documents for print.

About page and sub-page navigation

Page navigation allows you to navigate from one **page** to another, whereas sub-page navigation allows you to navigate from **one layer to another layer** on the same page.

Example

Suppose you have a single page PDF showing the slides of a presentation. Each slide is on a different layer. When the user presses the forward arrow, the next slide (on the same page, but on another layer) is shown and the previous one (on another layer) is hidden.

3.2.9.7. Check if blending color space is defined

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the page blending color space has been defined in the PDF document.

You must set the required blending color space and the required luminosity softmask blending color.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The **page blending color space** is the blending color space assigned to a page; it is used when individual artwork does not have a blending color space.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85
- *Select by blending color space* on page 364

3.2.9.8. Check if object is close to the page edge

Belongs to

- **Category:** Page

- **Type:** Checks

What it does

Checks whether the selected object is situated close to the page edge and might need to be enlarged.

You must specify the required distance to the trim box and the distance into the bleed. Optionally, you can choose to treat subpaths of compound paths individually. In that case, each of the subpaths will be checked separately.

See also:

- *Select objects close to the page edge* on page 415
- *Change objects that are close to the page edge* on page 167

3.2.9.9. Check if object is completely outside page box

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Searches for (and optionally selects) objects that lie completely outside the selected page box.

Depending on your workflow, you may want to remove these objects before printing.

3.2.9.10. Check if page box is defined

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the selected page box (trim, crop, art or bleed box) has been defined in the PDF.

3.2.9.11. Check if page box is too large

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the selected page box (art, bleed, crop, or trim box) lies inside the media box.

3.2.9.12. Check if page scaling factor is used

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the PDF uses a page scaling factor. If so, you can optionally check if a certain page scaling factor applies.

A page with scaling factor 2 will be displayed and printed twice the original size (= scaling factor 1). Page scaling has been introduced in PDF 1.6 and allows you to extend the maximum page size beyond 200 by 200 inch.

Related Actions

- *Apply page scaling factor* on page 163
- *Remove page scaling factor* on page 175

3.2.9.13. Check if trim marks match page box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if trim marks found in the PDF match the trim box and/or the bleed marks match the bleed box.

How to proceed

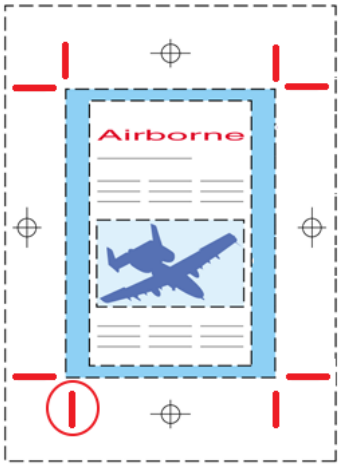
1. Indicate which marks you want to check: trim marks, bleed marks or both.
2. To help PitStop detect the trim marks, specify the potential color of the marks, by choosing one or more of the following:
   - 400% CMYK
   - Separation All (registration)
   - 100% black
   - A specific color

     In case of a specific color, do one of the following:
     - Select a color space from the list and use the sliders to select the appropriate color.
     - Click  and select the appropriate color.
     - Select an object with the Enfocus Selection tool and click  to grab the fill or stroke color from the selection.

3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value, if you're using a different unit.

Example

In the image below, the red marks are detected as trim marks, although the position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line). In this case, the deviation (= difference between the position of both marks) is less than the specified threshold.



Remark

A filled path with 3 lines is accepted as a trim mark if:

- The color is as specified in the attributes of this Action.
- It has no dash pattern.
- The 4 points of the 3 lines are a rectangle.
- The path is closed.
- The width is between 0.1 and 2 pt.
- The length is between 8 and 40 pt.

Related Actions

- *Use trim marks to set page box* on page 184
- *Select trim marks* on page 419

3.2.9.14. Check media box origin

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the media box is set to coordinates 0,0.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

Related Actions

- *Select by media box origin* on page 413
- *Move media box to 0.0* on page 171

3.2.9.15. Check number of pages

Belongs to

- **Category:** Page;Doc
- **Type:** Checks

What it does

Checks the number of pages in a PDF.

You can for example check if there are less/more than x page(s), or if the PDF contains an odd/even number of pages ...

3.2.9.16. Check page bleed box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks and compares the size of the bleed box with the size of the trim or crop box.

As of PitStop 2022, you can indicate which side(s) should be checked (left, right, top or bottom). Also, you can enable **Mirror according to page binding**, a new option that, when selected, checks the inner and/or outer side instead of the left and/or the right side of the page. This is useful in case of books, where you may want to ignore the inner edge (which does not require bleed).

3.2.9.17. Check page boxes consistency

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if two different page boxes (if defined) have the same size and position.

You can either compare the trim and art box, or the trim and crop box.

3.2.9.18. Check page box layout

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks whether the page boxes comply with the selected layout (Press, Screen viewing or PDF/X layout).

The attributes depend on the chosen layout:

- **Press layout** (typically for print)

  If you select this layout, the Action derives the correct media size from the first page box that is present in the document. The order in which is searched, is fixed: first the art box, then the trim, crop, bleed and finally the media box.

  You can define the minimum distance required between the media and bleed box and between the bleed and trim box, and you should choose one of the following options:

  - **Crop box must equal trim box**, or
  - **No crop box must be defined or the crop box equals the media box**. This means that it is OK if the crop box is not defined, but if it is defined, it should have the same size and position as the media box.

- **Screen viewing**

  If you select this layout, the Action checks if the page is defined solely by the crop box, which should have the same size as the media box. No other page boxes are allowed.

- **PDF/X layout**

  If you select this layout, the Action checks if the page box layout is compliant with the selected PDF/X version.

  - If you have chosen PDF/X-1a:2003 or PDF/X-3:2003, the art box or trim box shall not extend beyond the boundaries of the bleed box and the crop box.
  - PDF/X-4 allows either a trim or an art box but forbids having both.
  - PDF/X-6 allows an art box, next to the mandatory trim box.

Related Actions

Change page box layout on page 167

3.2.9.19. Check page format

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Ensures that the media box is defined as being the width or height of a multiple of a particular measurement. This allows you to check whether the page size of your document fits your column and/or row layout.

Example

To set all your page boxes to a multiple of 22cm wide

1. Select **A multiple of columns**.
2. To have pages that are always multiples of 22 cm:
   a. Enter 22 cm as column width.
   b. Enter 0 as column spacing.

Related Actions

Change page format on page 168

3.2.9.20. Check page orientation

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if all the pages in a PDF have a given orientation (portrait, landscape, all the same orientation or the most used orientation).

The orientation is based on the selected page box.

Related Actions

- *Change page orientation* on page 169

- *Select by page orientation* on page 413

3.2.9.21. Check page rotation angle

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the page rotation angle is equal to a specific value.

You can check for a rotation angle of -90°, 0°, 90°, or180° (clockwise).

Related Actions

- *Select by page rotation angle* on page 413
- *Apply page rotation* on page 162

3.2.9.22. Check page safe type zone

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks for text or objects that overlap or come close to an edge limit in a PDF.

The safe type zone is the area where you must not place any text or objects, unless these objects are intended as bleed.

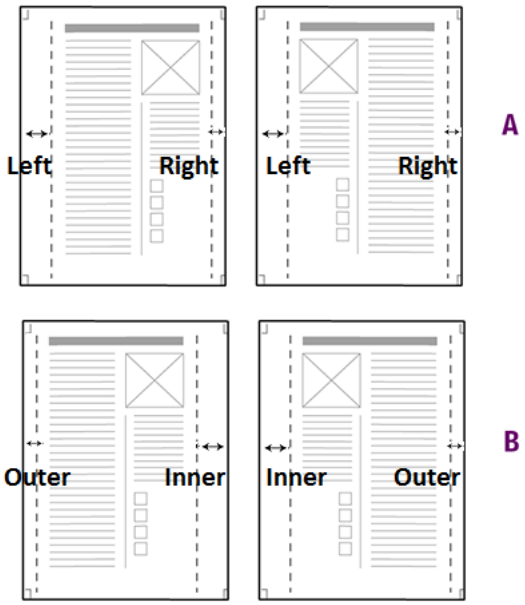
How to proceed

1. Define the safe type zone as one of the page boxes.
2. Optionally define values for the left, right, top and/or bottom margin.

3. To make sure that even and odd pages are mirrored, select **Mirror horizontal margins**. This is recommended if the left and right margin have a different size.

Figure 1: Mirror horizontal margins illustrated

A = ***Mirror horizontal margins*** *is not selected. Margins of odd and even pages are the same; the left margin is larger than the right margin.*
B = ***Mirror horizontal margins*** *is selected. Odd and even pages are mirrored; the outer margin is smaller than the inner margin.*



4. To only check for text in the page safe type zone, select the **Restrict this check to text** checkbox.

3.2.9.23. Check page size

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Allows you to check if the size or position of a specific page box matches the desired size or position.

How to proceed

1. Do one of the following:
   - To check the coordinates of the selected page box, select **Rectangle**.
   - To check the height and width of the selected page box, select **Size**.
2. Select the page box of which you want to check the size or position.
3. Enter the required values (coordinates or width and height).

4. In the **Precision** field, indicate how much the actual size or position is allowed to deviate from the entered values.

   A precision of 0 means that no deviation is allowed: the size or position needs to match exactly the entered values. For example, if you are checking for a height of 10 inch, even a very small difference (e.g. a page box height of 10.001 inch) will result in an error or warning.
5. Disable **Ignore page orientation** as required.

   When enabled (default setting), the smallest value is considered the width and the largest value is considered the height. When disabled, the page orientation is taken into account, meaning that the first value is considered the width and the second the height.

   Note: Action Lists upgraded from older versions (before this option was introduced) will have **Ignore page orientation** disabled. There's one exception: in Action Lists upgraded from version 17.1 to 2018, the checkbox will be *enabled*, and this may yield unexpected results. We advise reviewing such Action Lists before using them.

Related Actions

Select by page size on page 414

3.2.9.24. Check pages have same size

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks whether all pages in a PDF have the same size. The page size is based on the selected page box.

3.2.10. PDF 2.0

3.2.10.1. Check black point compensation

Belongs to

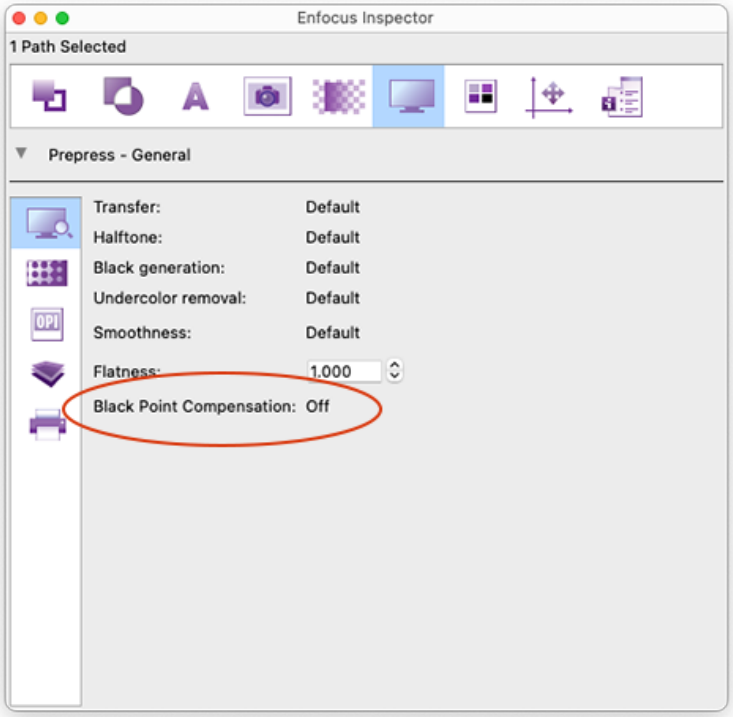
- **Category:** PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if either black point compensation is not present or has a particular value (On, Off, or Default).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Note that the black point compensation attribute of a selected object can be found in the Enfocus Inspector, on the **Prepress - General** tab. Possible values are On, Off or Default. When no blackpoint compensation is set (or when multiple objects with different black point compensation values are selected), you'll see a dash.



Related Actions

- *Remove black point compensation* on page 192
- *Select black point compensation* on page 421
- *Set black point compensation* on page 195

3.2.10.2. Check document information dictionary compliance

Belongs to

- **Category:** Metadata; PDF 2.0
- **Type:** Checks
- **Since:** 2022

What it does

Checks if the information dictionary is compliant with the chosen PDF version (PDF/X-6 or PDF 2.0).

For more information about the information dictionary, refer to *Change document information dictionary compliance* on page 144.

Related Actions

- *Change document information dictionary compliance* on page 144

3.2.10.3. Check document security

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Checks if a particular encryption was used to secure the PDF file.

Options:

- A PDF version (1.3 - 2.0)
- A combination of "none" and a PDF version (1.3 - 2.0)
- None
- None or Standard (= no custom security)
- Custom (enter a custom name in the text field)

3.2.10.4. Check DPart metadata

Belongs to

- **Category:** PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the document contains DPart metadata.

DPart (Document Part) metadata provides information about pages or parts of a PDF, allowing PDF processors to easily identify pages or page ranges that have particular properties.

This is a PDF 2.0 feature, hence this Action is typically used to check for PDF 2.0 features.

Related Actions

- *Remove DPart metadata* on page 192

3.2.10.5. Check enforced viewer preferences

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the Enforced key is used in the Viewer preferences.

Enforcing the viewer preferences is a PDF 2.0 feature, hence this Action is typically used to find (and remove) PDF 2.0 features.

Related Actions

- *Remove enforcements on viewer preferences* on page 193

3.2.10.6. Check file specification keys

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches the PDF for file specification keys.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will search for this type of links and check if they contain either the required file specification keys or the PDF 2.0 specific keys.

Related Actions

- *Check for file specifications* on page 279
- *Remove file specification from streams* on page 111
- *Remove file specification keys* on page 193

3.2.10.7. Check for associated files

Belongs to

- **Category:** General, PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if a PDF file contains associated files.

This is a PDF 2.0 feature. If you don't want PDF 2.0 features in your file, you can remove the associated files using a dedicated *Action*.

For more information about associated files, refer to *PDF 2.0 Application Note 002: Associated Files*.

Related Actions

- *Remove associated files* on page 111

3.2.10.8. Check halftone origin

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Logs either objects with or without default HTO (halftone) values, or with particular HTO values.

PDF 2.0 allows specifying the halftone origin, whereas in earlier versions, the halftone origin value had to be 'Default' (= not specified). If you want to remove the halftone origin from your document, you can use the *Set default halftone origin* Action.

Related Actions

- *Select by halftone origin* on page 422
- *Change halftone origin* on page 186
- *Set default halftone origin* on page 196

3.2.10.9. Check if Output Intents are used

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks for the presence of Output Intents, either on page or document level.

An Output Intent describes the color characteristics of the output devices on which the PDF document might be rendered. The Output Intent may be defined on document and/or page level.

This Action can be useful if you don't want PDF2.0 features in your PDFs. You can remove Output Intents using a dedicated *Action*.

Related Actions

- *Remove Output Intents* on page 194

3.2.10.10. Check if Requirements are used

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the PDF contains a Requirements dictionary in the Catalog, or one or more specific Requirement types (in that case you can specify which types to check for).

The Requirements dictionary specifies the requirements the PDF file has. Until PDF 2.0, the only *possible* requirement was 'EnableJavaScripts'. As of PDF 2.0, a number of new types are allowed, such as 3D Markup, Attachment, Encryption etc.

Related Actions

- *Change Requirements*

3.2.10.11. Check inline image syntax

Belongs to

- **Category:** Image; PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks the presence and/or validity of the L key (or Length key) of a PDF.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Inline images must not have the Length key
- Inline images must have the Length key
- Inline images must have a valid Length key.

Note that PDF 2.0 allows (but does not impose) the presence of an L key, but if it's present, it must match the actual inline image data length.

Related Actions

- *Select inline image syntax*
- *Change inline image syntax*

3.2.10.12. Check Mixing Hints in Output Intent

Belongs to

- **Category:** PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the document contains an Output Intent on document or page level that contains the Mixing Hints dictionary. Note that only the presence of the dictionary, not the contents is checked.

A Mixing Hints dictionary provides information about how spot colors interact with each other. That information may be used in blending calculations when the actual spot colors are not available on the target device. As of PDF 2.0, a Mixing Hints dictionary is allowed in an Output intent dictionary for the complete PDF.

3.2.10.13. Check PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Allows you to check if the text encoding of a PDF complies with a particular PDF version. Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Related Actions

- *Change PDF text string encoding* on page 101

3.2.10.14. Check PDF/Acrobat compatibility

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Allows you to checks if a particular Acrobat or PDF version is used in a PDF document.

You can for example check if the Acrobat version is equal to or higher/lower than a particular version.



Note: As of PitStop 2020, you can check a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). If the versions are different, PitStop uses the version from the Adobe extension. If there is no version specified in the Adobe extension, the header version or catalog version are considered, and the highest version number is taken.

3.2.10.15. Check Spectral Data in Output Intent

Belongs to

- **Category:** PDF 2.0

- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the document contains an Output Intent on document or page level that contains the Spectral Data dictionary. Note that only the presence of the dictionary, not the contents is checked.

The Spectral Data dictionary provides information about the spectral characteristics and the opacity properties of spot colors.

3.2.10.16. Check version compatibility with PDF/X-6

Belongs to

- **Category:** PDF 2.0, Metadata
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the version of the PDF complies with PDF/X-6 or PDF/X-6p.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). PDF/X-6 and PDF/X-6p require that both the version specified in the header and the version specified in the document catalog are 2.0 (or higher).

Related Actions

- *Fix version compatibility with PDF/X*

3.2.11. Position and size

3.2.11.1. Check if page scaling factor is used

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the PDF uses a page scaling factor. If so, you can optionally check if a certain page scaling factor applies.

A page with scaling factor 2 will be displayed and printed twice the original size (= scaling factor 1). Page scaling has been introduced in PDF 1.6 and allows you to extend the maximum page size beyond 200 by 200 inch.

Related Actions

- *Apply page scaling factor* on page 163
- *Remove page scaling factor* on page 175

3.2.11.2. Check for flipped objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Searches a PDF for objects that have been flipped, normally using QuarkXpress. These can slow down the RIP.

Related Actions

- *Flip content* on page 170
- *Flip selection* on page 199

3.2.11.3. Check for rotated objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

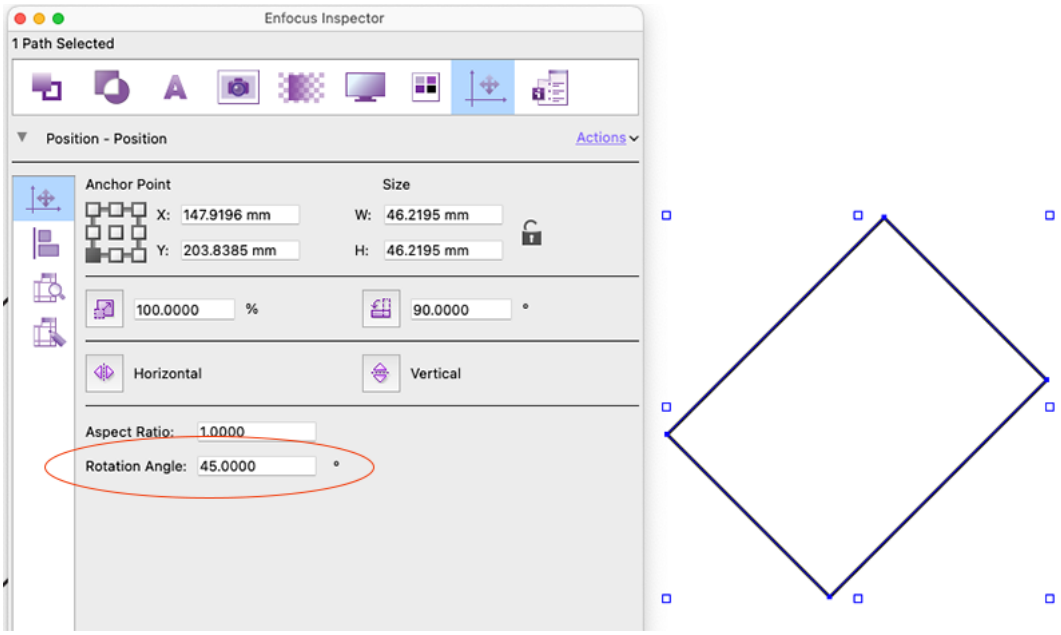
Checks if a PDF contains rotated objects. Objects can have been rotated by page layout applications such as QuarkXPress, and this may cause problems for (older) RIPs.

You can specify the non-permitted level of rotation, for example 'objects must not be rotated more than 2 degrees', optionally combined with two extra options:

- **Interpret all angles as rotations between 0 and 45 degrees from vertical or horizontal**: This option allows you to find small rotations in either direction. To decide whether or not an object is rotated, the measured angle is converted to an interval [0,45] degrees compared to the nearest horizontal or vertical page edge. As a consequence, a rotation of 88 degrees is converted to 2 (90-88) and a rotation of 271 degrees is converted to 1 (271-270). When checking for rotations smaller than 4 degrees, both rotations will be logged, whereas for example a rotation of 290 degrees (converted to 20 => 290-270) won't be logged. See example 1 below.
- **Ignore objects that are aligned horizontally or vertically**: This option allows you to exclude objects that are aligned exactly 0, 90, 180 or 270 degrees to the page edges. Such objects (rotated a multiple of 90 degrees) do not look rotated, so in most cases they should not be logged. See example 2 below.

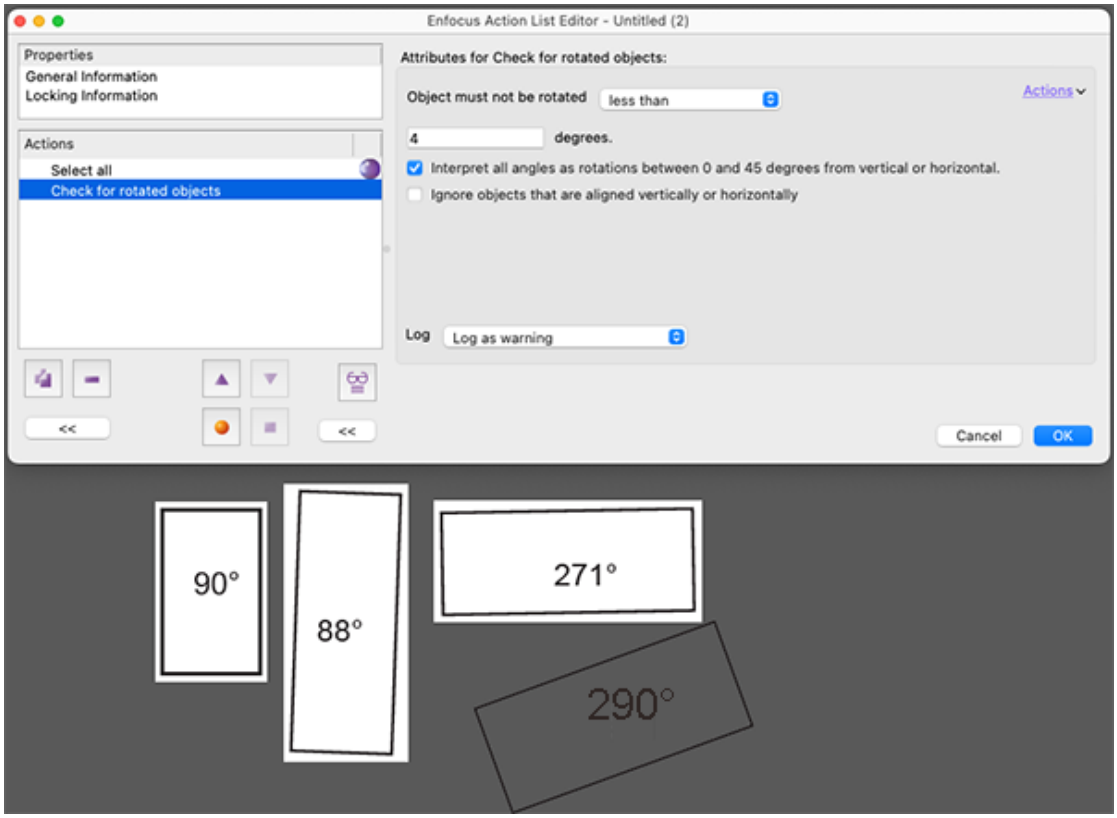
Remark

Note that you can check the rotation angle of an object using the PitStop Inspector.



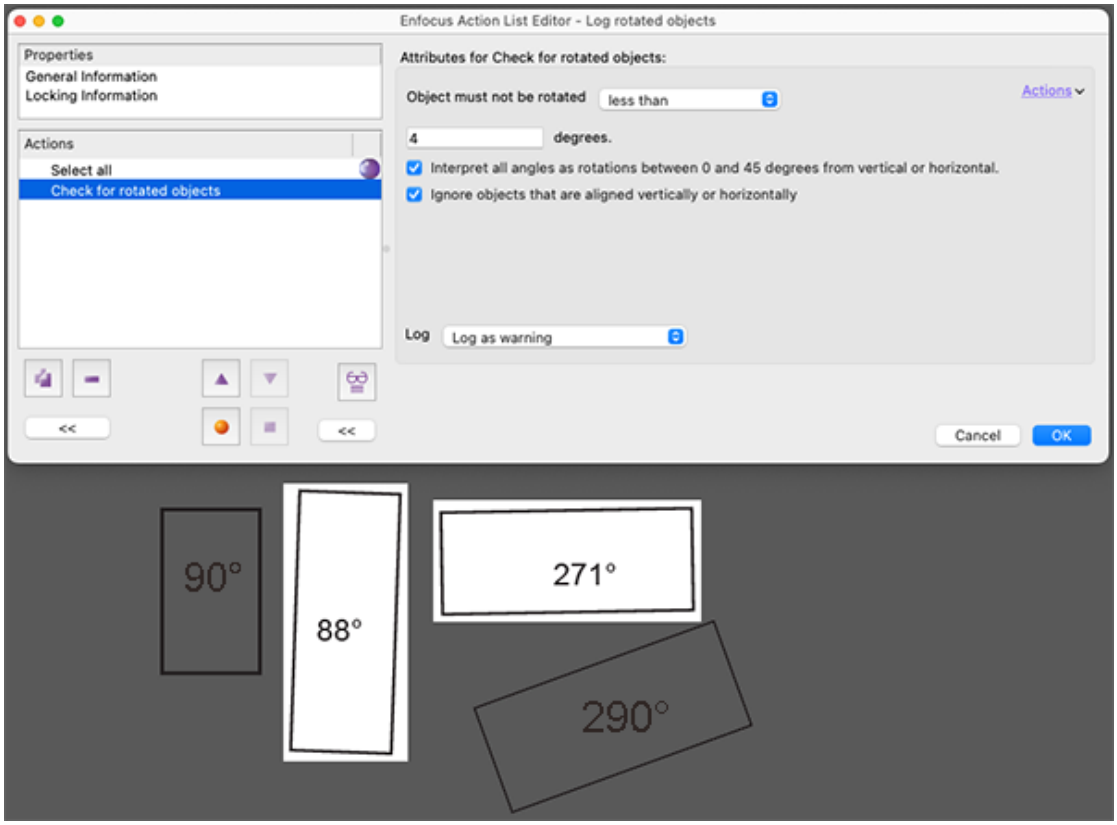
Example 1

In the example below, all angles are interpreted as rotations between 0 and 45 degrees from vertical to horizontal (first option). The first three objects are logged because they have a rotation angle of less than 4 degrees from the nearest vertical or horizontal page edge (as explained higher).



Example 2

When the **Ignore objects that are aligned horizontally or vertically** checkbox is selected, the object that has a rotation angle of 90° is no longer logged.



Related Actions

- *Rotate object* on page 204
- *Rotate content* on page 178
- *Rotate objects as group* on page 204
- *Select rotated objects* on page 429

3.2.11.4. Check for sheared objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Checks if the PDF contains objects that have been disproportionally skewed or twisted in a page layout application such as QuarkXpress.

3.2.11.5. Check XY scaling difference

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Checks the proportional scaling of a selected object.

If the XY scaling difference is 0%, the object is scaled proportionally, i.e. the height-to-width ratio is maintained. The object is enlarged or reduced both horizontally (X) and vertically (Y) with the same percentage.

In some cases, a small XY scaling difference is allowed, for example in line art (e.g. a rectangle in one color); in images this may cause distortions.

3.2.12. Prepress

3.2.12.1. Check flatness

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Allows you to check the minimum or maximum flatness of a line art curve.

The default setting to produce a smooth curve is 1. A value higher than 1 can produce a jaggy edge; lower than 1 can slow down the RIP.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

3.2.12.2. Check for transparent objects

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches the PDF document for any objects with transparency. You can restrict your search to transparent objects with fill overprint, strike overprint or spot color.



Note: As of PitStop 2022, this check is also applied to annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Select transparent objects* on page 435
- *Select pages with transparent objects* on page 418
- *Remove transparency* on page 228
- *Change transparency* on page 221

3.2.12.3. Check halftone phase

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks the PDF documents for the presence of halftone phases.

A halftone phase is a shift in the alignment of halftone and pattern cells in device space, to compensate for window system operations that involve scrolling. It is no longer used, but may still be found in documents containing artwork from older source applications.

Related Actions

Remove halftone phase on page 227

3.2.12.4. Check if object is set to knockout

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if a selected object is set to knockout or not. You can distinguish between the fill and stroke being 'knocked out'.

If an object is set to knockout, the colors of this object cut out the area underneath. The background color is erased.

3.2.12.5. Check if object is set to overprint

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if the fill and/or stroke of a selected object is set to overprint.

Black objects and particularly smaller text objects should be set to overprint, to compensate for misregistration and to preserve the legibility of the text.

Related Actions

Change overprint on page 219

3.2.12.6. Check for custom black generation

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if custom black generation curves (BG) have been included in the PDF document.

Black generation (BG) is the process of adding black ink to CMY-generated black and gray, in order to achieve a clear black color and to save valuable color ink.

Related Actions

Remove black generation on page 226

3.2.12.7. Check for custom halftone

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches a PDF for objects to which custom halftones are applied.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Custom halftones are mostly used for screening frequency and angles.

Associated with every output device is a default halftone definition that is appropriate for that device. Only relatively sophisticated documents need to define their own halftones to achieve special effects. In general, when a PDF document provides its own halftone specifications, it sacrifices portability: they may lead to unpredictable printed output when the same document is sent to different printers. This is why they are generally undesirable.

Related Actions

Remove halftone on page 226

3.2.12.8. Check for custom transfer function

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if a PDF contains objects to which transfer functions are applied.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Apply transfer function* on page 83
- *Remove custom transfer function* on page 226

3.2.12.9. Check for custom undercolor removal

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if custom undercolor removal definitions (UCR) have been included in the PDF document.

Undercolor removal is the process of removing large percentages of cyan (C), magenta (M), and yellow (Y) ink prior to printing, and replacing them with black (K) ink, in order to achieve a clearer black color in print, and to save on color inks.

Related Actions

Remove undercolor removal on page 229

3.2.12.10. Check for non-PDF/X compliant halftone

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches a PDF for objects with halftones that are not compliant with the PDF/X specification.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Some of these halftones are not allowed according to the PDF/X specification.

Related Actions

Remove non-PDF/X compliant halftone on page 227

3.2.12.11. Check for non-standard blend modes

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks whether the PDF contains objects with a blend mode other than one of the standard blend modes.

Blend modes determine how colors on different layers blend with each other.

There are 16 standard blend modes described in the PDF Specifications. They can be detected using the PitStop Inspector or the *Select by blend modes* Action. If new blend modes would be introduced (which is theoretically possible), this Action could be used to detect them.

For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Related Actions

Select by blend modes on page 431

3.2.12.12. Check ink coverage (total page check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Allows you to check the CMYK ink coverage either of all colors combined or per separation on a page (inside a particular page box).

You can for example check if the ink coverage in the media box is at least 300%.

In case of a separation-based check, you may exclude separations with 0% ink coverage (i.e. empty areas without content).

It's also possible to ignore small areas, for example areas smaller than 1 inch.

3.2.12.13. Check ink coverage (basic object check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Checks the total CMYK ink coverage of the color of the **objects** in the PDF.

You can for example check if the ink coverage is at least 300%.

When including images in the ink coverage check, the threshold will determine the minimum area in which the ink coverage has to be exceeded before reporting an error or warning. For example, when entering '0', even 1 dot exceeding the maximum ink coverage will be reported.

Related Actions

Select by ink coverage (basic object check) on page 366

3.2.12.14. Check Output Intents for DotGain

Belongs to

- **Category:** Prepress
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the Output Intents contain a DotGain dictionary.

A DotGain dictionary is a PDF 2.0 feature.

3.2.12.15. Check overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if fill and/or stroke overprint is set to Standard overprint mode (OPM 0), or Illustrator overprint mode (OPM 1).

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

For more information and examples, refer to *the PitStop Pro Reference Guide on the Enfocus website*.

Related Actions

- *Change overprint mode* on page 220
- *Select by overprint mode* on page 433

3.2.12.16. Check rendering intent

Belongs to

- **Category:** Color; Prepress

- **Type:** Checks

What it does

Allows you to check the rendering intent of particular objects (Paths, Text, Paths or Text, Images, or all Rendering objects) in a PDF.

You can check whether or not they use rendering, and if they do, which type:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Change rendering intent* on page 86
- *Remove rendering intent* on page 96

3.2.13. Text

3.2.13.1. Check CMap

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if a PDF contains an embedded CMap, and if so, whether its name is consistent with any matching external file. This is necessary for PDF/A compliance.

About CMaps

CMap (Character Map) is a mapping of character codes to an ID. This ID is used to map the characters to the correct glyphs.

CMaps can be external or embedded:

- When the CMap is external, it is referenced in the PDF by a name.

  Note: Some CMaps are shipped (as external files) along with PitStop.

- When the CMap is embedded, it's often also referenced inside the PDF.

3.2.13.2. Check corrupt font widths

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for fonts that have corrupt widths. You might want to remove or replace these fonts.

By default, horizontal writing is checked, but you can also include vertical writing by selecting the **Also check metrics for vertical writing** checkbox.

Corrupt font widths may occur in a PDF, when "artificial" bold or italic was used instead of the "bold" or "italic" version of the font concerned. For example, if "Futura" is used in your PDF, the "Futura-Bold" and "Futura-Oblique" fonts should be used instead of applying bold and italics on the regular Futura font. Artificial font may cause problems when printing the PDF.

As of PitStop 2022, you can set a threshold in the **Tolerance** field. This value, expressed in 1/1000 em, specifies the maximum acceptable deviation of the standard font width. For example, if the tolerance is set to 5, a font width that deviates 5/1000 em (or less) from the normal font width will not be logged.

Some PDF standards allow font size deviations. For example, PDF/X-4 allows a deviation of 5 1/1000 em, PDF/X-6 allows a deviation of 1 1/1000 em ... This Action can be used to search for font widths that do not comply with certain PDF/X versions.

About the em as unit

The unit used to set the tolerance is '1/1000 em'. 'em' is used because the size of an 'em' is relative to the size of the font: it denotes the point size. For example: 1 em in a 16-point typeface is 16 points, 1 em in an 8-point typeface is 8 points. As a consequence, if the tolerance is set to 1, the relative size is the same, but the absolute size differs depending on the font size.

The name 'em' comes from the width of the capital M in the typeface.

Related Actions

- *Select corrupt font widths* on page 437
- *Change corrupt font widths* on page 235

3.2.13.3. Check embedded font is OpenType

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Allows you to check if the embedded font is OpenType.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

- *Select embedded fonts* on page 438
- *Select OpenType embedded fonts* on page 441

3.2.13.4. Check font by name

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks for the presence of a particular font.

Enter the name of the font you want to check for in the text field, or use the **FontPicker** button to select it.

Note: From version 12 update 2 onwards, you can use a regular expression to define the font name.

3.2.13.5. Check font embedding

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks whether or not fonts are embedded.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

- *Select embedded fonts* on page 438
- *Unembed font* on page 247

3.2.13.6. Check font license

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks which operations the font's license allows without obtaining permission from the font's owner.

These operations are:

- Embed
- Subset
- Outline
- Preview and print

Related Actions

Select fonts by license on page 438

3.2.13.7. Check font metadata

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Allows you to check if the fonts in the PDF have been added correctly to the metadata.

About font metadata

Font metadata is descriptive information about the fonts used in a PDF, for example the name of the font, its type and encoding. You can find the font metadata of a file in Adobe Acrobat by selecting **File** > **Document Properties** and switching to the **Fonts** tab.

Related Actions

Add font metadata on page 234

3.2.13.8. Check font subsetting

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if fonts are subsetted or complete.

If a font is subsetted, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible.

Related Actions

- *Select subset fonts* on page 443

3.2.13.9. Check font type

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks for particular font types in a PDF.

You can check for:

- TrueType
- Type 1
- Type 3
- Multiple Master
- Composite TT
- Composite T1
- Composite (all types)

About types of fonts

Related Actions

Select fonts by type on page 439

3.2.13.10. Check font vendor

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks to see if fonts from a particular vendor have been used in a PDF.

3.2.13.11. Check for artificial font style

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for instances of artificial font style (artificial bold, italic or outline style).

About artificial font style

Some fonts consist of specific **font families** for each style. The font Futura, for example, has the font families Futura (for “regular” Roman style), Futura-Bold, Futura-Oblique etc. This implies that, if you want to put text in Futura and in bold, for example, you will have to select the font family “Futura-Bold”.

Certain design programs or word processors allow you to adapt the style of these fonts artificially. You can select text and to put it in italics or in bold by selecting the respective style within this font family. Sometimes, you can even do this by means of shortcuts, e.g. Control+b for bold or Control+i for italics. Text that has been modified in this manner uses a so-called **artificial bold or italic style**.

This method may seem very handy but it is recommended to avoid it, because these artificial styles can cause problems when printing: e.g. artificial bold is created when printing two characters on top of each other, one being one point size bigger than the other.

3.2.13.12. Check for city fonts

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for instances of city fonts.

City fonts are bitmap fonts that tend not to produce good results when printed.

3.2.13.13. Check for inconsistent Type 3 font width information

Belongs to

- **Category:** Text
- **Type:** Checks

- **Since:** PitStop 2022

What it does

Searches a PDF for Type 3 fonts that have corrupt widths (inconsistent d0 or d1 values). You might want to remove, replace or fix these fonts. Note that there's a dedicated Action to fix them.

Related Actions

- *Check corrupt font widths* on page 349
- *Fix inconsistent Type 3 font width information* on page 243

3.2.13.14. Check if a subset font contains a complete CharSet or CIDSet

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the subset fonts embedded in the document (if any) contain a complete character or CID set.

If a font is subset, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible. This Action allows you to check if all characters of the font are embedded. In case of simple fonts, the complete set is referred to as "CharSet"; in case of composite fonts, it's referred to as "CIDSet".

CID (Character Identifier) fonts are a format of Type 1 fonts that are typically used for Chinese, Japanese and Korean fonts.

Related Actions

- *Select subset fonts* on page 443
- *Check font subsetting* on page 351

3.2.13.15. Check if font contains all glyphs and metrics for all characters used

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches the PDF document for fonts that don't have the character set required to display and print the used characters correctly.

Optionally, you can include in your check the glyphs that were removed by subsetting fonts.

You can then replace these fonts by embedded or subset fonts that do have all required glyphs and metrics.

3.2.13.16. Check if invalid character (.notdef glyph) is used

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the PDF contains invalid characters.

.notdef glyphs are replacement characters for undefined characters in a PDF; they often look like a small box containing an X or a question mark and are not PDF/X compliant. You might want to remove or fix them.

Related Actions

Fix invalid characters (.notdef usage) on page 244

3.2.13.17. Check if TrueType fonts are PDF/X compliant

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if TrueType fonts are compliant with a particular PDF/X version. Options are PDF/X-4 and PDF/X-6.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

Select non-PDF/X or PDF/A compliant TrueType fonts on page 440

3.2.13.18. Check presence of ToUnicode map in font

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the unicode mappings of the fonts are compliant with a particular PDF/A version.

PDF/A requires that all text in the PDF file can be mapped to Unicode. Therefore, fonts used in the PDF should contain a character-to-glyph mapping that is consistent with character semantics as defined in the Unicode Standard.

This mapping is used to override the default text extraction behavior, for example when using the Acrobat text tool to copy and paste text to another application like Notepad.

3.2.13.19. Check text point size

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks the text point size against a particular value.

Examples

Text point size must be equal to 5 pt.

To check the minimum text point size, select "Text point size must be more than or equal to ... pt" and enter the appropriate value.

3.2.13.20. Check text x-height

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Check text x-height checks the font size by measuring the height of the lowercase x (= the x-height). The x-height refers to the distance between the baseline and the mean line in a typeface; this is typically the height of the letters x, u, v, w, and z. You can set a threshold for the text x-height expressed in points.

Note that the check only can work if at least one of the characters to be measured (x, u, v, w or z) is available in the PDF.

3.2.13.21. Check that composite TrueType CIDToGIDMap is present

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the PDF contains a mapping table for composite TrueType fonts to map CID (Character IDs) to GID (Clyph IDs), and if it's correctly defined. This is required by the PDF/A specification.

CID (Character Identifier) fonts are a format of Type 1 fonts that are typically used for Chinese, Japanese and Korean fonts.

GID (Glyph Identifier) are identifiers to identify all glyphs in a font.

3.2.13.22. Check TrueType font encoding according to PDF/A

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks whether the Truetype font used in the PDF complies with a given version of the PDF/A specification. Fonts must for example be embedded in the PDF.

3.3. Informs

The following Actions allow you to collect information from PDF documents, for example information about fonts, OPI, colors, ... The requested information will be available in the Preflight report.

3.3.1. Color

3.3.1.1. Gather color information

Belongs to

- **Category:** Color
- **Type:** Informs

What it does

Collects information about the color spaces used in a PDF and presents it in the log.

3.3.1.2. Gather ink information

Belongs to

- **Category:** Color

- **Type:** Informs

What it does

Calculates the amount of each color separation needed to print a page, and a complete document, i.e. how much of each page is actually covered by each ink.

This Action reports the result in % of the page size and also as inch2, cm2 or mm2 depending on your unit preferences. The ink usage report is also included as part of the Preflight Profile editor, so it can be generated within a Preflight Report by checking the **Inks** checkbox (at the bottom of the General section in the Preflight Profile editor). This check is off by default (because the calculation is time consuming).

3.3.2. Document

3.3.2.1. Gather filters information

Belongs to

- **Category:** Doc
- **Type:** Informs

What it does

Collects information about:

- The data format of the file (ASCII/binary)
- Whether or not compression is used
- The compression filters (if any), for example: ZIP, JPEG, LZW, ...

This information is presented in the Preflight Report under **General File Information** > **Compression**.

Related Actions

Check data format on page 271

Check contents compression on page 271

3.3.2.2. Gather Output Intent information

Belongs to

- **Category:** Doc
- **Type:** Informs

What it does

Collects information about the Output Intents used in a PDF document and presents it in the log.

In the report, you can find the following information (if Output Intents are used):

- ICC profile or ICC characterization name
- Registry name
- Additional information

3.3.3. Image

3.3.3.1. Gather image information

Belongs to

- **Category:** Image
- **Type:** Informs

What it does

Collects information about the images used in a PDF and presents it in the log.

The following information is logged:

- Type
- Color Space
- Physical Resolution
- Effective Resolution
- Page found
- Angle
- Skew
- Flipped
- Custom Transfer
- Custom Halftone
- Custom BG (black generation)
- Custom UCR (undercolor removal definitions)

3.3.3.2. Gather OPI information

Belongs to

- **Category:** Image
- **Type:** Informs

What it does

Collects information about the OPI (Open Prepress Interface) used in a PDF and presents it in the log.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Change OPI info* on page 115
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

3.3.4. Layers

3.3.4.1. Gather layer information

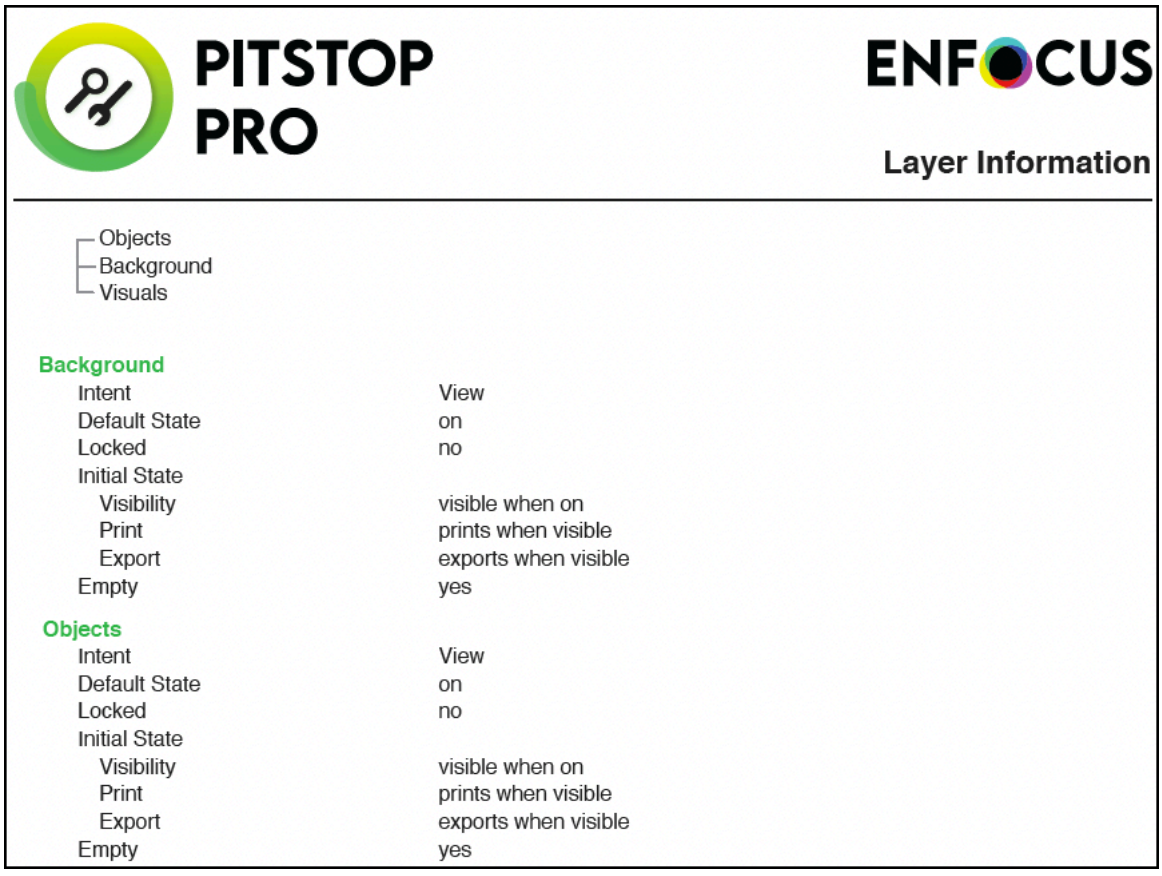
Belongs to

- **Category:** Layers
- **Type:** Informs
- **Since Version:** 2017

What it does

Collects information about the layers used in a PDF and presents it in a report.

You will get a clickable tree view (representing the sequence of the layers), followed by an overview of all layers (listed alphabetically) with their attributes.


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Layer Information

- Objects
  - Background
  - Visuals

Background

Intent	View
Default State	on
Locked	no
Initial State	
Visibility	visible when on
Print	prints when visible
Export	exports when visible
Empty	yes

Objects

Intent	View
Default State	on
Locked	no
Initial State	
Visibility	visible when on
Print	prints when visible
Export	exports when visible
Empty	yes

3.3.5. Metadata

3.3.5.1. Gather pages information

Belongs to

- **Category:** Metadata; Page
- **Type:** Informs

What it does

Collects information about the pages (number of pages and range) in a PDF and presents it in the log.

3.3.6. Page

3.3.6.1. Gather page box information

Belongs to

- **Category:** Page
- **Type:** Informs

What it does

Collects information about the page boxes used in a PDF document and presents it in the log.

In the report file (under Page boxes), each page box layout is represented by 2 drawings:

- One to show the page boxes that were defined in the document ("defined" page boxes)
- One to show the actual position of the page ("effective" page boxes).

Below these drawings, an overview of all page boxes and their sizes is listed:

- The pages this page box layout applies to
- The start position of the media box
- The page rotation

- The page scaling factor

3.3.7. Text

3.3.7.1. Gather font information

Belongs to

- **Category:** Text
- **Type:** Informs

What it does

Collects information about fonts used in a PDF and presents it in the log.

The following information is logged:

- Font Name
- Type
- Encoding
- Embedded
- Subset

3.4. Selections

The following Actions allow you to select elements in a PDF.

3.4.1. Color

3.4.1.1. Select black & white objects

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since Version:** 2018

What it does

Selects black and white images.

You can set a tolerance (an allowed deviation from '100% gray', default tolerance is '3') and tell PitStop how to determine what black and white is:

- **Calculate image average**: Take the color value of each pixel of the image (color and gray values) and calculate the average of this; decide based on this value whether or not it is "black and white".

- **Look for colored areas**: Search for colored areas and take only the values of colored pixels to decide whether or not it is "black and white". If most of the colored values are gray (or close to gray/taking into account the chosen tolerance), the image will be considered black and white; otherwise it will be considered a color image. This method will detect images that are mainly black and white but with a small colored area.

Remarks

- This Action works on all color spaces, on images, text and linear and radial shadings.
- Spot colors are always considered colored images, regardless of their name (e.g. even spot colors with the name 'black' will be considered colors).

Use Cases

- In digital printing, to save on ink, black and white images are preferably printed using black ink only. This Action provides an extra check to distinguish between black and white images with minor color tints (safe to use black) and black and white images with colored areas that definitely need color ink.
- Black text or thin lines (coming from CMYK) can be safely remapped to black only, thanks to this Action, which allows to filter real black text from colored text. Example Action List:

```
select text
select black & white objects
AND
remap color  <!--  target color black -->
```

Examples

The following image will be considered 'black and white' based on the average image calculation, but 'colored' based on the area calculation.



The image below is clearly 'black and white' and will be selected, regardless of the calculation method.



3.4.1.2. Select by blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Selections

What it does

Makes a selection based on the blending color space.

You must set the required blending color space and the required luminosity softmask blending color (or select the option **Undefined**).

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85

- *Check if blending color space is defined* on page 261

3.4.1.3. Select by color space

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects line art (fill and/or stroke) and/or other objects according to their color space.

Example

To select all ICC line art, proceed as follows:

```
Select by color space
<!-- Options:
1. Select both Fill and stroke color space.
2. For both, select "ICC tagged". Optionally, indicate the preferred number of color
 components.
3. Make sure the checkbox under Other objects is cleared
-->
Log selection
```

3.4.1.4. Select by color space in PDF/X Output Intent

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to make a selection based on the color space in the PDF/X Output Intent.

As of PitStop 2022 you should make clear which Output Intents should be taken into account. Options are:

- Document Output Intents (before PDF/X-6)
- Effective Output Intents (since PDF/X-6)
- Document Output Intents (PDF/A-2)

You can choose one of the following color spaces:

- CMYK
- RGB
- Gray

- Unknown

3.4.1.5. Select by ICC tag subtype

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows to make a distinction between ICC-based RGB, ICC-based gray and ICC-based Lab.

Related Actions

- *Check color type* on page 254

3.4.1.6. Select by ink coverage (basic object check)

Belongs to

- **Category:** Color; Prepress
- **Type:** Selections

What it does

Makes a selection of all objects that meet your ink coverage criteria.

You can for example select objects only if the ink coverage is at least 300%.

When including images in this selection, the threshold will determine the minimum area in which the ink coverage criteria have to be met in order to be selected. E.g. when entering '0', even an image of which only 1 dot meets the ink coverage requirement will be selected.

Related Actions

Check ink coverage (basic object check) on page 262

3.4.1.7. Select by number of color plates

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects that occur on a certain number of color plates (separations). You can make the selection based on the object's fill and/or stroke.

Example

You could for example search for objects with 4 color plates (dark gray), and afterwards change gray to CMYK Black. This will reduce the number of plates from 4 plates to 1 plate.

```
Select by number of color plates <!-- Choose 4 -->
Change Gray to CMYK Black <!-- Change Gray to CMYK Black on page 84 -->
```

Related Actions

Check number of color plates (basic object check) on page 263

3.4.1.8. Select by rendering intent

Belongs to

- **Category:** Color;Prepress
- **Type:** Selections

What it does

Selects color managed objects based on a particular rendering intent.

You can select paths, text, images, or all rendering objects, with one of the the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select rendering objects* on page 388

3.4.1.9. Select by spot color suffix

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects with spot colors that use a spot color with either a known suffix or a known suffix which is not of a particular type.

You can find an overview of the available suffixes in the table below.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types. For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Check spot color suffix* on page 268
- *Change spot color suffix* on page 86

3.4.1.10. Select by tagged ICC Profile

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select objects which have (not) been tagged with an ICC profile, or objects with a specific color space and a specific ICC profile.

You can distinguish between stroke and fill color, for example select objects of which the stroke color is ICC tagged.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Check ICC tagging* on page 258
- *Select by tagged ICC Profile* on page 369
- *Tag object with an ICC profile* on page 99
- *Check if ICC profile differs from ICC profile in PDF/X Output Intent* on page 260
- *Select objects of which ICC profile is equal to ICC profile in PDF/X output* on page 373
- *Check ICC profile version* on page 259

3.4.1.11. Select by tiling pattern

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does

Allows you to select text, line art and/or image masks with a tiling pattern. You can select only colored or uncolored tiling patterns, or both.



Note: You should select at least one checkbox above the divider and one below the divider.

Related Actions

- *Check objects by tiling pattern* on page 264
- *Select tiling pattern contents according to parent object selection* on page 379

3.4.1.12. Select color

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects by their fill or stroke color, or both.

How to proceed

Define the colors you want to select as follows:

1. Select the appropriate checkbox, depending on what you want to define (Fill color or Stroke color).

   Note: If both checkboxes are selected, objects that match both fill and stroke colors will be selected. This is equivalent to combining separate actions with the AND operator.

2. Select the appropriate color in one of the following ways:
   a. Select an object with the PitStop Select Objects tool and use the icon to grab the fill or stroke color (depending on what you're defining).
   b. Click the color picker icon and select the appropriate color.
   c. Select the required color space:
      - Device colors can be Gray, RGB or CMYK
      - Calibrated colors can be Gray or RGB
      - User Swatch (= user-defined colors)
3. Fine tune the color by moving the sliders.

3.4.1.13. Select color range

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select objects with a specific color, by specifying the color range of the fill and/or stroke color.

The available options depend on the chosen color space:

- Gray, CMYK or RGB: **search in converted values of other color spaces** (If selected, the result of the conversion is calculated in advance.)
- Separations: You can decide to select either all spot colors or only the spot colors with a particular name. You can type the name or click the **Load Spot Color** button to select it.
- DeviceN process colors: **allow spot colors in DeviceN color space**

Example

To catch all gray objects (either fill or stroke) with a brightness between 0% and 40 %, and turn them into CMYK objects with 100% Cyan color, you can do the following:

```
Select gray fill or stroke color
<!-- This is the "Select color range" Action with the options Fill and Stroke
 selected.
Select "Color space is gray", and in the Gray from field, enter values between 0% and
 40% -->
Change fill and stroke color
<!-- This is the "Change color" Action with Fill and Stroke selected.
Select "Device CMYK" and set Cyan to 100% -->
```

3.4.1.14. Select default color spaces

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select default color spaces or default color spaces that are not defined by PDF/X-3.

Default color spaces are defined on page level. They are used to systematically remap device-specific colors to device-independent colors.



Note: PitStop also provides an Action to ***change*** *default color spaces*.

3.4.1.15. Select DeviceN with attributes

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select the fill and/or stroke of DeviceN and/or NChannel objects.

You must specify which attributes must be present to select the object:

- Spot color definitions
- Process color mapping

- Mixing hints
- Solidities
- Printing order
- Dot gain

Related Actions

Check DeviceN attributes on page 255

3.4.1.16. Select gray

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to make a selection based on the gray color of the fill and/or stroke color of the objects in the PDF.

You can specify how much the actual gray in the document is allowed to deviate from "true" gray (i.e. gray which doesn't have tones of any other color; for RGB this means that the percentage of Red, Gray and Blue is the same; for CMYK, this holds for Cyan, Magenta and Yellow).

3.4.1.17. Select incorrectly defined process color spaces in DeviceN

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select objects that use a DeviceN color space containing a process color space which does not match the PDF/X Output intent.

Related Actions

Check DeviceN for process color spaces on page 256

3.4.1.18. Select non-compliant Output Intent

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects the whole document if the Output Intent is:

- **Not compliant** with a particular PDF/X or PDF/A version, OR
- **Compliant** with a particular PDF/X or PDF/A version, **but the ICC profile or ICC characterization is not as specified**.

You can check the compliance with the following PDF/X versions:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1
- PDF/A-2

3.4.1.19. Select objects of which ICC profile is equal to ICC profile in PDF/X output

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects of which the ICC profile is equal to the ICC profile in PDF/X output. Choose either fill, stroke or both.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Select by tagged ICC Profile* on page 369
- *Check ICC tagging* on page 258
- *Check if ICC profile differs from ICC profile in PDF/X Output Intent* on page 260
- *Tag object with an ICC profile* on page 99

- *Check ICC profile version* on page 259

3.4.1.20. Select page by gray surface

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 13

What it does

Selects gray pages in a PDF based on the total surface (%) of colored content on that page.

You can configure the following attributes:

- How big the non-gray area should be, e.g. less than 90% should be non-gray
- Whether or not a deviation from gray is allowed, e.g. if only "pure" gray should be selected, choose 0% as deviation.
- Which of the page boxes defines a page.

Use cases:

- Use this Action in combination with *Log selection* to detect whether a PDF should be printed in color or in black and white.
- Use this Action in combination with *Convert color* to select gray pages and convert the colors to grayscale (to save ink).

Example

The following Action List selects the pages in your PDF that have almost no colored content (less than 5% of the page - the page being defined by the trim box). There is a small tolerance allowed, meaning that colors that are "almost gray" are also considered "gray".

```
Select page by gray surface
                <!-- Select page if non-gray surface is less than 5% of the total
 page area  -->
                <!-- Ignore color that deviates less than 3% from gray -->
                <!-- Page area is defined by the trim box -->
```

Related Actions

- *Select gray* on page 372
- *Select page by ink coverage (non-Black only)* on page 374

3.4.1.21. Select page by ink coverage (non-Black only)

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 13

What it does

Selects gray pages in a PDF.

This Action detects the ink coverage of color content (CMY and spot colors) in a page and selects the pages for which the maximum ink coverage of each non-black separation is below a particular percentage (as defined in the Action). You can ignore small non-gray areas (e.g. a company logo) and limit the check to an area inside a particular page box as required.

Use cases:

- Use this Action in combination with *Log selection* to detect whether a PDF should be printed in color or in black and white.
- Use this Action in combination with *Convert color* to select gray pages and convert the colors to grayscale (to save ink).

Example

The following Action List selects all pages with CMY or spot color values lower than 5%. These pages may have a very small colored area (< 5 cm) or colors outside the trimbox.

```
Select gray page <!-- Select page if ink coverage of each non-Black separation is less
 than 5% -->
                 <!-- Ignore non-gray areas smaller than 5 cm -->
                 <!-- Only check inside the trim box -->
```

Related Actions

- *Check ink coverage (total page check)* on page 262 : checks the ink coverage of *all* colors (including black)
- *Select page by gray surface* on page 374

3.4.1.22. Select process colorant

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does

Selects the colorant(s) of your choice (Cyan, Magenta, Yellow, Black).

It's typically used with *Add trace path* (to draw a path around the selected process colors) or with *Check ink coverage (total page check)* (to check the ink coverage of one or more process colors).

Examples

Example 1:

Using the following Action List, you can draw a path based on the selected colorants (CMY in this example).

```
Select process colorant (CMY on) - channels on which the Action will work
```

```
Select all - objects that will be used to trace the path
Trace path (Use colorant selection on) - draws the path based on the selected
 colorants
```

Example 2:

```
Select process colorant
Check ink coverage (total page check)
```

Related Actions

- *Add trace path* on page 71
- *Check ink coverage (total page check)* on page 262

3.4.1.23. Select shading objects

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects all shading objects.

Shadings represent complex mathematical functions. That's why certain output devices may not be able to correctly interpret them. Shadings can also cause problems during color conversions.

Note: As of PitStop 7, shadings can be color converted.

3.4.1.24. Select spot color

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select either all spot colors in a PDF file, or one or more particular colors, based on their names.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the spot color name.
- From version 13 update 1 onwards, there is an extra option to select a spot color based on a list of names. This new option is useful if different spot color names refer to the same color, so you can easily run a fix on objects with differently named spot colors. It also allows you to select different spot colors in one go.
- From version 2018 onwards, you can select spot colors by a Pantone Library.

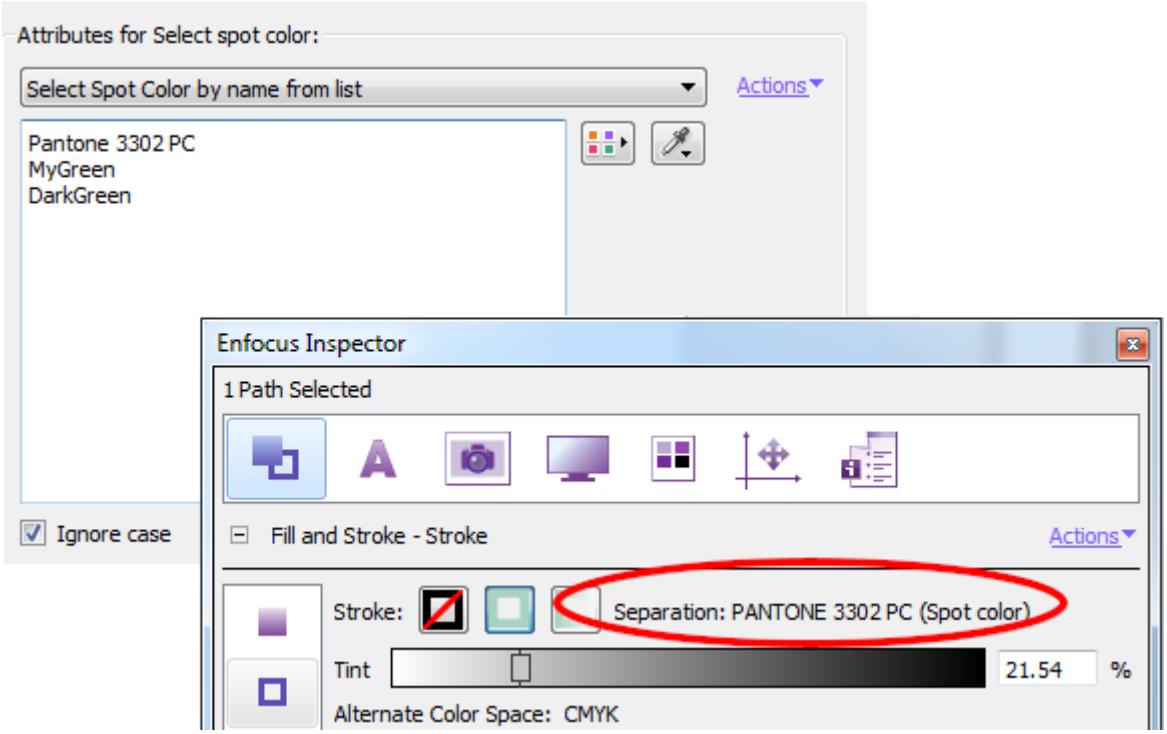
How to proceed

In the attributes of the Select spot color Action, proceed as follows:

1. Select the appropriate option from the list:
   - If you choose **Select all spot colors**, no other options have to be set.
   - If you choose **Select Spot Color by PANTONE color library**, you should select the library of your choice from another list that is displayed.

     You can further reduce your selection based on the alternate color values:
     - Ignore the alternate color values
     - Select only colors with correct alternate color values
     - Select only colors with wrong alternate color values
   - If you choose one of the other options, you have to specify the name of the spot color(s) that have to be selected. Proceed with step 2.
2. Enter the name of the spot color(s) concerned:
   - In case of **Select spot color by regular expression**, you can use regular expressions. PitStop supports Boost Regular Expressions. For an overview of the options, refer to *http://www.boost.org/doc/libs/1_55_0/libs/regex/doc/html/boost_regex/syntax/perl_syntax.html*.
   - In case of **Select spot color by name** or **Select spot color by name from list**, you can simply type the name of the spot color(s) concerned or use the color picker  or the Grab color button . Note that, in case of a list, you must enter the names one by one, each on a separate line. It is for example not possible to select two colors in the document, and select them in one go, using the Grab color button . Instead, you must select the first color, grab it, then select the second color, and grab it and so on.
3. If the spot color should be selected regardless of its case (upper or lower case letters), select the **Ignore case** checkbox.

Example



In this example, PitStop will search for three different spot color names (Pantone 3302 PC, MyGreen, DarkGreen, not taking into account the case of the names), which may (or may not) refer to the same color. Suppose the document contains a spot color called "PANTONE 3302 PC", then it will be found and selected.

Related Actions

- *Check spot color by name* on page 267
- *Check spot color by PANTONE library* on page 267

3.4.1.25. Select spot color by alternate color space

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects spot colors based on their alternate color space.

For example, select a spot color if its alternate color space is ICC tagged RGB or Device RGB.

Example

To convert a spot color's alternate color space to another color space, for example CMYK, proceed as follows:

```
Select spot color by alternate color space <!-- select the appropriate alternate color
 space(s) -->
```

```
Convert alternate color space to CMYK  <!-- (See Convert alternate color space to CMYK
 on page 87) -->
```

3.4.1.26. Select tiling pattern contents according to parent object selection

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does

Allows you to select the tiling pattern content depending on whether or not the parent object (e.g. text or line art) is selected.

There are two options:

- Select the tiling pattern content if the parent object is selected.
- Select everything except the tiling pattern content of parent objects that are not selected.

3.4.1.27. Select undefined DeviceN colorants

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects which use a DeviceN color space (including NChannel) that contains spot colors that are not defined in the colorants dictionary.

About the DeviceN color space

The DeviceN color space is defined as a list of names. These names can refer to the process colors (CMYK, RGB or Gray) or spot colors. Spot colors can have an alternate in CMYK for output devices that do not recognize their name, or they can just be a name without color definition. If the color is just a name (for example: "Silver" or "MySpot"), it cannot be used on other devices.

Checking the colorants dictionary

You can use the Enfocus PitStop Inspector to check whether a particular spot color has been defined in the colorants dictionary. Proceed as follows:

1. Select an object with the color you want to check (using the Enfocus Select Object Tool).
2. Click to display the Enfocus Inspector and select > . Next to the Fill icons, you will see "DeviceN (Spot + process colors). Below you will see the number of components and their names.
3. Click the **Actions** link (in the top right corner) and select **Color Picker**.

4. In the left part of the Color Picker dialog, navigate to the **Document Spot Colors** folder. This folder contains all spot colors used in the document (not only the ones used for the selected object).
5. Select the spot color you want to check. If the color is just a color name, without a color definition, the Alternate Color Space is Gray.

Related Actions

Check DeviceN colorants on page 255

3.4.2. Document

3.4.2.1. Select by document encoding

Belongs to

- **Category:** Doc
- **Type:** Selections

What it does

Selects a document based on its encoding (binary or ASCII).

About document encoding

ASCII encoding was formerly required to ensure that PDF files could be safely transported via e-mail or the Internet. However, most e-mail software in use today handles non-ASCII documents normally, eliminating the need to ASCII-encode your document.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Check data format* on page 271
- *Change document encoding* on page 100

3.4.2.2. Select document

Belongs to

- **Category:** Doc
- **Type:** Selections

What it does

Allows you to select the whole document.

3.4.3. General

3.4.3.1. Select clipping objects

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects clipping objects, i.e. objects of which the shape masks other artwork. Only areas inside the clipping objects are visible.

You could use this Action to select clip text of which you want to change the font.

Related Actions

Select objects that are completely clipped away on page 428

3.4.3.2. Select embedded PostScript fragments

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects all fragments of embedded PostScript in the PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

- *Check for embedded PostScript fragments* on page 279
- *Remove PostScript* on page 111

3.4.3.3. Select form contents according to form selection

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Allows you to select or deselect the content of selected forms.

Forms are rectangular frames in a PDF wich contain objects, for example an image or a placed PDF.

For more information, refer to *the PitStop Pro Reference Guide on the Enfocus website* (See Chapter "Editing forms").

Related Actions

Select forms on page 382

3.4.3.4. Select forms

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Allows you to select all forms in a PDF document.

Forms are rectangular frames in a PDF wich contain objects, for example an image or a placed PDF.

Example

To select all forms and log them as an error:

```
Select forms
Log selection <!-- enter "Forms were found in this document" and select "Log as error"
 at the bottom -->
```

Related Actions

- *Log selection* on page 284

3.4.3.5. Select invisible objects without fill and stroke

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects objects that have no fill or stroke color associated with them. Even though these objects are not visible in the document, you might want to remove them.

Related Actions

- *Select objects that use neither stroke nor fill* on page 393 (same functionality)

- *Check for invisible objects without fill and stroke* on page 280
- *Remove invisible objects without fill and stroke* on page 231

3.4.3.6. Select objects that have a clipping path

Belongs to

- **Category:** General
- **Type:** Selections

What it does
Selects objects of which the shape (partly) masks other artwork. Only areas inside the clipping objects are visible.

Related Actions

- *Select clipping objects* on page 381
- *Select objects that are completely clipped away* on page 428

3.4.3.7. Select parent content object

Belongs to

- **Category:** General
- **Type:** Selections

What it does
Allows you to select parent content objects, for example the page the object belongs to.

3.4.3.8. Select tiling pattern contents according to parent object selection

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does
Allows you to select the tiling pattern content depending on whether or not the parent object (e.g. text or line art) is selected.

There are two options:

- Select the tiling pattern content if the parent object is selected.

- Select everything except the tiling pattern content of parent objects that are not selected.

3.4.3.9. Select XObjects

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects any XObject in the PDF file.

XObjects are PostScript objects, such as background images, that are defined only once in a PDF file, but used several times (e.g. on several pages). Using XObjects can speed up printing but requires extra printer memory.

XObjects are supported as of PDF 1.4.

Example

To log the presence of XObjects, use:

```
Select XObjects
Log Selection
```

3.4.4. Image

3.4.4.1. Select by alternate images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects either **all images with alternates** or **all images with alternates that are default for printing**.

An alternate can be a high resolution version of an image that is used in the PDF to preview the image on screen. If you want to make sure that the correct image is set to print, choose **all images with alternates that are default for printing**.

Related Actions

- *Add alternate images* on page 112
- *Check for alternate images* on page 285
- *Remove alternate images* on page 116

3.4.4.2. Select by image resolution

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Makes a selection of images based on their resolution, for example all images with a resolution between 320 and 400 ppi.

You can select all images, or limit your selection to color or gray scale images, or to monocolor images only.

Note: This Action checks for the **effective** resolution; if the image has been resized, this is the resolution after scaling.

Related Actions

Check resolution on page 290

3.4.4.3. Select by image size

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select images by their width or height (expressed in pixels).

You can for example select images with a width or height equal to (or more or less than) 64 pixels.

3.4.4.4. Select image by filter type

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select images according to the compression type they use.

You can choose one or more of the following filters:

- ASCII hex
- CCITT
- ZIP

- RunLength
- JPEG2000
- ASCII 85
- JPEG
- LZW
- JBIG2

Optionally, you can also include soft-mask images (of the chosen filter types) in your selection (i.e. the images that mask an image). These are not included by default.

3.4.4.5. Select images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects all the images in a PDF document.

Example

The following selects everything in a PDF except for the images:

```
Select all
Select images
NOT
AND
```

3.4.4.6. Select images with OPI info

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects all the images in a PDF document that contain OPI (Open Prepress Interface) information.

OPI images are treated special as they are assumed to be preview images. They will for example not be preflighted as other images would be.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Example

The following finds any such images and logs them as a caution:

```
Select images with OPI info
Log selection <!-- In the field, type your message (ex. 'Images with OPI comments were
 found in this PDF'), then select Log as warning at the bottom -->
```

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Change OPI info* on page 115

3.4.4.7. Select image type

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select a particular type of images.

You can select one of the following image types:

- 1-Bit images
- Grayscale images
- Color images
- Stencil mask
- Indexed images

Example

The following will convert color images to Grayscale but will not alter Black & White images:

```
Select image type <!-- In the popup, select Color -->
Convert color <!-- In the popup, select Grayscale -->
```

3.4.4.8. Select inline image syntax

Belongs to

- **Category:** Image; PDF 2.0
- **Type:** Selections

- **New since:** PitStop 2022

What it does

Selects images based on the presence of an L key.

The L key specifies the length of the image data and allows users to skip inline images if required.

You can select images...

- Without an L key
- With an L key
- With an invalid L key

Note that PDF 2.0 allows (but does not impose) the presence of an L key, but if it's present, it must match the actual inline image data length.

Related Actions

- *Check inline image syntax*
- *Change inline image syntax* on page 114Change inline image syntax

3.4.4.9. Select page by number of images

Belongs to

- **Category:** Image
- **Type:** Selections
- **Since:** 2020

What it does

Selects all pages that contain a particular number of images.

You could for example select all pages with less than 4 images.

Related Actions

- *Check number of images on page* on page 288

3.4.4.10. Select rendering objects

Belongs to

- **Category:** LineArt;Text;Image
- **Type:** Selections

What it does

Selects all objects with a rendering intent.

This includes paths, text and images with any of the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation



Note: This Action does not allow you to make a selection based on **one particular** rendering intent. To select objects by **one** of the listed rendering intents, use *Select by rendering intent* on page 367.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select by rendering intent* on page 367

3.4.4.11. Select single image page images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does
Selects single image page images, i.e. images that cover the entire page.

3.4.5. Layers

3.4.5.1. Select layers

Belongs to

- **Category:** Layers
- **Type:** Selections
- **Since version:** 12 update 3

What it does
Selects ALL layers in a PDF document.

Related Actions

Select layers by name on page 390

3.4.5.2. Select layers by name

Belongs to

- **Category:** Layers
- **Type:** Selections
- **Since version:** 12 update 3

What it does

Allows you to select layers with a particular layer name.



Note: You can use regular expressions to define the layer name (if you select **Equals/ Does not equal** as operator method).

Example

To select "Layer1" and "Layer3" but not e.g. "Layer2", "Layer12" or any other layer, choose the following attributes:

```
Select layers where name equals [13] <!-- to exclude e.g. Layer2 and Layer12 -->
Select Match case <!-- to exclude e.g. layer1 -->
Select Use regular expressions <!-- to make sure [13] is considered a regular
 expression instead of a string  -->
```

3.4.5.3. Select objects in layers by layer properties

Belongs to

- **Category:** Layers
- **Type:** Selections

What it does

Allows you to select content based on the layer properties of the layer it's placed on.

You can select content that is:

- **Optional**: placed on a layer
- **Not optional**: not placed on a layer
- **By default visible**: visible when the document is first opened (applies to both layered and "normal" content)
- **By default invisible**: invisible when the document is first opened
- **Visible**: set to "visible" e.g. by the user or by an application such as PitStop (regardless of the initial visibility state)

- **Invisible**: set to "invisible" e.g. by the user or by an application such as PitStop (regardless of the initial visibility state)

Example

The following Action List allows you to select layered content that is by default visible. Normal content (that is visible by default) is not selected.

```
Select objects in layers by layer properties <!-- Choose "Select content that is
 optional" -->
Select objects in layers by layer properties <!-- Choose "Select content that is
 visible" -->
AND <!-- This operator makes sure that only content is selected that is optional and
 visible at the same time -->
```

Related Actions

- *Change layer properties* on page 120
- *Select objects in layers by name* on page 391

3.4.5.4. Select objects in layers by name

Belongs to

- **Category:** Layers
- **Type:** Selections

What it does

Allows you to select objects inside layers with a certain name.

How to proceed

1. Select whether the layer name should (not) be equal to or (not) contain the value you specify.
2. Optionally, enable **Match case** or **Use regular expressions**.



Note: The option **Use regular expression** is available as of PitStop 12 update 2, if you select **equals** or **does not equal**. This option allows you to define the layer name using a regular expression (e.g Layer[1-3] will match the following layer names: Layer1, Layer2 and Layer3).

Related Actions

- *Select objects in selected layers* on page 391
- *Select objects in layers by layer properties* on page 390

3.4.5.5. Select objects in selected layers

Belongs to

- **Category:** Layers

- **Type:** Selections
- **Since version:** 12 update 3

What it does

Selects objects in the layer(s) selected by another Action in the same Action List.

Example
To select the objects on **all** layers of the PDF, create the following Action List:

```
Select layers <!-- Select layers on page 389 -->
Select objects in selected layers
```

Related Actions

- *Select objects in layers by name* on page 391
- *Select objects in layers by layer properties* on page 390

3.4.6. Line Art

3.4.6.1. Select by line weight

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Selects objects with a particular line weight.

For example, select objects with line weight *less than 0.0123* inch.

Related Actions

- *Select by line weight* on page 392
- *Check line weight* on page 296

3.4.6.2. Select closed paths

Belongs to

- **Category:** Line Art
- **Type:** Selections
- **Since Version:** 2018

What it does

Selects the closed paths in a file.

Use case: To be able to manipulate the contents of a file based on the dieline (closed paths), you may select the dieline from within a PDF file containing other paths of the same color and width.

Related Actions

- *Select subpaths* on page 396

3.4.6.3. Select line art

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Allows you to select objects that are drawn as line art (i.e. vector and not raster).

3.4.6.4. Select line art by total number of nodes

Belongs to

- **Category:** Line Art
- **Type:** Selections
- **Since Version:** 2019

What it does

Selects paths based on the number of nodes. The number of nodes can be counted based on compound paths or subpaths.

This Action can be useful in combination with *Select closed paths* on page 392 or with *Rasterize selection* on page 109.

Related Actions

- *Select page by total number of nodes* on page 395

3.4.6.5. Select objects that use neither stroke nor fill

Belongs to

- **Category:** LineArt;Text
- **Type:** Selections

What it does

Selects vector or path objects that contain no stroke or fill color value in a PDF.

Related Actions

Select invisible objects without fill and stroke on page 382 (same functionality)

3.4.6.6. Select objects with negative dash pattern phase

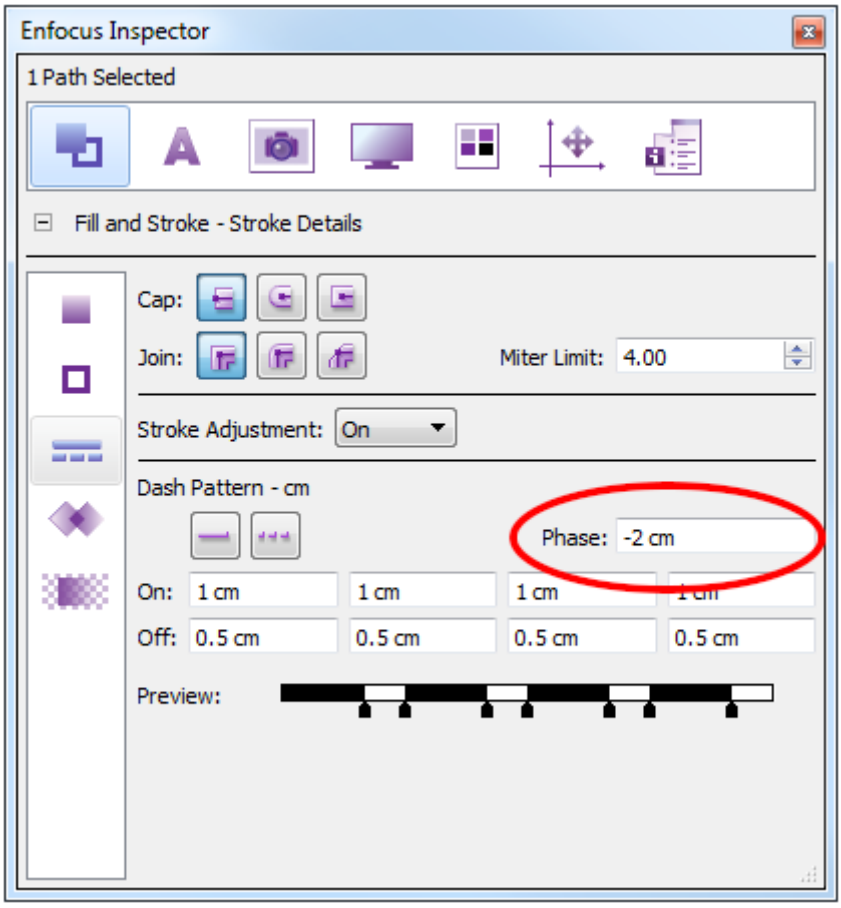
Belongs to

- **Category:** LineArt
- **Type:** Selections
- **Since version:** 13

What it does

Select documents that have a dash pattern phase with a negative value.

The dash pattern phase specifies the distance into the dash pattern to start the dash. Negative values may not be supported by the RIP.



Related Actions

- *Check for objects with negative dash pattern phase* on page 294
- *Fix negative dash pattern phase* on page 137

3.4.6.7. Select page by number of paths

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Allows you to make a selection based on the number of paths on a page.

You could for example select all pages with less than 4 pages.

Related Actions

Check number of paths on page on page 297

3.4.6.8. Select page by total number of nodes

Belongs to

- **Category:** Line Art
- **Type:** Selections
- **Since version:** 13 update 1

What it does

Selects pages based on the number of nodes present on that page. You can set the threshold (e.g. less than/more than (...) e.g. 10.000 nodes) as required. This Action is useful to select (and afterwards change) complex pages with lots of points, which may take a considerable amount of time to rip and therefore may cause a production bottleneck. A common way of handling this issue is to select the offending pages and convert them to bitmaps.



Note: The new default Action List "Find complex pages (over 5,000 nodes) and rasterize them at 600 dpi" includes this functionality.

Related Actions

- *Check total number of nodes on page* on page 297
- *Select line art by total number of nodes* on page 393

3.4.6.9. Select rendering objects

Belongs to

- **Category:** LineArt;Text;Image
- **Type:** Selections

What it does

Selects all objects with a rendering intent.

This includes paths, text and images with any of the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation



Note: This Action does not allow you to make a selection based on **one particular** rendering intent. To select objects by **one** of the listed rendering intents, use *Select by rendering intent* on page 367.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select by rendering intent* on page 367

3.4.6.10. Select subpaths

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Selects the subpaths if the entire path is selected.

About subpaths

A path is considered the combination of the path itself which represents most graphic state properties such as color, line-weight, etc. and the subpaths which represent the lines. For example, a doughnut is a single path with a single fill and stroke color, which consists of two subpaths (=two circles).

Related Actions

- *Combine subpaths* on page 132
- *Split in subpaths* on page 141

3.4.6.11. Select thin objects

Belongs to

- **Category:** Line Art

- **Type:** Selections

What it does

Allows you to select objects based on the maximum thickness of the fill or stroke.

If desired, you can indicate that for objects of which stroke and fill have the same color, the width of the fill and stroke should be added together.

This Action is typically used to select and afterwards remove thin white lines that may be visible on small screens (e.g. on an iPad screen).

Example

If you choose the following options:

```
Select objects with width of Filled rectangle
smaller than 0.0353 cm
Calculate whole thickness when stroke and fill have the same color <!-- selected -->
```

Following objects will be included in the selection:

- Objects with different stroke and fill color, must have a **fill** smaller than 0.0353 cm.
- Objects with the same stroke and fill color, must have a **fill** and **stroke** (added together) smaller than 0.0353 cm.

Related Actions

Check thin objects on page 297

3.4.7. Metadata

3.4.7.1. Select annotations

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations of a particular type in a PDF document.

Example

To delete all annotations of the type "Movie" and "Sound" in a PDF, configure the following Action List:

```
Select annotations <!-- select Movie and Sound -->
```

```
Remove selection
```

3.4.7.2. Select annotations appearance streams contents according to annotation selection

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows you to select content based on the selected annotations.

About annotation appearance streams

An appearance stream determines the visual appearance of an annotation (e.g. borders, colors,...). Different from *Select annotations* on page 397 (which only selects the annotation **content**), this Action allows you to also include the appearance stream in your selection, so that other actions can be applied to it. You could for example check for RGB objects only inside appearance streams.

This Action has two options:

- **Select the annotation content if the annotation is selected**: If the annotation is selected, all the PDF objects in the appearance stream will be selected too.
- **Select everything except the annotation content of annotations that are not selected**: This is the inverse of the first option; everything in the PDF is selected, except for the objects inside appearance streams of unselected annotations.

Example

To select all annotations of the type "Text" and change their color, configure the following Action List:

```
Select annotations <!-- select Text only - See Select annotations on page 397 -->
Select annotations' appearance streams contents according to annotation selection <!--
 choose first option -->
Change color <!-- Pick the desired fill/stroke color - See Change color on page 84 --
>
```

To select and change the color of the whole document, including text annotations but excluding video, sound, ... configure the following Action List:

```
Select annotations <!-- select Text only - See Select annotations on page 397-->
Select annotations' appearance streams contents according to annotation selection <!--
 choose the second option -->
```

```
Change color <!-- Pick the desired fill/stroke color - See Change color on page 84 --
>
```

3.4.7.3. Select annotations by print setting

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations based on their print setting.

Example

To select all printing annotations and remove them

```
Select annotations by print setting <!--Option: Select annotations if set to print -->
Remove selection
```

To select all printing annotations and set them to non-printing

```
Select annotations by print setting <!-- Option: Select annotations if set to print --
>
Change annotations' print setting <!-- Option: Set annotation to Non-Printing -->
```

See also: *Change annotations print setting* on page 142

3.4.7.4. Select by binding

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows the selection of a PDF based on its binding (left-edge or right-edge binding).

Most European language documents are bound on the left.

Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Check binding* on page 300

- *Change binding* on page 143

3.4.7.5. Select by document info

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows you to make selections based on document info, such as the title, subject, author, keywords, producer or creator of the PDF. You can specify where the information must be taken from, and what the expected value is.

Note: From version 12 update 2 onwards, you can use regular expressions to define the value in the **Compare with** field (if you select **Equals/Does not equal** as operator method).

Example

Suppose you want to select a document of which the author is Anne Banks. It doesn't matter where this information is taken from.

Attributes:

- Document info: author
- Read value from: any metadata location

  Note: If you select **Both metadata locations**, the name of the author will be searched for in both the XMP metadata stream and the info dictionary; if you select **Most recent metadata location**, only the most recently changed metadata location will be checked.
- Operator method: equals
- Compare with: Anne Banks

If you are not sure about the spelling of the name *Anne* (spelled Ann or Anne?), you could select the **Use regular expressions** checkbox and enter "Ann(e)? Banks" in the **Compare with** field.

Related Actions

- *Change document info* on page 143
- *Check document info* on page 301

3.4.7.6. Select by PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Selections

What it does

Allows you to make a selection based on the PDF's Acrobat or PDF version.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.

Note: As of PitStop 2020, you can select a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Example

To select PDFs with Acrobat version higher than 7.0, proceed as follows:

```
Select by PDF version <!-- options: Acrobat version must be more than 7.0 -->
```

Related Actions

- *Change PDF version* on page 145
- *Check PDF/Acrobat compatibility* on page 311

3.4.7.7. Select by trapped flag

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows the selection of a PDF based on the value of the trapped flag.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

The trapped flag is stored in the info dictionary and/or in the XMP metadata stream, but the data can be inconsistent; that's why you must indicate where the trapped flag must be taken from, e.g. from the most recent metadata location.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

3.4.7.8. Select document if XMP file identifiers are not present

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects document if XMP file identifiers are not present.

Related Actions

- *Set XMP file identifiers* on page 156
- *Check file identifiers in document XMP metadata* on page 272

3.4.7.9. Select document if document XMP metadata contains invalid types

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects the document if metadata streams defined in the PDF do not conform to the XMP schema.

About XMP metadata streams

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

Check if document XMP metadata types are valid on page 309

3.4.7.10. Select external hyperlink annotations

Belongs to

- **Category:** Metadata

- **Type:** Selections

What it does

Selects annotations with external links to other files, applications and/or web Pages embedded in a PDF document.



Tip: You can check the validity of the links with *Check external hyperlink annotations* on page 304.

3.4.7.11. Select if document XMP contains an invalid name space prefix

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects if document XMP contains an invalid namespace prefix.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the Additional Metadata button, then select Advanced).

Related Actions

Check if date is present in document XMP metadata on page 307

Check file identifiers in document XMP metadata on page 272

3.4.7.12. Select if document metadata is inconsistent

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects if document metadata is inconsistent, i.e. if the metadata values are not identical in the different metadata locations.

How it works

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.

- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Extra checks

Optionally you can make the selection only if metadata in one location (selected from the list) is also present in the other location; if all metadata should be present in both locations, select **any metadata location**.

If multiple creators should not be considered an inconsistency, select the **Allow multiple creators** checkbox.

Related Actions

- *Check if document metadata is consistent* on page 308
- *Make document metadata consistent* on page 151

3.4.7.13. Use flags to select annotation

Belongs to

- **Category:** Metadata
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects annotations based on the flag they have.

You can select the flags of your choice and indicate whether or not the flags should be enabled.

Following flags can be selected:

- Invisible
- Print
- NoRotate
- ReadOnly
- ToggleNoView
- Hidden
- NoZoom
- NoView
- Locked
- LockedContents

Related Actions

- *Check annotation flags settings* on page 298

3.4.8. Operators

3.4.8.1. AND

Belongs to

- **Category:** Operators
- **Type:** Selections

What it does

AND is a logical operator. This means it is used to select a single object with more than one attribute.

Example

To select text that was Helvetica AND size 12 pt, use:

```
Select Font Helvetica
Select Text if Point Size = 12.00 pt
AND
```



Note: AND is NOT used to select two different objects!

For example, **the following is incorrect** because a font cannot be both Helvetica and Arial:

```
Select Font Helvetica
Select Font Arial
AND
```

3.4.8.2. Duplicate top of selection stack

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Duplicate top of selection stack is a logical operator. It is used to **duplicate** the top of the current Action list stack. It's typically combined with the *Remove top of selection stack* ("delete") operator.

For internal use only

Both "Duplicate top of selection stack" and *Remove top of selection stack* are only used internally by PitStop.

When running a Preflight Profile, PitStop turns this Profile into an Action List; the more checks and fixes there are in the Preflight Profile, the longer and more elaborate its Action List representation. In order to avoid having to perform complex selections multiple times, PitStop

optimizes the internal Action List by duplicating these selections when they are needed multiple times.

3.4.8.3. Group Actions

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Allows you to group several Actions within an Action List.

This Action is useful to organize and document your Action List.



Note: Instead of using the Group Actions Action, you can as well right-click an Action in the Action List and select **Make Group** from the context menu.

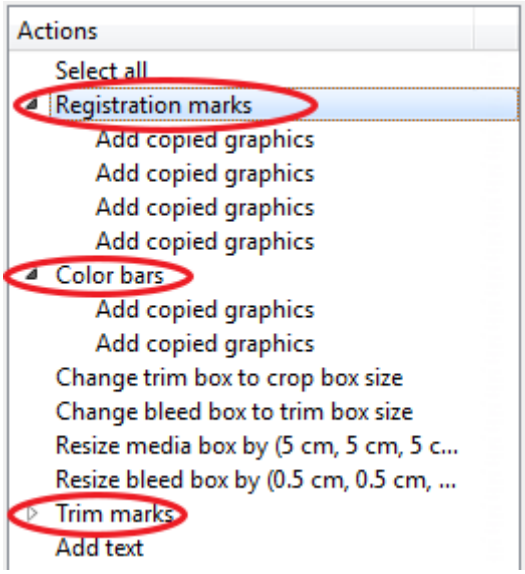
How to proceed

1. Double-click **Group Actions** to add it to the Action List.
2. Specify a meaningful name for your Action group and enter a description.
3. Move **Group Actions** to the desired position. You can drag and drop it, or use the options in the context menu (**Move Up**, **Move Down**).
4. Add the required Actions to your Action List and drag them to your group.

Example

The screenshot below shows the **Add my Printer Marks and Enlarge** Action List (by default provided with PitStop). This Action List contains 3 Action groups (preceded by an icon: if the group is expanded; if the group is collapsed):

- The **Registration marks** group contains the different Actions required to add registration marks to the top, bottom, left and right of the page.
- The **Color bars** group contains the Actions to create two color bars.
- The **Trim marks** group contains the Actions to set the trim marks (using *Add object* on page 65).



3.4.8.4. NOT

Belongs to

- **Category:** Operators
- **Type:** Selections

What it does

NOT is a logical operator. It is used to exclude objects according to their attributes.

Example
To select all the text in a document that was not Arial, you need to exclude Arial from your selection.

```
Select Text
Select Font Arial
NOT <!-- NOT only applies to the immediately preceding item in the list of selections
 -->
AND
```

3.4.8.5. OR

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

OR is a logical operator. It is used to select objects that share attributes.

Example

To select all text that is either Helvetica or Arial, use the following:

```
Select Font Helvetica
Select Font Arial
OR
```



Note: Do not use OR to exclude objects!

For example, the following will select all 12pt AND 14pt fonts:

```
Select Text if point size = 12.00 pt
Select Text if point size = 14.00 pt
OR
```

3.4.8.6. Remove top of selection stack

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Deletes the top of the current Action list stack. It's typically combined with the *Duplicate top of selection stack* operator.

For internal use only

Both "Remove top of selection stack" and *Duplicate top of selection stack* are only used internally by PitStop.

When running a Preflight Profile, PitStop turns this Profile into an Action List; the more checks and fixes there are in the Preflight Profile, the longer and more elaborate its Action List representation. In order to avoid having to perform complex selections multiple times, PitStop optimizes the internal Action List by duplicating these selections when they are needed multiple times.

3.4.8.7. ROLL

Belongs to

- **Category:** Operators
- **Type:** Selections
- **Since version:** 13 update 2

What it does

Allows you to change the order of the selections in the stack.

You must set:

- The *number of selections* to be taken into account, for example "3" if you want to change the order of the 3 last selections preceding the ROLL operator.
- The *distance*, i.e. the number of positions to move the items in the stack. If distance is set to "1", all selections in the stack move up one position. The selection on top moves down to the bottom of the stack.

Just like the other operators, ROLL must be placed after the selections in the Action List. The affected selections will be highlighted with a green indicator. Refer to *Using operators in Action Lists* on page 33.

For advanced use only

This Action may be used in advanced and complex Action Lists by users who are familiar with the ROLL operator in PostScript (which has the same functionality).

Example

Suppose you have a document with text, line art and images.

The following Action List results in a stack with the text segments at the bottom and images at the top.

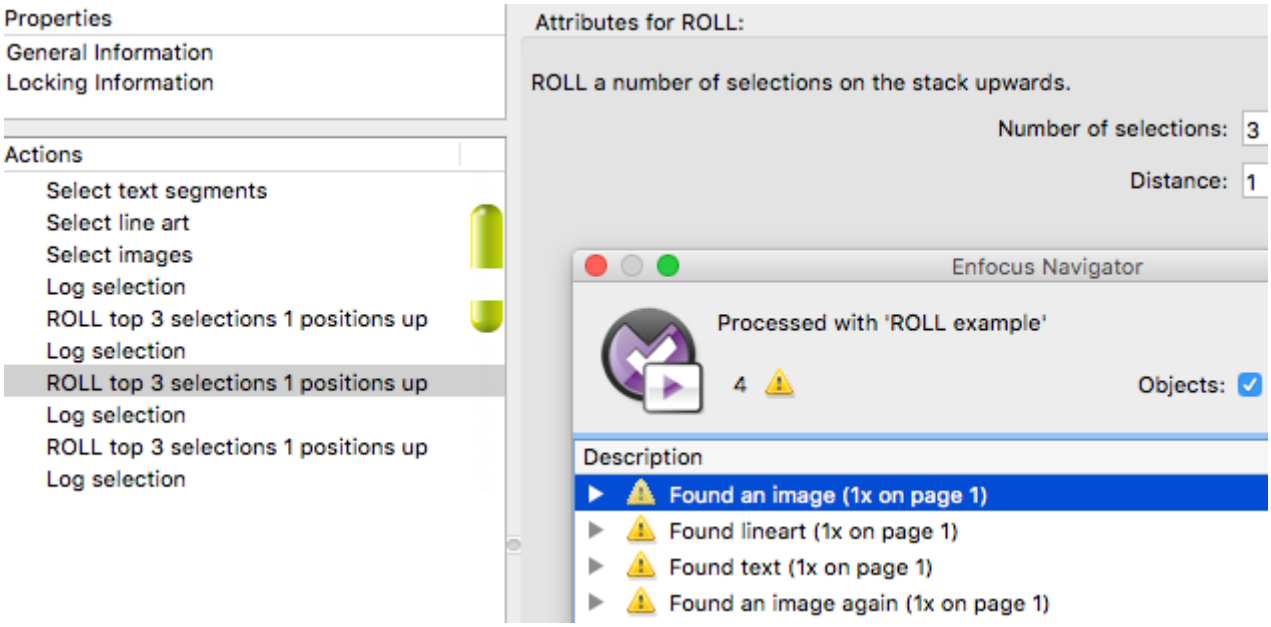
```
Select text segments
Select line art
Select images
```

With Roll added (number of selection set to 3 and distance to 1), images will move to the bottom of the stack, line art to the top and images will be inbetween.

```
Select text segments
Select line art
Select images
Roll                <!--  Selection set to 3, distance is 1 -->
```



Tip: You can test this by adding Log selections to your Action List and checking the result in the Enfocus Navigator as shown in the screenshot below.



3.4.8.8. Select all

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Allows you to select every object in a PDF document.

Example

To delete every object in a PDF:

```
Select all
Remove selection
```

Remark

Note that objects that are clipped away (hence are invisible) are selected as well. If you don't want this, we recommend removing them first. You can use *Select objects that are completely clipped away* on page 428 and *Remove selection* on page 233 to do so.

3.4.8.9. Select last added objects

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Selects the objects that were added recently (in the same Action List).

This Action must be preceded by an Action of the type "Add".

Example

The following Action List will first add graphics to the PDF. The added graphics will then be selected and used by the third Action.

```
Add copied graphics <!-- Add copied graphics on page 63 -->
Select last added objects
Check XY scaling difference  <!-- Check XY scaling difference on page 341 -->
```

3.4.9. Packaging

3.4.9.1. Select Esko barcode

Belongs to

- **Category:** Packaging
- **Type:** Selections
- **Since Version:** 13 update 2

What it does

Allows you to select Esko barcodes (both the new ArtPro Plus barcodes as well as the old XMP ones).

Note: The selection is made based on the metadata attached to the barcode. If the metadata is absent, the Action won't be able to select the barcode.

Related Actions

- *Select Esko barcode type* on page 411
- *Check Esko barcode value* on page 317
- *Check Esko barcode type* on page 317
- *Add barcode* on page 59

3.4.9.2. Select Esko barcode type

Belongs to

- **Category:** Packaging
- **Type:** Selections
- **Since Version:** 13 update 2

What it does

Allows you to select Esko barcodes by type (chosen from a list).

Related Actions

- *Select Esko barcode* on page 411
- *Check Esko barcode type* on page 317
- *Check Esko barcode value* on page 317
- *Add barcode* on page 59

3.4.9.3. Select spot colors from Esko Normalized PDF XMP

Belongs to

- **Category:** Packaging
- **Type:** Selections
- **Since Version:** 13 update 2

What it does

Allows you to select spot colors based on the metadata attached to ESKO Normalized PDF files.

There are three categories of metadata to choose from: **Ink book**, **Printing method** and **Ink attribute**. If properties from different categories are selected, they are combined in the selection.

3.4.10. Page

3.4.10.1. Select by blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Selections

What it does

Makes a selection based on the blending color space.

You must set the required blending color space and the required luminosity softmask blending color (or select the option **Undefined**).

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85

- *Check if blending color space is defined* on page 261

3.4.10.2. Select by media box origin

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages of which the lower left corner is not located at coordinates 0,0.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

Related Actions

- *Check media box origin* on page 324
- *Move media box to 0.0* on page 171

3.4.10.3. Select by page orientation

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages by orientation.

Choose either Portrait, Landscape, Same orientation or Most used orientation to select all pages with this orientation, and select the page box the orientation must be based on.

Related Actions

- *Change page orientation* on page 169
- *Check page orientation* on page 327

3.4.10.4. Select by page rotation angle

Belongs to

- **Category:** Page; Position and Size
- **Type:** Selections

What it does

Selects pages with a certain rotation angle.

You can choose a rotation angle of -90°, 0°, 90°, or 180° (clockwise).

Related Actions

- *Check page rotation angle* on page 328
- *Apply page rotation* on page 162

3.4.10.5. Select by page size

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages based on the size of one of the page boxes.

You can for example select pages with a trim box of 21x29 cm.

The precision indicates how much the actual size is allowed to differ from the specified size. A precision of 0 means that no deviation is allowed: the size needs to match exactly the entered values.

Related Actions

Check page size on page 329

3.4.10.6. Select color bars

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select color bars with a certain color patch border and patch size.

Color bars (also called color control bars or color control strips) are small squares of color representing CMYK inks and tints of gray, that are used by press operators to control ink density, dot gain, print contrast, ...



Note: PitStop provides an Action List to add color bars.

Example

You could combine this Action with another Action to, for example, delete all color bars at once:

```
Select color bars
```

```
Remove selection <!-- Remove selection on page 233 -->
```

3.4.10.7. Select empty pages

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects pages in a PDF document that contain no objects.

You can specify that elements outside of a specific page box should be ignored and/or visually empty pages (paper-white and invisible (fully transparent) objects).

Related Actions

- *Check for empty pages* on page 319
- *Remove empty page* on page 175

3.4.10.8. Select objects close to the page edge

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects objects close to the page edge.

You must specify the distance to the trim box and the distance into the bleed.

Optionally, you can choose to treat subpaths of compound paths individually. In that case, each of the subpaths will be selected separately.

See also:

- *Check if object is close to the page edge* on page 321
- *Change objects that are close to the page edge* on page 167

3.4.10.9. Select objects if page is selected

Belongs to

- **Category:** Page
- **Type:** Selections

What it does
Allows you to select all objects on the selected page(s).

3.4.10.10. Select page by its page box properties

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select a number of pages based on one of the following criteria:

- Whether or not a certain page box is defined.
- The fact that the crop or art box differs from the trim box.
- The fact that a certain page box lies (partially) outside of the media box.
- The fact that the size of the bleed box is not sufficient compared to the trim or crop box.

  This allows you to detect pages of which the page boxes are not well defined.

3.4.10.11. Select page if content is selected

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select a page if the content is selected.

You can select or both the page object and the entire page content.

How to proceed

1. Specify **what** you want to select:
   - The page object only, or
   - Both the page object and the entire page content.
2. Specify on what **condition** you want to select it, for example if more than one objects are selected.

3.4.10.12. Select pages

Belongs to

- **Category:** Page
- **Type:** Selections

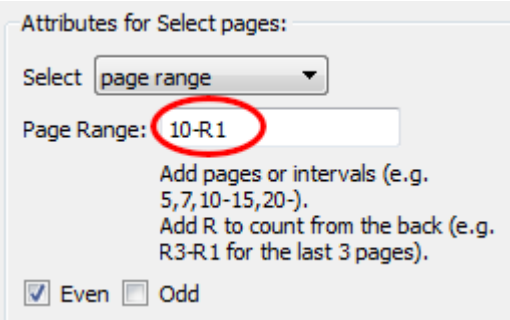
What it does

Allows you to select a particular page, a set of pages, or a page range, for example the first or last page of a PDF, all odd pages, pages from 1 to 5, ...

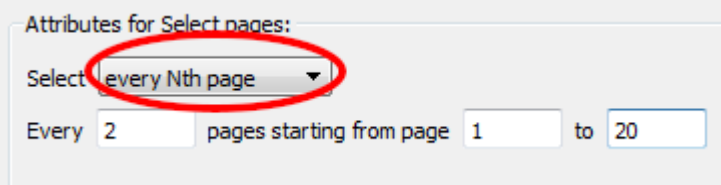
You can also make a selection based on the *number of pages* in the PDF, for example: Select if number of pages is not a multiple of 10.

New options added in 13 update 1

- **Rn notation** allowed in page range selection. If you want to add pages starting from the end of the PDF, you can use this notation in the **Page range** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ...



- **Extra option to select every Nth page**, e.g. every second page in the PDF in the first 20 pages of the PDF.



Example

To select every page but the first page of a PDF, and then add a copied graphic to that page, proceed as follows:

```
Select all pages <!-- Choose: Select all pages, Even and Odd -->
Select first page <!-- Choose: Select first page, Even and Odd -->
NOT
AND
Add copied graphics <!-- See Add copied graphics on page 63 -->
```

3.4.10.13. Select pages with page label

Belongs to

- **Category:** Page
- **Type:** Selections
- **Since Version:** 2019

What it does

Selects pages based on their label. You can enter the label or (a combination of) properties, such as the label prefix, the number style or the page range (odd, even, page numbers).

Related Actions

- *Change page labels* on page 169
- *Remove page labels* on page 176

3.4.10.14. Select pages with PieceInfo

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Searches for pages containing PieceInfo.

This can for example apply to pages coming from Illustrator, containing Illustrator PieceInfo. If a PDF contains PieceInfo, it was saved with editing capabilities from applications such as Illustrator, which may be lost if you edit the PDF with another application.

Removing PieceInfo will make the file smaller, but it won't be possible anymore to import the document in Illustrator.

3.4.10.15. Select pages with transparent objects

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects pages containing transparency.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341

- *Remove transparency* on page 228
- *Select transparent objects* on page 435
- *Change transparency* on page 221

3.4.10.16. Select registration marks

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select potential registration marks with a certain color.

How to proceed

Specify the potential color of the registration marks, by choosing one or more of the following:

- 400% CMYK
- Separation All (registration)
- 100% black
- A specific color

  In case of a specific color, do one of the following:

  - Select a color space from the list and use the sliders to select the appropriate color.
  - Click  and select the appropriate color.
  - Select an object with the Enfocus Selection tool and click  to grab the fill or stroke color from the selection.

Related Actions

Add registration marks on page 69

3.4.10.17. Select trim marks

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select potential trim or bleed marks with a certain color.

How to proceed

1. Indicate which marks you want to select: trim marks, bleed marks or both.
2. To help PitStop detect the trim marks, specify the potential color of the marks, by choosing one or more of the following:

- 400% CMYK
- Separation All (registration)
- 100% black
- A specific color

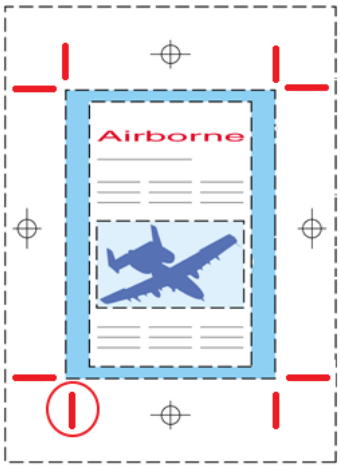
  In case of a specific color, do one of the following:

  - Select a color space from the list and use the sliders to select the appropriate color.
  - Click  and select the appropriate color.
  - Select an object with the Enfocus Selection tool and click  to grab the fill or stroke color from the selection.

3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value, if you're using a different unit.

Example

In the image below, the red marks are detected as trim marks, although the position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line). In this case, the deviation (= difference between the position of both marks) is less than the specified threshold.



Remark

A filled path with 3 lines is accepted as a trim mark if:

- The color is as specified in the attributes of this Action.
- It has no dash pattern.
- The 4 points of the 3 lines are a rectangle.
- The path is closed.
- The width is between 0.1 and 2 pt.
- The length is between 8 and 40 pt.

Related Actions

- *Use trim marks to set page box* on page 184
- *Check if trim marks match page box* on page 323

3.4.11. PDF 2.0

3.4.11.1. Select black point compensation

Belongs to

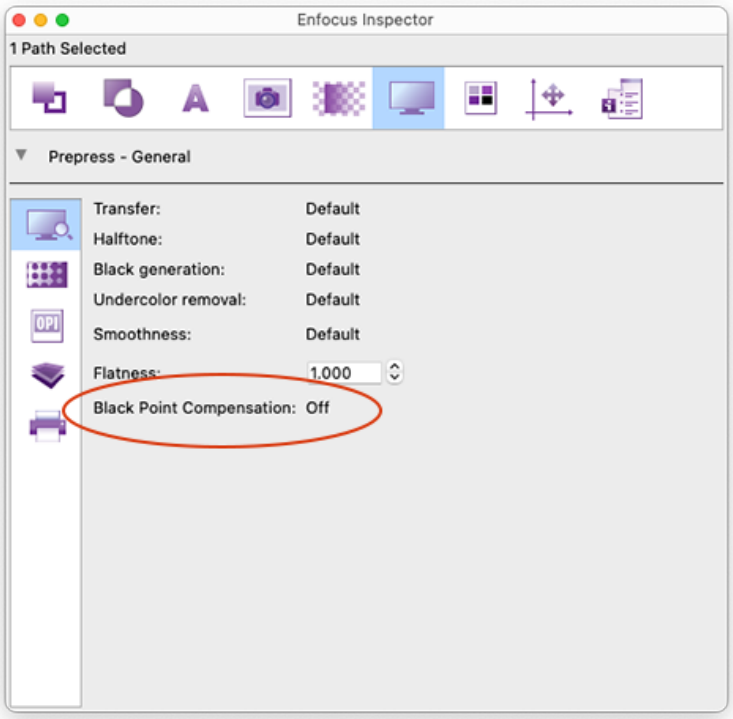
- **Category:** PDF 2.0
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects objects based on the presence of black point compensation (regardless of its value) or based on a particular value (On, Off, or Default).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Note that the black point compensation attribute of a selected object can be found in the Enfocus Inspector, on the **Prepress - General** tab. Possible values are On, Off or Default. When no blackpoint compensation is set (or when multiple objects with different black point compensation values are selected), you'll see a dash.



Related Actions

- *Check black point compensation* on page 330
- *Remove black point compensation* on page 192
- *Set black point compensation* on page 195

3.4.11.2. Select by halftone origin

Belongs to

- **Category:** PDF 2.0
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects objects either with or without default HTO (halftone origin) values, or with particular HTO values.

PDF 2.0 allows specifying the halftone origin, whereas in earlier versions, the HTO value had to be 'Default' (= not specified).

Related Actions

- *Check halftone origin* on page 334
- *Change halftone origin* on page 186
- *Set default halftone origin* on page 196

3.4.11.3. Select by PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Selections

What it does

Allows you to make a selection based on the PDF's Acrobat or PDF version.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.



Note: As of PitStop 2020, you can select a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Example

To select PDFs with Acrobat version higher than 7.0, proceed as follows:

```
Select by PDF version <!-- options: Acrobat version must be more than 7.0 -->
```

Related Actions

- *Change PDF version* on page 145
- *Check PDF/Acrobat compatibility* on page 311

3.4.11.4. Select inline image syntax

Belongs to

- **Category:** Image; PDF 2.0
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects images based on the presence of an L key.

The L key specifies the length of the image data and allows users to skip inline images if required.

You can select images...

- Without an L key
- With an L key
- With an invalid L key

Note that PDF 2.0 allows (but does not impose) the presence of an L key, but if it's present, it must match the actual inline image data length.

Related Actions

- *Check inline image syntax*
- *Change inline image syntax* on page 114Change inline image syntax

3.4.12. Position and size

3.4.12.1. Select by intersecting bounding boxes

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Selects the objects defined by a first selection, that overlap the objects defined by a second selection (within the same Action List).

In order to define the first and second selection, this Action needs to be preceded by 2 other selection Actions.

Example

Suppose you have two magenta filled line art objects and two yellow filled line art objects. One of the two magenta objects physically overlaps 1 of the 2 yellow objects; that's the object you want to select and log.

To do so, proceed as follows:

```
Select color <!-- settings: Fill - CMYK - 100% M -->
Select color <!-- settings: Fill - CMYK - 100% Y -->
Select by intersecting bounding boxes
Log selection <!-- Choose user-defined text, for example: Magenta objects overlapping
 yellow objects have been found -->
```

3.4.12.2. Select by page rotation angle

Belongs to

- **Category:** Page; Position and Size
- **Type:** Selections

What it does

Selects pages with a certain rotation angle.

You can choose a rotation angle of -90°, 0°, 90°, or 180° (clockwise).

Related Actions

- *Check page rotation angle* on page 328

- *Apply page rotation* on page 162

3.4.12.3. Select concealed objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** 2017

What it does

Selects completely hidden objects that do not affect the visual appearance of the PDF, such as redundant objects that were left behind on a hidden layer or original cropped content that is of no use.

Hidden objects can increase the file size, add to the file complexity and they may produce false hits during preflight. Therefore, you may want to use this Action to select these unneeded objects and ignore or remove them before preflighting the document.

Note that there are different options to determine whether or not an object is visible; you have the choice whether or not to take into account the objects on other layers, or you can limit the scope by adding another select Action.

Example

The following Action List can be used to remove all objects that are not needed to render or print a PDF.

```
Select concealed objects
Remove selection
```

3.4.12.4. Select inside or outside contour

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since version:** 13 update 1

What it does

Selects objects using the area defined by the current selection. This Action is useful to select objects only within a defined shape, such as a Dieline or a Cutter Guide.

There are several options. You can select:

- The objects inside or outside the contour.
- The objects inside or outside the contour or overlapping contour.
- The objects completely covering the area inside the contour.

Note that this Action must be preceded by a Select Action in the same Action List (for example a Select spot color or a Select objects on layer Action). You can use any "select" Action you

want, e.g. select by layer, by color, by line weight and you can use even operators (AND, OR) as required, but remember that only the **basic shape of the selected line art objects** will contribute to the contour!

Remarks

- *Clipping* is taken into account when determining whether an object lies inside or outside the contour. For example, if an image is partly outside the contour, but this part is clipped, it's considered to be completely inside the contour. The clipping paths are not logged.
- As of PitStop 2022 update 1, in case of complex shapes, the non-zero winding rule (in the Inspector: Fill) is used to determine what lies inside the contour. For more information, refer to the *PDF Reference (figure 7.9)*. This change is done to apply with the latest PDF specifications. In older versions of PitStop (2022 and earlier), the even-odd rule was applied. In the example below, the image on the left shows how PitStop 2022 interpreted the contour (the part in the middle will be cut out), the image on the right shows how PitStop 2022 update 1 will draw it.



- The line art that is used to determine the contour area (through the preceding "select" Action) is not selected by "Select inside contour"; only the objects (images, shadings - which may have exactly the same shape as selected the line art) in that area will be part of the selection. This is illustrated in example 2 and 3.
- You can even select objects inside or outside a non-closed contour or one with gaps using the **Ignore gaps in contour if smaller than ...** checkbox.
- Annotation objects are logged too.
- It's also possible to use text as a contour.

Example 1

This Action List logs all images inside the contour formed by all line art on the Cutting layer:

```
Select by layer "Cutting"
Select inside contour
Select images
Select AND
Log selection
```

Example 2

This Action List moves all elements belonging to the barcode to a separate layer. Note that the technical contour around the barcode is not moved!

```
Select spot color "Barcode area"
Select inside contour
```

```
Move to layer "Barcode"
```

Example 3

This Action List converts the color of all objects with spot color "Content area" to CMYK. The "content area" spot color itself is (obviously) not touched.

```
Select spot color "Content area"
Select inside contour
Convert selection to CMYK
```

3.4.12.5. Select objects inside or outside region

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Makes a selection across pages defined by a user-defined area or by PDF page boxes.

This is useful to select (and afterwards remove or move) objects that lay outside the trim box, hence will not be printed.

How to proceed

1. Define the area inside or outside which the objects should be selected. Choose on of the following options:
   - **Define the region relative to the lower left of the media box**: You can manually enter the values of the X and Y axis (the anchor point) and the height and with (the size) of the area, or grab them by clicking the icon . Note that you can grab them from a selection or from a page box.
   - **Use** (one of the page boxes): You can choose one of the page boxes, the printing area or either the art or trim box, depending on what's defined (option **the art box (if defined) or trim box**).
   - **Use region relative to page box**: You can specify the exact location of the area to check, for example "place the center left of the region relative to the center right of the bleed box with a particular offset, height and width".
2. Indicate which objects relative to the defined area should be selected, for example the objects inside or overlapping the region.
3. Indicate whether or not annotations and clipping paths should be included in the selection.
4. If applicable, choose whether or not to take into account page rotation and scaling factor.

Example

To select any objects that lay outside of the trim box and delete them, you could use the following:

```
Select objects inside or outside region <!-- Select "Use trim box" and "Select objects
 outside region"  -->
```

```
Remove selection
```

3.4.12.6. Select objects that are completely clipped away

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Allows you to select objects that are hidden ("clipped away") by other objects of which the shape masks the artwork.

Optionally, you can include invisible objects that belong to this form.

3.4.12.7. Select overlapping objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** 2017

What it does

Selects objects based on their relationship with other objects they interact with, i.e. objects that (at least partly) lay on top of, or below other objects.

There are four options:

- The first option allows you to select objects that (at least partly) *overlap* any object on the page.
- The second option allows you to select object that (at least partly) *are overlapped* by any other object on the page
- The third option allows you to select objects that (at least partly) are *on top of other objects selected earlier* in the same Action List.
- The third option allows you to select objects that (at least partly) are *below other objects selected earlier* in the same Action List.

This Action is included in a number of default Action Lists:

- Find Images without an overlapping Varnish
- Check for Black Text sitting on Dark Color (does not include images)
- Check for White Text sitting on Light Color (does not include images)

Example

The following Action List will remove all objects that are on top of the text in your PDF:

```
Select text
Select overlapping objects (third option selected)
Remove selection
```

3.4.12.8. Select rotated objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** PitStop 2022

What it does

Selects objects that are rotated.

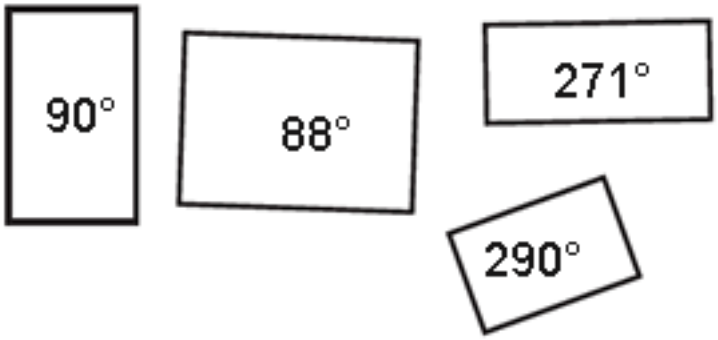
Objects can have been rotated by page layout applications such as QuarkXPress, and this may cause problems for (older) RIPs.

You can specify the required level of rotation, for example 'objects that are rotated more than 2 degrees', optionally combined with two extra options:

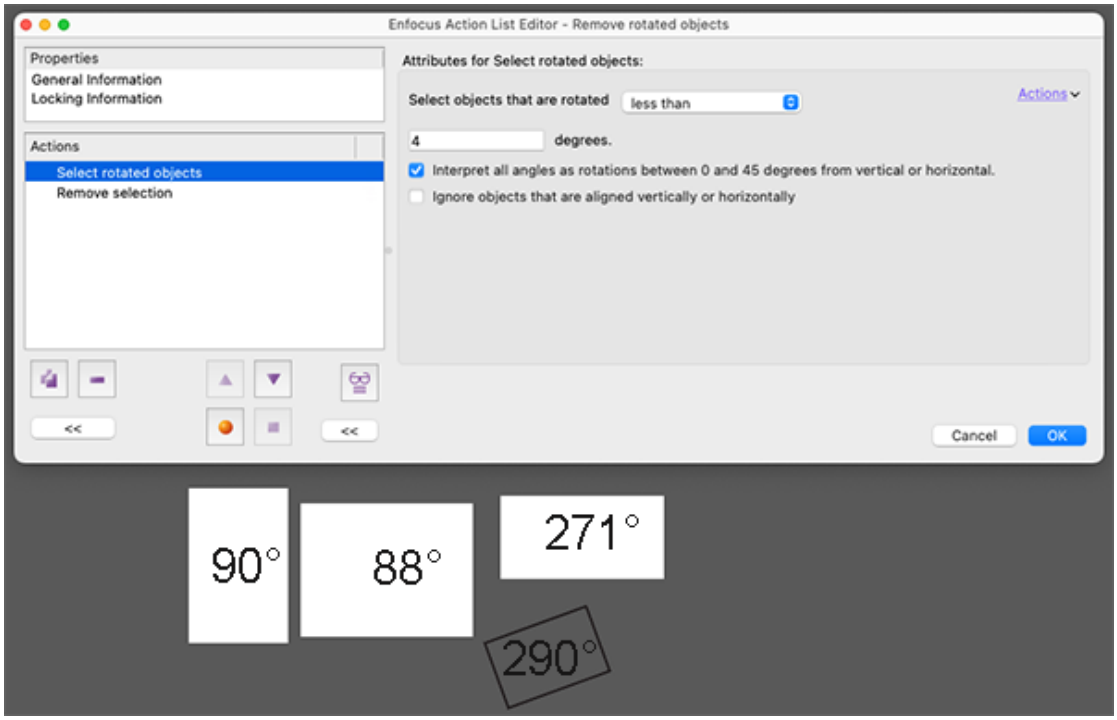
- **Interpret all angles as rotations between 0 and 45 degrees from vertical or horizontal**: This option allows you to find small rotations in either direction. To decide whether or not an object is rotated, the measured angle is converted to an interval [0,45] degrees compared to the nearest horizontal or vertical page edge. As a consequence, a rotation of 88 degrees is converted to 2 (90-88) and a rotation of 271 degrees is converted to 1 (271-270). When checking for rotations smaller than 4 degrees, both rotations will be selected, whereas for example a rotation of 290 degrees (converted to 20 => 290-270) won't be selected. See example 1 below.
- **Ignore objects that are aligned vertically or horizontally**: This option allows you to exclude objects that are aligned exactly 0, 90, 180 or 270 degrees to the page edges. Such objects (rotated a multiple of 90 degrees) do not look rotated, so in most cases they should not be selected. See example 2 below.

Example 1

Suppose you have a PDF file with the following 4 rotated objects. You want to select and remove the objects that have a rotation angle of less than 4 degrees.

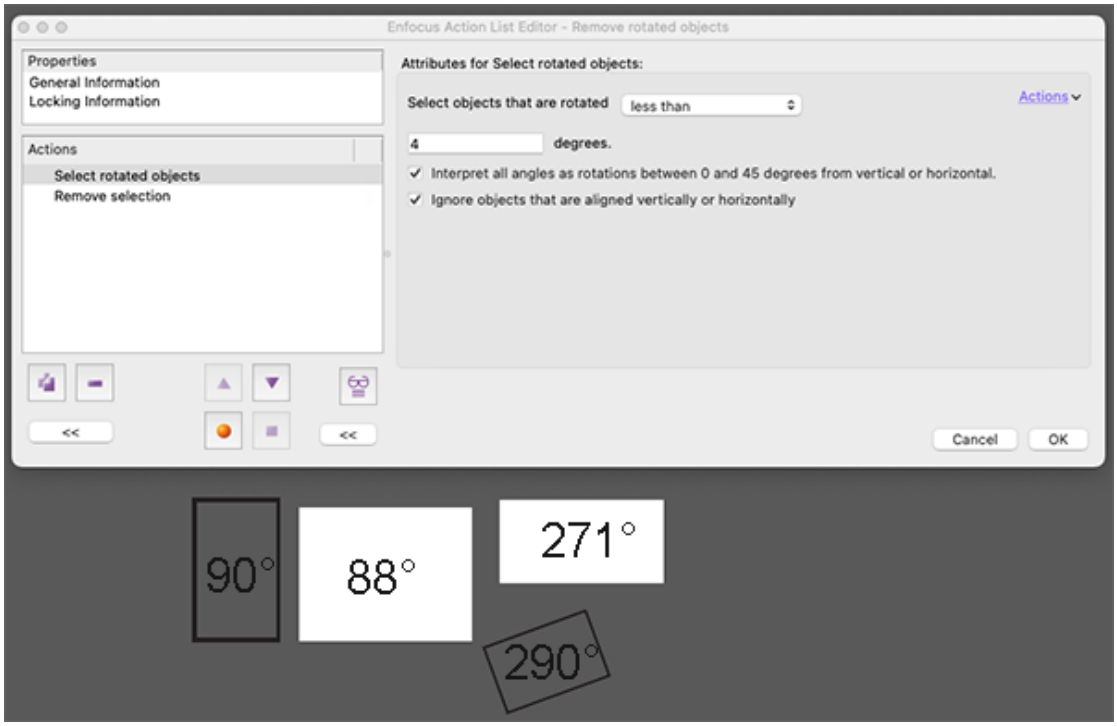


In the example below, all angles are interpreted as rotations between 0 and 45 degrees from vertical to horizontal (first option). The first three objects are selected and removed because they all have a rotation angle of less than 4 degrees from the nearest vertical or horizontal page edge (as explained higher).



Example 2

When the **Ignore objects that are aligned vertically or horizontally** checkbox is selected, the object that has a rotation angle of 90° is no longer selected nor removed.



Related Actions

- *Check for rotated objects* on page 338

3.4.12.9. Select size

Belongs to

- **Category:** Position/Size
- **Type:** Selections

What it does

Allows you to select any object in a PDF of which the height or width is less than, equal to, or greater than a certain size.

You can choose whether or not to take into account page rotation and scaling factor.

3.4.12.10. Select visible objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** 2017

What it does

Selects all objects that are needed to render and print a PDF and that affect the visual appearance of the PDF.

This Action can be useful to separate visible from invisible content, or to make sure that preflight checks are only applied to visible content, as it doesn't make sense to check and fix objects that are invisible. Note that PitStop comes with a default Restricting Action List created using this Action; you can use it in conjunction with a Preflight Profile to check only the elements needed to render the file, and ignore the rest.

To determine whether or not an object is visible, you can take into account the objects on other layers, or you can limit the scope by adding another select Action.

3.4.13. Prepress

3.4.13.1. Select by blend modes

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects with or without one or more specific blend modes.

Blend modes determine how colors on different layers blend with each other. For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Related Actions

- *Check for non-standard blend modes* on page 345
- *Remove alternative blend modes* on page 190

3.4.13.2. Select by graphic state attributes

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects based on their graphic state attributes.

You can select one of the following object types:

- Objects with non-PDF/X-1 compliant halftone info
- Objects with transfer function info
- Objects with halftone info
- None

Viewing the graphic state attributes of an object

Proceed as follows:

1. Select the object, using the PitStop Select Objects tool .
2. Click to display the Enfocus Inspector.
3. Select (**Prepress**) > (General) or (**Halftone**).

Related Actions

- *Check for non-PDF/X compliant halftone* on page 345
- *Check for custom transfer function* on page 344

3.4.13.3. Select by ink coverage (basic object check)

Belongs to

- **Category:** Color; Prepress
- **Type:** Selections

What it does

Makes a selection of all objects that meet your ink coverage criteria.

You can for example select objects only if the ink coverage is at least 300%.

When including images in this selection, the threshold will determine the minimum area in which the ink coverage criteria have to be met in order to be selected. E.g. when entering '0', even an image of which only 1 dot meets the ink coverage requirement will be selected.

Related Actions

Check ink coverage (basic object check) on page 262

3.4.13.4. Select by overprint

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Selects objects based on the overprint mode of their fill and/or stroke.

How to proceed

Proceed as follows:

1. To select objects based on their fill/stroke overprint, select the corresponding checkbox. For example, to select object based on the overprint mode of their stroke, select **Stroke overprint**.
2. Indicate whether overprint must be enabled or disabled for the options selected in step 1, by clicking the buttons.
   -  Overprint is off.
   -  Overprint is on.



Tip: Check the Actions field, to see if the Action is configured appropriately. For example, if you selected the Stroke overprint checkbox and clicked the button next to it, the name of the Action should change into "Select if stroke overprint is off."

Related Actions

- *Check if object is set to overprint* on page 343
- *Change overprint* on page 219

3.4.13.5. Select by overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects based on the overprint mode of their fill and/or stroke color.

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

Related Actions

- *Change overprint mode* on page 220

3.4.13.6. Select by rendering intent

Belongs to

- **Category:** Color;Prepress
- **Type:** Selections

What it does

Selects color managed objects based on a particular rendering intent.

You can select paths, text, images, or all rendering objects, with one of the the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select rendering objects* on page 388

3.4.13.7. Select flatness

Belongs to

- **Category:** Prepress

- **Type:** Selections

What it does

Allows you to select objects with a flatness setting equal to or higher/lower than a certain value.

The default setting to produce a smooth curve is 1. A value higher than 1 can produce a jaggy edge; lower than 1 can slow down the RIP.

Example
If the curves in a PDF are showing visible line segments, try the following to solve the problem:

```
Select flatness <!-- Option: Select objects with a flatness higher than 1.0 -->
Change flatness <!-- Option: Change flatness to 1.00 -->
```

Related Actions

- *Check flatness* on page 341
- *Change flatness* on page 130

3.4.13.8. Select objects in areas with dense graphics

Belongs to

- **Category:** Prepress
- **Type:** Selections
- **Since version:** 2020

What it does
Detects and selects areas that have dense vector graphics (i.e. many line art or clip mask nodes).

Typically, the selection will then be rasterized to make the file less complex (and easier for the RIP to handle).

You should define the area to be detected (by entering the length of 1 side), and the minimum number of nodes in that area. Alternatively, PitStop can calculate the minimum number of nodes per area based on a selection in a document: to do so, select an area with many nodes and click **Grab settings**).



Note:

- The unit in which the length is expressed, depends on your user preferences (PitStop Preferences - Units & Guides category).
- Remember that the number of nodes (in the document or in a selected area) can also be found in the PitStop Inspector (on the Summary tab).

3.4.13.9. Select transparent objects

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does
Allows you to select transparent objects.

You can check the transparency of different elements, such as the fill or stroke, the blend modes, ... For the whole list of options, check the attributes of the Action in PitStop.

You can select all transparent objects or restrict your selection to objects that have *all* or *at least one* of the following properties:

- Fill is set to overprint
- Stroke is set to overprint
- Graphic element uses a spot color



Note: When checking for transparency groups, pages will be selected if they have an explicit transparency group key (i.e. when "Page is transparency group" is selected in the transparency group properties in the Enfocus Inspector. For more information, refer to the PitStop Reference Guide).

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Remove transparency* on page 228
- *Change transparency* on page 221

3.4.14. Text

3.4.14.1. Select by inconsistent Type 3 font width information

Belongs to

- **Category:** Text
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects Type 3 fonts containing characters with a corrupt font width (Type 3 glyphs d0 or d1 values that are inconsistent with the font's widths array).

Type 3 fonts are usually wrongly converted SVG fonts, i.e. fonts that are used in Illustrator, Indesign, Photoshop, ... but that are not supported by the PDF specs and most RIPs, and therefore converted to Type 3. PitStop fixes this, so the font can be handled by most RIPs.

Related Actions

- *Check for inconsistent Type 3 font width information* on page 353
- *Fix inconsistent Type 3 font width information* on page 243

3.4.14.2. Select clipping and non-clipping text

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all text segments, even if they have been clipped and are not visible anymore.



Tip: If you want to select non-clipping text only, you can use *Select text segments*.

3.4.14.3. Select corrupt font widths

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select all text with a corrupt font width.

By default, horizontal writing is checked, but you can also include vertical writing by selecting the **Also check metrics for vertical writing** checkbox.

Corrupt font widths may occur in a PDF, when "artificial" bold or italic was used instead of the "bold" or "italic" version of the font concerned. For example, if "Futura" is used in your PDF, the "Futura-Bold" and "Futura-Oblique" fonts should be used instead of applying bold and italics on the regular Futura font. Artificial font may cause problems when printing the PDF.

As of PitStop 2022, you can set a threshold in the **Tolerance** field. This value, expressed in 1/1000 em, specifies the maximum acceptable deviation of the standard font width. For example, if the tolerance is set to 5, a font width that deviates 5/1000 em (or less) from the normal font width will not be selected.

Some PDF standards allow font size deviations. For example, PDF/X-4 allows a deviation of 5 1/1000 em, PDF/X-6 allows a deviation of 1 1/1000 em ... This Action can be used to select font widths that do not comply with certain PDF/X versions.

About the em as unit

The unit used to set the tolerance is '1/1000 em'. 'em' is used because the size of an 'em' is relative to the size of the font: it denotes the point size. For example: 1 em in a 16-point typeface is 16 points, 1 em in an 8-point typeface is 8 points. As a consequence, if the tolerance is set to 1, the relative size is the same, but the absolute size differs depending on the font size.

The name 'em' comes from the width of the capital M in the typeface.

Related Actions

- *Check corrupt font widths* on page 349
- *Change corrupt font widths* on page 235

3.4.14.4. Select embedded fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select all embedded or unembedded fonts in a PDF document.

The selection of embedded fonts includes OpenType embedded fonts.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

- *Check font embedding* on page 350
- *Unembed font* on page 247
- *Check embedded font is OpenType* on page 349

3.4.14.5. Select fonts by license

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select fonts that allow certain operations without obtaining permission from the font's owner.

These operations are:

- Embed
- Subset
- Outline
- Preview and print

Related Actions

Check font license on page 351

3.4.14.6. Select fonts by name

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select all the fonts with a particular name.



Note: From version 12 update 2 onwards, you can use regular expressions to define the font name.

Example

To select all the Times, Arial, Helvetica and Courier fonts in a PDF, you could use the following sequence of Actions:

```
Select font Times
Select font Arial
OR
Select font Helvetica
OR
Select font Courier
OR
```

3.4.14.7. Select fonts by type

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects text using a particular font type.

You can select one of the following font types:

- TrueType
- Type1
- Type3
- Multiple Master
- Composite TT
- Composite T1
- Composite (all types)

About types of fonts

Example

For example, to unembed TrueType fonts without unembedding any other font types, do the following:

```
Select TrueType fonts
Unembed font <!-- See Unembed font on page 247 -->
```

Related Actions

Check font type on page 352

3.4.14.8. Select fonts that can be emulated

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects fonts that can be emulated.

Fonts that can be emulated are fonts that can be represented on screen, even if the font is unavailable on your system and even though it has not been embedded. If you are certain the document only needs to be viewed on screen, and will not be printed, fonts that can be emulated do not need to be embedded. This makes your PDF lighter, for example for distribution on the internet.

Example

To select fonts and then unembed them:

```
Select fonts that can be emulated
Unembed font <!-- See Unembed font on page 247 -->
```

3.4.14.9. Select non-PDF/X or PDF/A compliant TrueType fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select a TrueType font that is not compliant with a particular PDF/X or PDF/A version, for example a symbol font. Options are PDF/A-1, PDF/A-2, PDF/X-4 and PDF/X-6.

After this selection, you might want to remove or replace this font.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

Check if TrueType fonts are PDF/X compliant on page 355

3.4.14.10. Select objects that use neither stroke nor fill

Belongs to

- **Category:** LineArt;Text
- **Type:** Selections

What it does

Selects vector or path objects that contain no stroke or fill color value in a PDF.

Related Actions

Select invisible objects without fill and stroke on page 382 (same functionality)

3.4.14.11. Select OpenType embedded fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all embedded fonts that are OpenType, or alternatively, all embedded fonts that are not OpenType.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Example

To search for all OpenType fonts and then unembed them, proceed as follows:

```
Select embedded fonts that are OpenType
Unembed font
```

Related Actions

- *Check embedded font is OpenType* on page 349
- *Unembed font* on page 247

3.4.14.12. Select rendering objects

Belongs to

- **Category:** LineArt;Text;Image
- **Type:** Selections

What it does

Selects all objects with a rendering intent.

This includes paths, text and images with any of the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation



Note: This Action does not allow you to make a selection based on **one particular** rendering intent. To select objects by **one** of the listed rendering intents, use *Select by rendering intent* on page 367.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select by rendering intent* on page 367

3.4.14.13. Select standard 14 fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects the standard 14 PostScript fonts.

The 14 fonts are automatically installed with Adobe Acrobat and embedded by default (since PDF 1.5).

Example

To save on file size, you could select these fonts and unembed them. Proceed as follows:

```
Select standard 14 fonts
Unembed font <!-- Unembed font on page 247-->
```

3.4.14.14. Select subset fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects fonts that are subsetted.

If a font is subsetted, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible.

Example

If you have the original font on your system, you could choose the subsetted fonts and embed them completely for later editing. To do so, proceed as follows:

```
Select subset fonts
Embed font
```

Related Actions

- *Check font subsetting* on page 351

3.4.14.15. Select text by key phrase

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select text objects containing a particular key word or phrase.

To take into account the case of the key phrase (uppercase/lowercase as entered in the text field), select the **Case sensitive** checkbox.



Tip: To only select a particular key word (and not the entire text object it belongs to), you could first split the text objects, using *Split in words* on page 246.

3.4.14.16. Select text by point size

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects text in a font that is below, above or equal to a certain size (expressed in points).

This Action is useful to select text that is too small to print correctly.

3.4.14.17. Select text by x-height

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Select text by x-height allows you to select text by a font size expressed in x-height. The x-height refers to the distance between the baseline and the mean line in a typeface; this is typically the height of the letters x, u, v, w, and z. You can set a threshold for the text x-height expressed in points.

Note that this Action only can work if at least one of the characters to be measured (x, u, v, w or z) is available in the PDF.

3.4.14.18. Select text segments

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all text objects in a PDF.



Tip: This Action does not select clipping text, which is not visible in the PDF. If you want to select clipping text as well, you can use *Select clipping and non-clipping text* on page 437.

3.5. Settings

The following Actions allow you to change certain default settings, such as the image recompression, page boxes, color management, the number of decimal places, ...

3.5.1. Color

3.5.1.1. Override color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Replaces any color management settings from the PDF Profile or general PitStop preferences with the settings defined here. These settings will be used when converting colors.

3.5.1.2. Restore previous color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does
Allows you to revert to the previous color management settings (if you have changed them before, in the same Action List).

Related Actions

Save color management settings on page 446

3.5.1.3. Save color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does
Allows you to save the current color management settings (changed in the Action List).

Related Actions

Restore previous color management settings on page 445

3.5.2. General

3.5.2.1. Override color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Replaces any color management settings from the PDF Profile or general PitStop preferences with the settings defined here. These settings will be used when converting colors.

3.5.2.2. Override default image recompression

Belongs to

- **Category:** General; Image
- **Type:** Settings

What it does

Overrides the default recompression quality setting (used by PitStop when changing images) with the one defined in this Action.

How it works

If PitStop is used to change images (e.g. to convert the color, to resample the image...), the images are decompressed first, then changed, and afterwards recompressed according to the default settings (maximum for JPEG, lossless for JPEG2000). With these default settings, files may grow to an unacceptable size compared to the original input PDF file. In that case, you can use Override default image recompression to make the files smaller.

3.5.2.3. Override page box defaults

Belongs to

- **Category:** General; Page
- **Type:** Settings

What it does

Replaces the default order (Media > Crop > Art - Bleed - Trim) of the page boxes in a PDF document with the order defined in this Action.

3.5.2.4. Override rounding rules

Belongs to

- **Category:** General
- **Type:** Settings

What it does

Replaces the default rules used for comparing text size, line weight and/or coordinates to the ones set in this Action.

You have the choice to:

- Leave text size, line weight and/or coordinates unchanged
- Use the default rules, or
- Use decimals.

Example

PitStop applies a number of rounding rules when comparing the actual values in a PDF to the ones set in a check (Profile check or "check" Action). For example, if you want to check if the text point size is equal to 10 points, PitStop will give a warning if there is a difference of 0.1 point.

If you don't want to log such small differences, use this Action to overrule the default behavior. Example of such an Action List:

```
Select all
Override rounding rules <!-- Select: Text size: decimals 0 -->
Check if text point size is equal to 10.0 pt <-- Check text point size on page 356  --
>
```

Remark

We recommend using points as measurement unit because in the background, PitStop Pro converts all the different measurement units (p, in, cm, mm) into points and applies the rounding rules to this value (with its decimals).

3.5.2.5. Restore previous color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Allows you to revert to the previous color management settings (if you have changed them before, in the same Action List).

Related Actions

Save color management settings on page 446

3.5.2.6. Save color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Allows you to save the current color management settings (changed in the Action List).

Related Actions

Restore previous color management settings on page 445

3.5.2.7. Split Action List

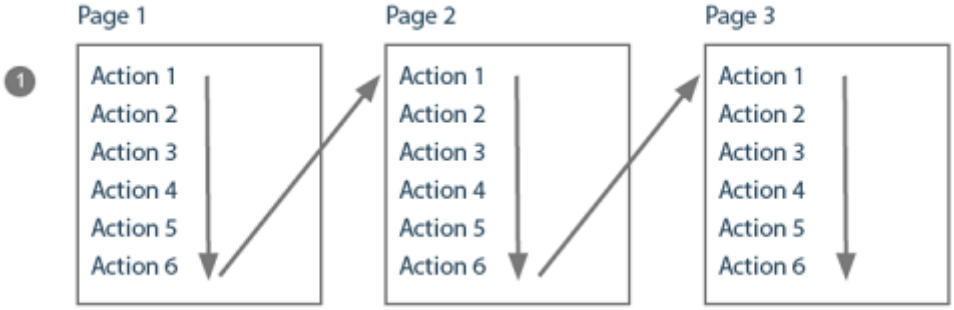
Belongs to

- **Category:** General
- **Type:** Settings
- **Since Version:** 2019

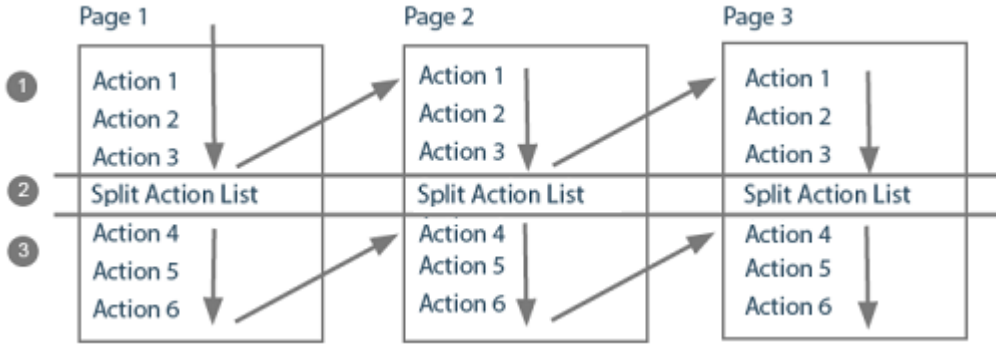
What it does

This Action changes the way the content of an Action List is processed:

- Without this Action/default behavior: All Actions are executed one after the other, page after page, until the end of the document. There is no way to get back to the beginning of the document, for example to copy something from the end of the document to the beginning.



- With this Action:
  1. First all Actions **preceding** *Split Action List* are executed, one after the other, page after page, until the end of the document.
  2. Then the changes are saved. If anything is copied to the clipboard, it's preserved.
  3. Next, the Actions **following** *Split Action List* are executed on the saved document, starting from the beginning of the document until the end or until another *Split Action List*. Note that after saving, the selection is lost, so a selection has to be made after *Split Action List*.



This approach makes it possible to go through a document multiple times.

Example Action Lists

The following Action List copies the content of page 5 to page 2:

```
select page range                <!--Page range is "5" -->
copy content to clipboard        <!--Clipboard name e.g. content pg 5 -->
split Action List
select page range                <!--Select the target page: Page range is "2" -->
paste objects from clipboard     <!--Clipboard name chosen higher -->
```

The following Action List splits pages and reorders them in one and the same Action List:

```
split pages in half              <!--To split the spreads -->
split Action List
select all                       <!--Make the selection -->
reorder pages                    <!--Specify the new page order,
                                     based on the split pages  -->
```

Related Actions

This Action is typically used to reorder split pages and to copy content backwards (from later pages to earlier pages). In that case, the following Actions may be useful:

- *Split pages in half* on page 183
- *Reorder pages* on page 177
- *Copy or cut objects to clipboard* on page 105
- *Paste objects from clipboard* on page 74

3.5.3. Image

3.5.3.1. Override default image recompression

Belongs to

- **Category:** General; Image
- **Type:** Settings

What it does

Overrides the default recompression quality setting (used by PitStop when changing images) with the one defined in this Action.

How it works

If PitStop is used to change images (e.g. to convert the color, to resample the image...), the images are decompressed first, then changed, and afterwards recompressed according to the default settings (maximum for JPEG, lossless for JPEG2000). With these default settings, files may grow to an unacceptable size compared to the original input PDF file. In that case, you can use Override default image recompression to make the files smaller.

3.5.4. Page

3.5.4.1. Override page box defaults

Belongs to

- **Category:** General; Page
- **Type:** Settings

What it does

Replaces the default order (Media > Crop > Art - Bleed - Trim) of the page boxes in a PDF document with the order defined in this Action.

4. Actions sorted per Category

4.1. Add

4.1.1. Changes

4.1.1.1. Add background

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Adds a background to the selection that preceeds this Action in your Action List.

You can choose a color for the background and define a size (size of one of the page boxes or the same size as the bounding box of all objects).

4.1.1.2. Add barcode

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 2018

What it does

Adds the barcode of your choice. You can select the barcode you need from a list of common barcode types, choose the color of the back- and foreground and specify the position.

Tabs

Tabs	
Barcode	• **Type**: Select the barcode you want to add. We support over 120 barcode types. • **Value**: Enter the numeric value and/or a document variable by clicking the **Variable** button.

Tabs	
	The **Variable** button gives access to a list of predefined variables, such as %Current Document Name%, %Document Title%, %Page Number%, ...(for the full list, see below). The current value is shown at the bottom of the dialog. Note that this list of variables is also available in the *Add object* Action. If a check digit is needed, you can either enter it yourself or leave it blank and let PitStop add it. **Note:** Values are verified when the Action List is executed, there is no check during the configuration of the Action. • **Translate escape characters**: If selected, barcodes that support escape sequences can be used. For example, if this option is enabled, "\n" is considered an escape character instead of a plain string. For more information, refer to the documentation of your barcode library. • **Ignore check digit(s)**: If selected, the check digit is not verified. • **Width reduction**: Width reduction compensates for 'dot gain': printed material looking darker than intended. In case of barcodes, it means that the bars are enlarged and the gaps reduced. To correct the barcode width, you can either enter an absolute value (e.g. 1 mm) or a relative value (e.g. 5%). • **Font name and size**: Select the font and the font size of your choice. The chosen font will be used for the numeric values below the bars. Note that the numeric values may not be readable if you select a bar code font. • **Group barcode objects**: If selected (default), the barcode and the numeric value are grouped, so they can be handled (e.g. moved, changed,...) as one object.
Color	• Choose the **foreground** color. The default color is black. • Select a **background** as required and pick a background color.

Position	• There are two options to specify the position and size of the barcode:
	
	  • **Use selection bounding box**: if selected, the barcode will be placed on the bounding box of an object in the PDF that is selected. The size of the selected object determines how big the barcode will be.
	
	  • **Specify position and size**: Size and position can be defined independently from each other.
	
	  The absolute position is set by entering the X and Y coordinates.
	
	  The relative position is determined by the distance and position relative to one of the page boxes.
	
	  The size is set by entering the width and the height. If the lock icon looks closed, any changes you make to one of the dimensions changes the other dimension proportionally.

Tabs	
	• You can use the default **quiet zone** (= default for the chosen Action) or you can determine the dimensions. The lock icon can be used to make sure proportions are kept if changes are made afterwards. • Barcodes can be **rotated** as required. Rotation angles are 90°, 270° and 360°.
Data matrix	Only available if the chosen barcode type is Data Matrix. Options: • **Square** or **Rectangle** • **Size**: Choose one of the predefined sizes or 'Automatically Detect'. **Note:** The list of predefined sizes depends on the length of the barcode (= the value on the Barcode tab). If 'Automatically Detect' is chosen, the barcode will get the size that best fits the length of the value.

Note: This Action supports variables in most fields.

Document variables - Overview

This is the full ist of the predefined variables that can be inserted via the **Variable** button on the Barcode tab:

- %Current Document Name%
- %Full Document Path%
- %Time%
- %UTC Time%
- %Date%
- %UTC Date%
- %User Company%
- %User Name%
- %Page Number%
- %Page Count%
- %Document Title%
- %Page Box Dimensions%
- %Page Box Width%
- %Page Box Height%

Standard Action Lists

PitStop 2018 comes with a number of default Action Lists for generating barcodes.

Some of these Action Lists make use of smart variables; to that end a new Variable Set was added to PitStop 2018 (Smart Preflight Variable Set - PitStop Pro v1.3).

If you're not familiar with Smart Preflight, we recommend taking a short elearning course on Smart Preflight, available on the Enfocus website (*https://www.enfocus.com/learn*), or check out the *PitStop Reference Guide*, which has a chapter on Smart Preflight too.

Related Actions

- *Check Esko barcode value* on page 317
- *Check Esko barcode type* on page 317
- *Select Esko barcode* on page 411
- *Select Esko barcode type* on page 411

4.1.1.3. Add color bar

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Adds color patches to your PDF document. The color patches are individually created for each page and show all separations including any spot colors.

How to proceed

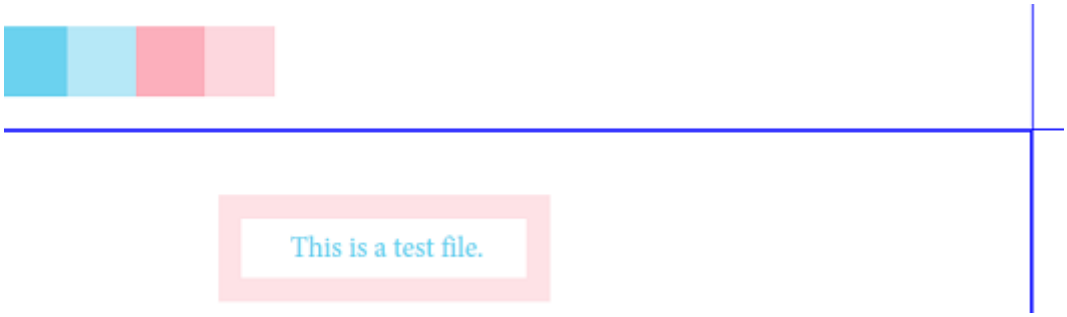
1. On the **Color Patches** tab, indicate how many tint values per separation you want to add.

   By default, a 100% tint of the color is added.

   - To change a value, double-click it in the **Tint values (%)** box and type an alternative value.
   - To add another value, click  and enter the required value.
   - To remove a value, select it and click .
2. Enter the required size of the color patches, i.e. the preferred height or width. This depends on the device you're using.
3. Select the preferred options:
   - **Repeat color patches**: The color patches are repeated till the end of the line (= right border of the page box). If this checkbox is cleared, each tint value of each color is added only once.
   - **Don't add process colors (C, M, Y, K)**: For process colors no color patches are added.
   - **Don't add if tint is 0%**: If a color is defined but not used in the PDF, no color patch will be added.
4. Switch to the **Position** tab.
5. Determine the position of the color bar relative to one of the page boxes.

Examples

Example 1: This document contains two spot colors, which are each added once, in 2 tint values (100% + 50%). Chosen position: relative to the top of the trim box (blue line). Process colors are not added.



Example 2: Same options as in the first example, but with **Repeat color patches** enabled.



4.1.1.4. Add copied graphics

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Copies graphic elements and positions them on the page. The graphics can be rotated, put in the foreground or background. You can place them at any position on the page and use the "repeat" feature to more precisely position the graphic.

How to proceed

1. Select the graphic(s) from a file or by making a selection. Do one of the following:
   - Select **Use first page of file** and select the file concerned. You can also use a variable.
   - Select the graphic you want to copy in your PDF using the PitStop Select Objects tool and select **Use grabbed graphics**. Click **Grab Selection**. The selected graphic is shown in the field below the button. If the graphic should be rotated, specify a rotation angle, e.g. 45.
2. Switch to the different tabs and select the appropriate options.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the graphics you want to copy (either elements you selected in the PDF or the first page of a particular PDF).
Attributes	Determine if the graphic should be pasted in the foreground or in the background. Select or clear the **Use page rotation** and **Use page scaling factor** checkbox: • To take into account page rotation and/or scaling factor, select this checkbox. The Action will be applied to the actual position of the page content. • To ignore page rotation and/or scaling factor, clear this checkbox. The Action will be applied to the original position of the page content (i.e. BEFORE applying page rotation and/or scaling factor). Enable **Share graphics between copies** to add the copied graphic as a shared form XObject. This means that the graphic is defined only once, but used several times, on several pages. This is an easy way to reduce the file size. **Note:** Only use this option if you're sure that all instances/ occurences of the graphic will remain the same (as is the case with a logo), because changing one graphic will change them all.
Region	Determine the region where the copied graphics should (or should not) be placed, relative to the page box of your choice. Margins can easily be set by grabbing the offsets from a selected area (use the Grab Offsets button ).
Repeat	If the graphics should be placed more than once on a page, change **No repeat** to: • **Distribute/Repeat fixed number of graphic elements** if you want to determine how often they should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the copied graphics evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the copied graphics. If you choose "repeat", you should define the exact distance between the copied graphics yourself. The distance can be between the bounding boxes of the copied graphic (choose: **Between edges**) or from center to center (choose: **Between centers**).

Tabs	On this tab, do the following:
	Note: Remember that you can use Smart Preflight variables to define the distances.
Position	Indicate how the graphic elements should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

4.1.1.5. Add object

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Inserts a chosen object (a line, a rectangle, an ellipse or a text) and positions it relative to one of the page boxes. This can be useful to add information to be trimmed off later.

Note: If you're inserting text, you can make use of predefined variables, such as the name of the document, the author, the page number, page count, the page box dimensions, ...See the example below.

The **Fill** and **Stroke** tabs allow you to define the color of the objects you are inserting.

Add rectangle

When adding a rectangle, you can choose different corner styles, e.g. rounded corners, chamfered corners or inverted corners. You can also determine the radius (only positive values are accepted).

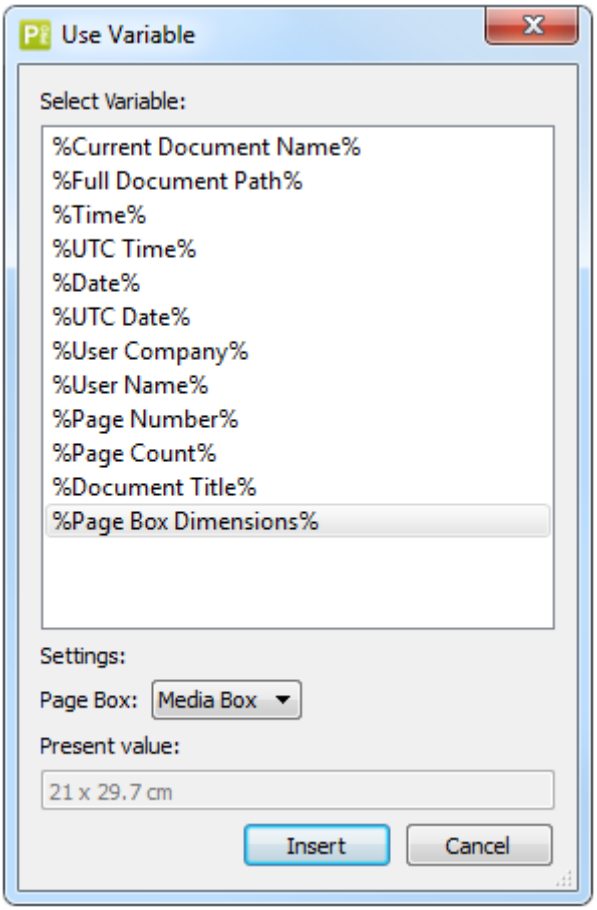
This option is useful for customers who want to automatically generate cutter guides or dielines for labels based on a PDF page box such as the trim box. See also the Action Lists based on this Action, which make a dieline in an overprinting spot color based on the trim box.

Example

To add the width and height of the media box to your document, proceed as follows:

1. In the attributes for the Add object Action, on the **Object and position** tab, choose **Add text in foreground**.
2. Click the **Variable** button.
3. Select **%Page Box Dimensions%**.
4. Select the page box of which you want to insert the dimensions, in this example **Media Box**. The current value is shown.
5. Click **Insert**.
6. Select a font and a font size and determine where the text must be inserted in the document, for example in the center of the media box with a particular offset.
7. Specify whether or not to take into account page rotation and page scaling factor if applicable.

Below is an example of the dialog that allows you to insert predefined text variables.



4.1.1.6. Add page box marks

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Allows you to add trim marks and/or bleed marks to your document in the style of your preference (InDesign or QuarkXPress).

4.1.1.7. Add page number

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Adds page numbers (including section and chapter numbers) to a PDF.

Note: The Global Change **Add Page Number** provides the same functionality.

How it works

You must first create a sample piece of text, which will be used to determine the format and style used for page numbering (font, color, size etc):

- If you want to add a page number only, the sample should only be a number, e.g. "3".
- If you want to add a page number with more information (for example: include the word "Page" and the total number of pages) add this to the sample, e.g. "Page 1 of 10".

The text strings (including spaces and punctuation) in this sample will be used as they are. For the numbers in this sample, you should indicate which one refers to the page number, hence should be considered a variable. For example, if your sample is "Page 1 of 10", "1" refers to the page number (Page %pagenr% of 10) and will be different on each page. "10" will not be changed, as it is not possible to use variables for other information than page numbers.

How to proceed

1. Create an example piece of text.
2. Select the sample by using the PitStop Select Objects tool .
3. In the attributes of the Action, click the **Grab Sample from Selection** button.

   The sample text appears in the Sample field.
4. Specify the position of the page numbers relative to the text and one of the page boxes. You can use a default offset, manually enter offset values or grab the document's offset values.
5. To start numbering on a different page than the first page of the document, enter the page number. For example, if you want to start numbering after the table of contents, for example on the third page of the document, enter "3". Note that you can also use a variable for this (added in PitStop 2020).
6. By default, the pages are numbered consecutively based on all pages of the PDF. However, if you want to base the page numbering on a selection of pages, select **For generating page number sequence, use: Selected pages**.

   Example:

   ```
   Select pages <!-- page range 1-3, only odd pages -->
   Add page number
   ```

   Output in case of PDF pages (default):

   - Page 1: numbered 1, page 2: not numbered, **page 3: numbered 3**

   Output in case of Selected pages:

   - Page 1: numbered 1, page 2: not numbered, **page 3 numbered 2**
7. If your sample text contains numbers, the **Variable number sequence** list is activated. This list allows you to indicate which number should be considered a variable (indicated by "%pagenr %").

   For example, if your sample text is "Page 2, Section 1", you will have three options:

   - "Page 2, Section 1" will insert "Page 2, Section 1" on every page.

- "Page %pagenr%, Section 1" will insert "Page 1, Section 1" on page 1, "Page 2, Section 1" ... (Section 1 will not change)
- "Page 2, Section %pagenr%" will insert "Page 2, Section 1" on page 1, "Page 2, Section 2" ... (Page 2 will not change)

8. Switch to the **Options** tab and select the appropriate checkbox:
   - **Remove any overlapping text** will remove existing page numbers.
   - **Only number pages that already have a number** will not add page numbers to pages that currently don't have any.
   - **Add white background** ensures that the page numbers are visible, even if the PDF has a dark background.

4.1.1.8. Add pages

Belongs to

- **Category:** Add; Page
- **Type:** Changes

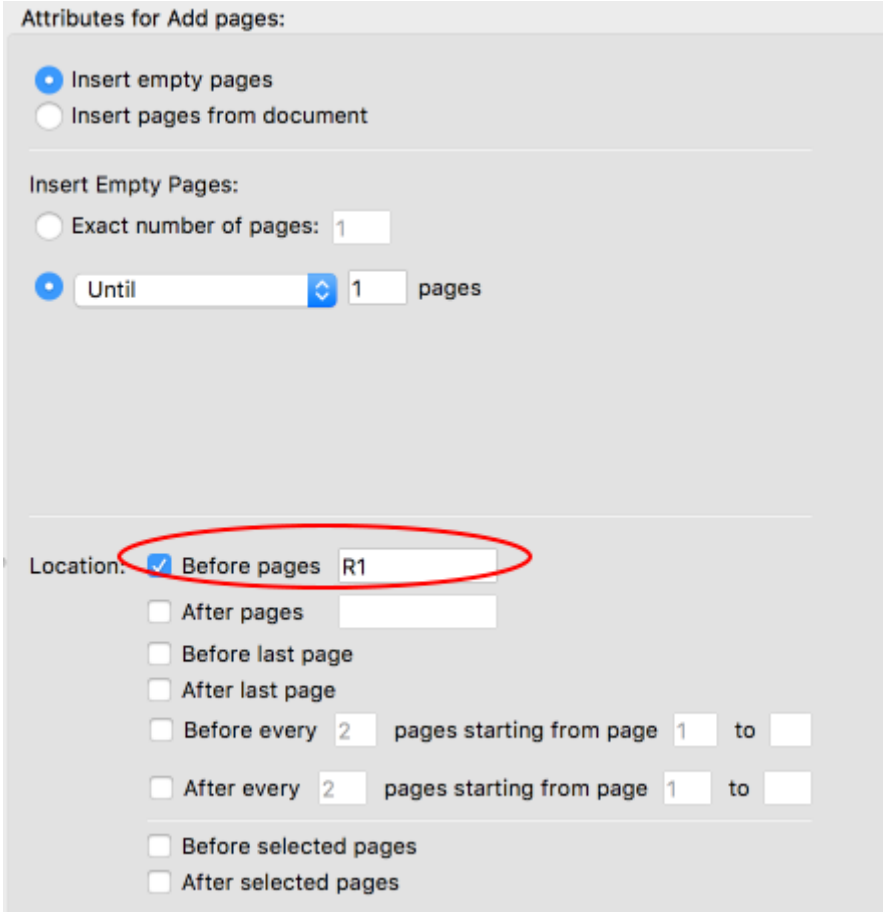
What it does

Allows you to insert either empty pages or pages from a particular PDF file (by embedding the file or by using the file path (optionally specified by a variable)).

You can choose the number of pages to add, the location of the new pages in the PDF ...

As of PitStop 2019, you can insert pages before or after a selection you made earlier in your Action List. You could for example select all pages with a certain string and insert empty pages based on this selection. See also the example Action List below.

"R[number]" notation
If you want to add pages starting from the end of the PDF, you can use the "R[number]" notation in the **Before pages/After pages** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ... This allows you for example to add a backup interleave page to every page in the PDF.



Example Action List

Suppose you have a mixed landscape/portrait document and you want to insert an empty page after every landscape page. That's possible with the following Action List.

```
Select all
Select by page orientation <!- select if page orientation = landscape ->
Add pages <!- select "insert empty pages" and "after selected pages" ->
```

4.1.1.9. Add registration marks

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Allows you to add registration marks to your document in the style of your preference (InDesign or QuarkXPress).

Registration marks ensure that the different separations in a color document are properly aligned.

Related Actions

Select registration marks on page 419

4.1.1.10. Add separation names

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 12 update 2

What it does

Allows the names of color separations to be generated and positioned within a PDF file. The separation names are individually created for each page and show all separations including any spot colors.

You have several options. You can specify:

- *How* the separation names should be displayed (stacked (i.e. one per line), inline (*reflow*) or all on top of each other (*on same location* - useful for color plates); in color or with color patches, rotated, ...). You can also determine the font and the font size.
- *Where* exactly they should be placed on the page (position of the color names relative to a page box).
- Whether or not *process colors* and *separations with 0% tint* should be displayed.
- If you have chosen to add color patches, whether or not they should have a border (*Add stroke on color patches*).

Examples

- Example 1: Layout: **Stack** and Color: **Separation names in black + color patches** are selected.



- Example 2: Layout: **Overflow** and Color: **Separation names in black + color patches** are selected. The color patches have a border, because **Add stroke on color patches** is enabled.



- Example 3: Layout: **Overflow** and Color: **Separation names in color** are selected.



4.1.1.11. Add trace path

Belongs to

- **Category:** Add
- **Type:** Changes
- **Since version:** 2020

What it does

Generates a path or shape by tracing objects in a PDF.

This Action generates a path around everything that's not white, which enables creating vector elements to be used as cutter guides or shapes for embossing.

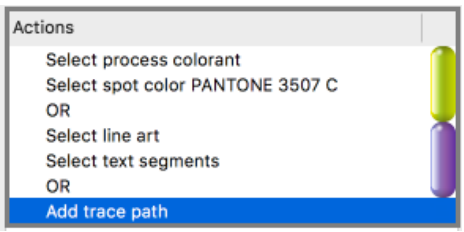


Note: This Action is also available as an option in the Inspector Line Art tab (with exception of the Use colorant selection option, which is not available through the Inspector).

Attributes

Attribute	Description
Scan resolution (ppi)	Default value is 300. Increasing this value will slow down processing but improve accuracy (and vice versa).
White threshold	Default value is 10%. This is the best value to filter out tiny pixels that are artefacts. To change this threshold, drag the slider to right or to the left or enter the value of your choice manually. Increasing the white threshold may result in light gray parts being included in the selection.
Curve optimization	Default value is 20%. If you lower this value, more selection points will be taken into account to draw the curve, making the curve more accurate but less fluent.
Ignore white holes	This option allows you to include or ignore white shapes (i.e. paths fully inside an other path). If included, the white holes are cut out. This option is useful when making white underprints for printing on transparent substrates.
Invert trace path, use <page box> as outer edge	This option allows you to invert the created path, using the page box of your choice as an outer boundary.

Attribute	Description
Only add trace paths larger than ...	This option allows you to remove paths that are smaller than a specified size, i.e. paths of which the width and height of the bounding box are smaller than the entered value.
Only add largest trace path	This option allows you to remove all smaller paths, to keep only the largest one.

Use colorant selection	This option allows you to let the Action only trace the selected channels (e.g. only CMY), ignoring the others (e.g. K).
	
	This option requires two preceding "select" Actions; the first one to select the *channels*that need to be traced, the second to select the *objects* that need to be traced.
	
	Example Action List 1 (path based on process colors, in this example: CMY):
	
	`select process colorants (CMY on)`
	`select all`
	`trace path (Use colorant selection on)`
	
	Example Action List 2 (path based on text segments in a particular spot color, in this example: PANTONE 3507 C):
	
	`select spot color PANTONE 3507 C`
	`select text segments`
	`trace path (Use colorant selection on)`
	
	Example Action List 3 (draws a path around magenta and PANTONE 3507 C + works on text and line art)
	
	

Examples
Suppose you're running this Action on the below image. The generated trace path depends on the chosen options.



Attributes	Result
Default values, no extra options enabled	
Default values, ignore white holes	
Default values, ignore white holes, only add largest trace path; as a result, the single balloon is not traced anymore.	

Attributes	Result
Default values, ignore white holes, resolution of 72 ppi (iso 300)	
Default values, ignore white holes, resolution of 72 ppi (iso 300), no extra curve optimization (selected version, so you can clearly see the selection points)	
Default values, ignore white holes, resolution of 72 ppi (iso 300), with increased curve optimization (selected version, so you can see that now there are fewer selection points, resulting in a smoother curve)	

4.1.1.12. Paste objects from clipboard

Belongs to

- **Category:** Add, General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does

Allows you to paste objects from the clipboard to one or more selected pages. You can paste them multiple times (with fixed distances or distributed across a distance) as required and indicate where they should be placed.

This Action must be preceded by a "copy/cut "Action (that moves the objects to the clipboard) and a "select" Action (that indicates where the objects should be pasted) in the same Action List.

If there are several "copy/cut" Actions in the Action List, you may want to give each of the clipboards an appropriate name, to make sure the different objects are pasted on the correct pages.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut/copy-and-paste.
3. Add a *Copy or cut objects to clipboard* on page 105 Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 2 -if you added "Select all" in step 2, step 4 is redundant).
5. Add a *Paste objects from clipboard* Action and select the name of the clipboard (as entered in step 2). Switch to the different tabs to define the region and the position of the copied objects (see table below).

Note: Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the clipboard that contains the objects to be pasted. Determine whether or not the clipboard should be cleared after the object was pasted. This option determines what happens if there are no objects to be copied (= if the select Action in step 2 of the above procedure results in an empty selection). • If checked, the clipboard will be empty, so nothing will be pasted. • If cleared, the clipboard will still contain content from the previous page and that content will be pasted.
Attributes	Determine if the objects should be pasted in the foreground or in the background of the document.
Region	Determine the region where the objects should be moved to. The region is defined based on the page box of your choice and you can define margins within that page box, by grabbing the offsets from a selected area (using the **Grab position** button ). You can also specify a specific area the objects should not be placed in, also based on a page box and with the option to set margins. **Note:** The settings on this tab are only used if **Move graphic elements** is selected on the Position tab. If this is not the case, the original location of the graphic elements is preserved.

Tabs	On this tab, do the following:
Repeat	If the objects should be pasted more than once on a page, change **No repeat** to: • **Distribute/Repeat fixed number of graphic elements** if you want to determine how often the copied objects should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the pasted objects evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the pasted objects. If you choose "repeat", you should define the exact distance between the pasted objects yourself. The distance can be between the bounding boxes of the pasted objects (choose: **Between edges**) or from center to center (choose: **Between centers**). **Note:** Remember that you can use Smart Preflight variables to define the distances.
Position	If the selected objects should be moved, select **Move graphic elements**. Indicate how the objects should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

Related Action

- *Copy or cut objects to clipboard* on page 105
- *Add copied graphics* on page 63

4.1.1.13. Put selection in form

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Allows you to gather all selected objects in a form (a so-called XObject form).

Forms are rectangular frames in a PDF document that contain objects. The way in which you edit these forms and the objects inside them is different from regular objects in a PDF document. For example, you can select a regular object and move it to a random position on the page in your PDF document. Objects in forms can only be moved inside the form and thus, you can use the form to crop the object.

Note that you can use PitStop's Edit Form tool in order to edit the form and the objects it contains.

4.2. Color

4.2.1. Changes

4.2.1.1. Add default color spaces for color spaces that are not compliant to the Output Intent

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

If you are using an Output Intent that does not support a certain color space, you can use this Action to replace it with another color space that does comply.

You can select an alternative color space for Gray, RGB, and/or CMYK.

The following PDF/X and PDF/A standards are supported:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1
- PDF/A-2

4.2.1.2. Apply CMYK curve

Belongs to

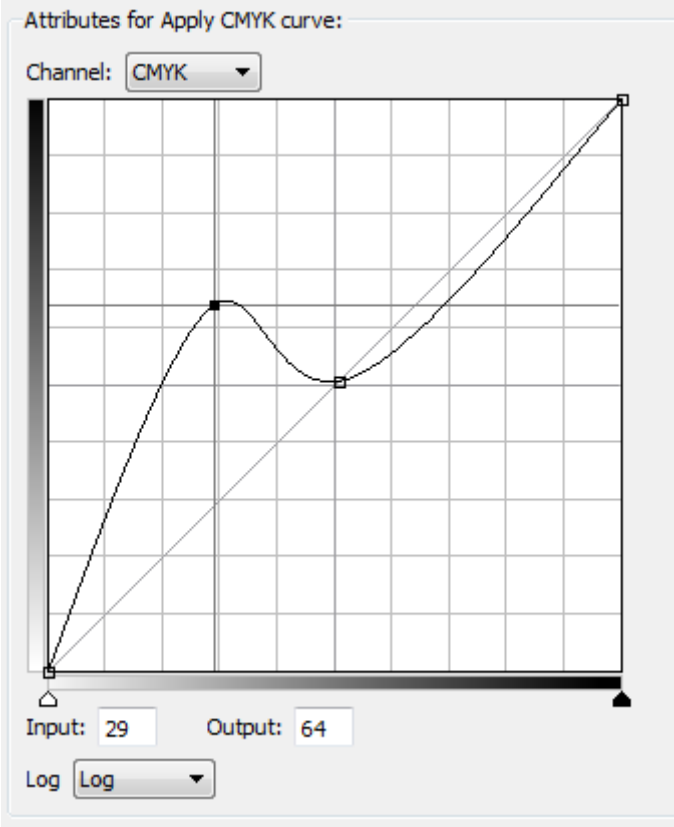
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied to selected CMYK objects, either on all four channels, or on individual C, M, Y, or K channels.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



4.2.1.3. Apply color curve

Belongs to

- **Application:** PitStop Pro
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied on separations of selected objects.

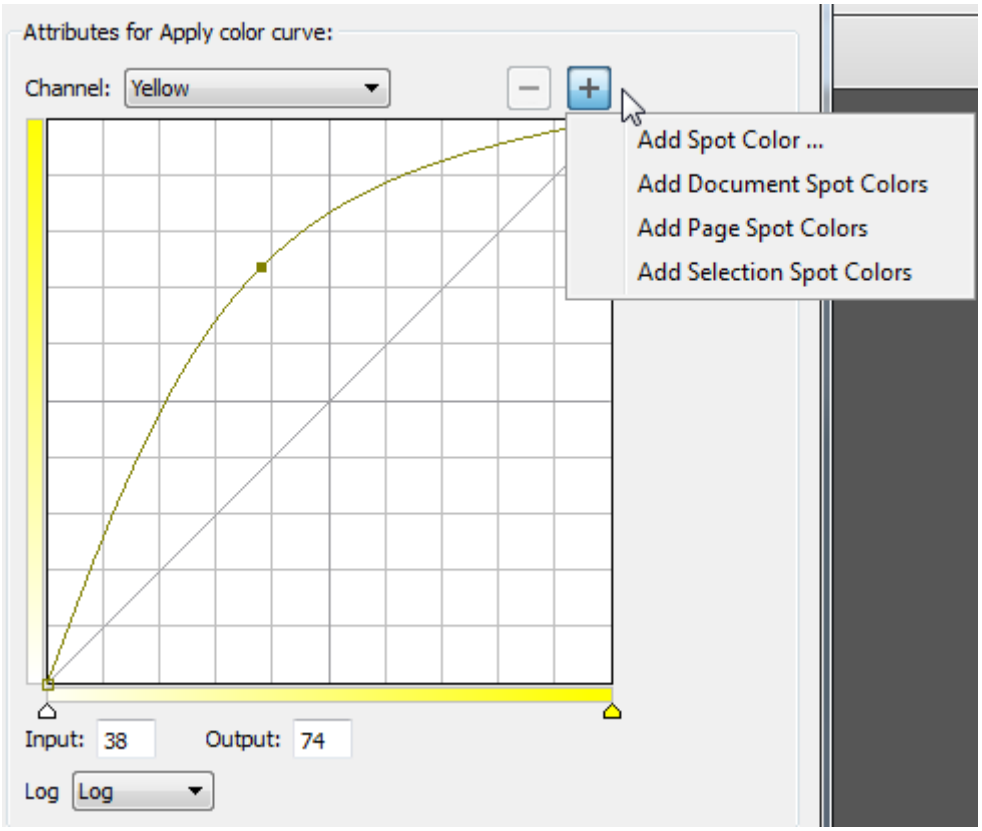
The default separations are C, M, Y, K, and Other (= all other separations in the file except for CMYK), but you can also add a curve for another spot color or varnish separation, which will be used if that color appears in the processed file.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Note: Apply color curve is also available as a Global Change!

Example

The + button allows you to add a curve for an additional color.



4.2.1.4. Apply DeviceLink

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to convert the color of the selected objects to Gray, CMYK or RGB using a device link profile (instead of an ICC profile).

DeviceLink profiles are device specific profiles, converting colors from one color space to another, without converting to LAB or any other device independent color space in between.

You can browse for a local DeviceLink profile or you can select one from the list; PitStop includes 40 DeviceLink profiles for CMYK-CMYK conversions and ink coverage reduction.

Note that you can convert only the stroke or fill of the objects, or both.

Note: If the objects concerned are tagged with an ICC profile, it must be removed first, before you can apply a DeviceLink profile. To do so, you can use *Tag object with an ICC*

profile, with the ICC profile set to **None**. Alternatively, you can use the PitStop Inspector (**Fill and Stroke** tab, ICC profile (at the bottom of the tab) set to None).

4.2.1.5. Apply Gray curve

Belongs to

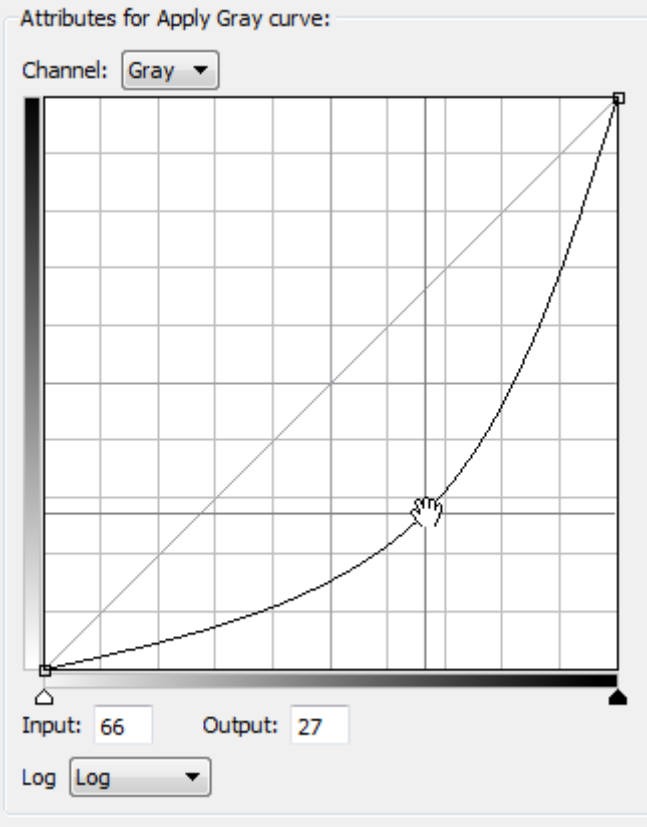
- **Application:** PitStop Pro
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows a curve to be applied to selected Gray objects.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



4.2.1.6. Apply Lab curve

Belongs to

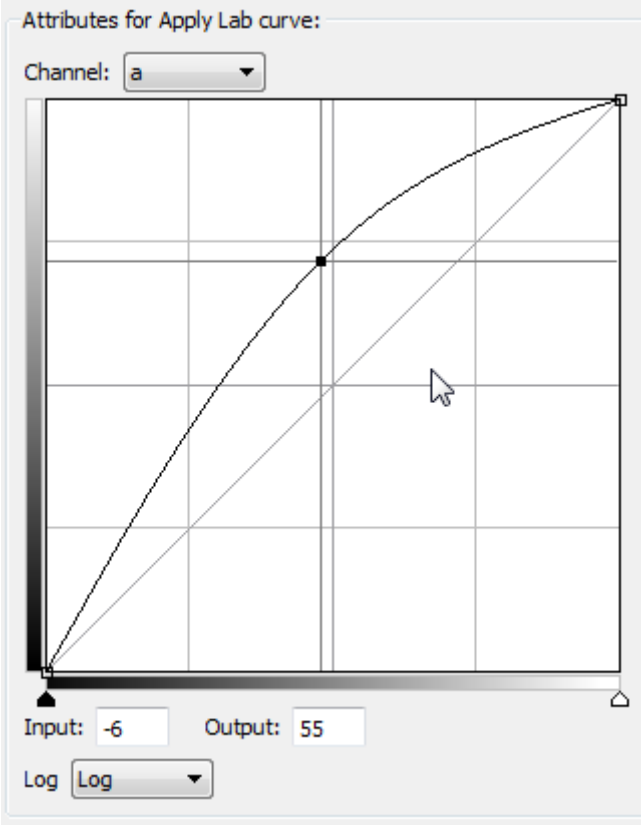
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied to selected Lab objects on individual lightness, a, or b channels.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



4.2.1.7. Apply RGB curve

Belongs to

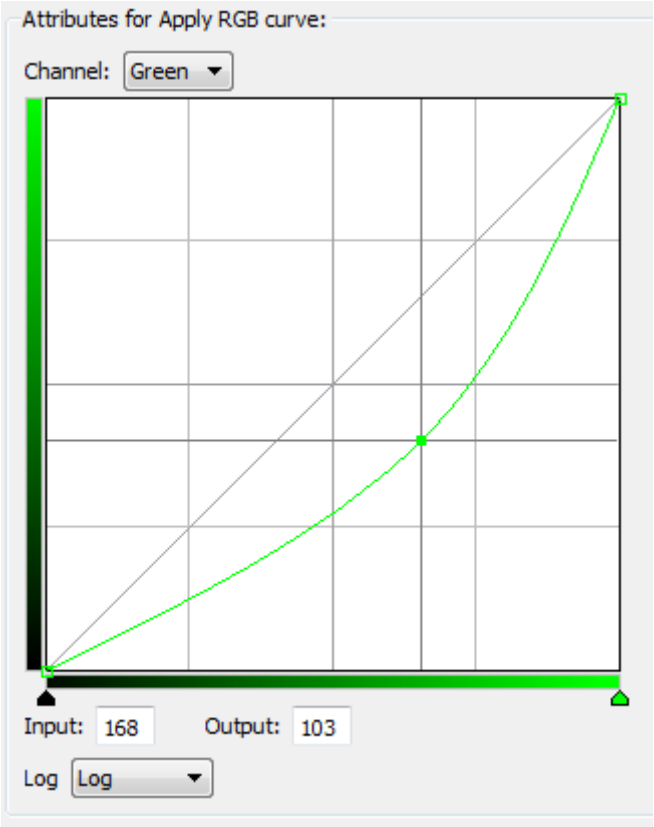
- **Category:** Color
- **Type:** Changes
- **Since version:** 12 update 2

What it does

This Action allows color curves to be applied to selected RGB objects, either on all three channels, or on individual R, G, or B channels.

Curves can be created by adding points, and dragging them to the preferred position, or by entering values in the **Input** and **Output** field below the curve.

Example



4.2.1.8. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.

Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344

- *Remove custom transfer function* on page 226

4.2.1.9. Change color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to change the fill and/or stroke colors in a PDF.

How to proceed

Define the target colors as follows:

1. Select the appropriate checkbox, depending on what you want to change (Fill color or Stroke color).
2. Select the appropriate target color in one of the following ways:
   a. Select an object with the PitStop Select Objects tool and use the icon to grab the fill or stroke color (depending on what you're defining).
   b. Click the color picker icon and select the appropriate color.
   c. Select the required color space:
      - Device colors can be Gray, RGB or CMYK
      - Calibrated colors can be Gray or RGB
      - User Swatch (= user-defined colors)
3. Fine tune the color by moving the sliders.

4.2.1.10. Change default color spaces

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to set the default color spaces for Gray, RGB and CMYK objects in a PDF. These spaces are chosen from the list of available profiles (or you can browse for profiles on your system) and can be applied to all objects or only to objects with absent color spaces.

4.2.1.11. Change Gray to CMYK Black

Belongs to

- **Application:** PitStop Pro

- **Category:** Color
- **Type:** Changes

What it does

Remaps the device grayscale color space to the device CMYK color space, keeping overprint.

4.2.1.12. Change blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Changes

What it does

Allows to change the blending color space and/or the luminosity softmask blending color space (if defined in the PDF document).

You can:

- Change the color to CMYK, gray or RGB, or
- Remove the blending color space, by selecting "none" from the first list, or
- Leave one of the color spaces unchanged, by selecting **Do not change**.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Check if blending color space is defined* on page 261
- *Select by blending color space* on page 364

4.2.1.13. Change rendering intent

Belongs to

- **Category:** Prepress;Color
- **Type:** Changes

What it does

Modifies the rendering intent of an object to one of the following:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96

4.2.1.14. Change Output Intent

Belongs to

- **Category:** Color; Metadata
- **Type:** Changes

What it does

Changes a PDF's Output Intent to comply with a particular PDF/X or PDF/A version, using a particular ICC profile and/or ICC characterization.

Note that you can change the document Output Intent or the page level Output Intent.

Related Actions

Check Output Intent on page 265

4.2.1.15. Change spot color suffix

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Either modifies a selected spot color's suffix to one of the suffixes in the table below or removes any known spot color suffix.

This allows you to use the latest Pantone naming conventions when checking and correcting Pantone suffixes.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types.

For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Check spot color suffix* on page 268

4.2.1.16. Convert alternate color space to CMYK

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the alternate color space for a spot to CMYK.

If you want to change all alternate color spaces except for gray, select the **Do not convert if alternate color space is gray** checkbox.

About alternate color spaces

The alternate color space is used as a 'backup' color space when the original spot color is not available on a specific output device, and when converting the spot color into CMYK. If this alternate color space is defined as anything other than CMYK or plain gray, the output results may not be up to standards.

4.2.1.17. Convert color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the color space of an object to gray, RGB, CMYK or a given spot color.

You can convert the fill and/or stroke color as required.

4.2.1.18. Convert color to shading color space

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts the colors in a PDF to their shading counterparts.

4.2.1.19. Convert images to indexed color space

Belongs to

- **Category:** Color;Image
- **Type:** Changes

What it does

Changes the color of images to the indexed color space.

About the indexed color space

The indexed color space uses no more than 256 colors, and is as such particularly suited for use in Web applications. Images are typically converted to indexed color mode in order to **decrease their file sizes**. When an image is converted to indexed color, a color lookup table is created, in

which the colors that were used in the image are stored and indexed. Using an indexed color table lets you reduce the file size of an image while maintaining the visual quality that you need.

4.2.1.20. Convert indexed color space to base color space

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the indexed color space back to the original colors.

About the indexed color space

The indexed color space uses no more than 256 colors, and is as such particularly suited for use in Web applications. Images are typically converted to indexed color mode in order to **decrease their file sizes**. When an image is converted to indexed color, a color lookup table is created, in which the colors that were used in the image are stored and indexed. Using an indexed color table lets you reduce the file size of an image while maintaining the visual quality that you need.

4.2.1.21. Convert process to DeviceN

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts all instances of device CMYK to DeviceN.

You must indicate what is most important to you:

- Reducing the number of color plates to a minimum, or
- Keeping the overprint settings

4.2.1.22. Convert shading color space to solid color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts shading colors ("gradients") in the corresponding solid colors. You can convert the fill, the stroke or both as required.

Shadings represent complex mathematical functions. That's why certain output devices may not be able to correctly interpret them. Shadings can also cause problems during color conversions.

Related Actions

Select shading objects on page 376

4.2.1.23. Convert spot color to equivalent CMYK color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the color of a spot color object to its CMYK equivalents (for example to save on ink).

You can do this for all spot colors, or only for spot colors of which the alternate color is CMYK or Gray (less risk of getting small color variations).

4.2.1.24. Create varnish

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Creates a varnish on top of the selected object.

This varnish is a user-defined spot color with the same shape of the selected object.

How to proceed?

Enter a name to recognize this spot color by, and indicate whether or not you wish to set it to overprint.

4.2.1.25. Fix missing DeviceN colorants

Belongs to

- **Category:** Color
- **Type:** Changes
- **Since version:** 13

What it does

Adds missing DeviceN colorants to the colorants dictionary.

PitStop searches in the processed document for a real separation space that matches the missing colorant space by name. If such a color space is not found in the document, PitStop can derive the missing colorant space from the DeviceN tint function. If you want this, select **If the colorant**

cannot be found in the processed document, generate colorant from DeviceN alternate and tint transform.

You may use this Action to make your file PDF/X-4 compliant.

Related Actions

Check DeviceN colorants on page 255

4.2.1.26. Make DeviceN without NChannel information

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts the color space to DeviceN without NChannel information.

About NChannel

NChannel is an extension of the DeviceN color space, a multi-component, device-dependent color space. NChannel color spaces give applications greater flexibility when representing colors that are not available on a target device.

NChannel is supported from PDF 1.6 (Acrobat 7.x) onwards. If you are opening a PDF in an earlier version of Adobe Acrobat, colors can print or display incorrectly.

About converting NChannel to DeviceN

This Action will convert NChannel to DeviceN, so the object looks as it will be printed when using devices not supporting PDF 1.6 features.

Note that there are three options. You can convert the color space to:

- **DeviceN**
- **NChannel with regular DeviceN color information only**
- **NChannel with color information additional to regular DeviceN**



Note: This Action will have no visual effect if all colors are available on the target device.

PitStop provides an Action List with the same functionality: Convert NChannel Color Space to DeviceN

Related Actions

- *Check for NChannel colors with non-trivial process dictionary* on page 256

4.2.1.27. Match fill and stroke colors

Belongs to

- **Category:** Color; LineArt

- **Type:** Changes
- **Since version:** 12 update 3

What it does
Changes the stroke color to match the fill color or vice versa.

Use case

Suppose you want to print very small text. To improve the readability, you convert the text to outlines and add a stroke. However, the stroke color is black by default. This may not be desired, e.g. if your text is in color. In that case, you can run this Action with the option **Change the stroke color to match the fill color**.

Related Actions

Change color on page 84

4.2.1.28. Normalize PANTONE library names

Belongs to

- **Category:** Color
- **Type:** Changes
- **Since version:** 2018

What it does

Allows you to rename old or faulty PANTONE spot color names to match the new, correct naming conventions.

You can choose one or more of the following methods:

- **Replace PMS with PANTONE**: PMS stands for *Pantone Matching System* and was used in the past. Using this method, the old color name *PMS Yellow C* will become *PANTONE Yellow C*.
- **Fix upper/lower case mismatches**:
  - **Only make PANTONE name upper case**: "PANTONE" is not always spelled correctly. Using this method, you can fix this part of the color names. For example, *Pantone* Yellow C will be changed to *PANTONE* Yellow C.
  - **Fix all mismatches**: If selected, all mismatches will be fixed, for example *Pantone yellow C* will be changed to *PANTONE Yellow C*.
- **Add suffix if not present: <suffix of your choice>**: If suffixes are missing, you can tell PitStop which suffix to add. Note that only the current suffixes can be selected; old suffixes are not in the list.
- **Remove extra spaces**: Removes redundant spaces in PANTONE library names.



Note: This option does not remove spaces in incorrect names, unless they have been corrected by one of the other normalization methods. For example, "Pantone Yellow C" will only be changed into "PANTONE Yellow C" if both "Make PANTONE uppercase" and "Remove extra spaces" are selected.

- **Add missing spaces**: Adds a space after the name PANTONE (if it's missing), and/or before the suffix (C, U, CP, UP) (if it's missing).

PitStop checks if the normalization method results in an existing PANTONE color. If that is the case, the color name is changed.

If no replacement is found, for example because the spot color name in the document is unknown/incorrect or no PANTONE Spot color, you will get a warning. This is also the case if renaming a colorant in the DeviceN space would result in a duplicate (as it's not possible to have twice the same name in a DeviceN space).

Related Actions

- *Check spot color by PANTONE library* on page 267
- *Select spot color* on page 376
- *Change spot color suffix* on page 86

4.2.1.29. Remap alternate color space to CMYK

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Remaps the alternate color spaces of the chosen spot colors to the preferred CMYK values.

How to proceed

1. To add the spot colors of which you want to remap the alternate color space, do one of the following:
   - To select the desired spot color from the list of spot colors (Spot color picker)
     1. Click .
     2. Select the preferred spot color and click **OK**. The selected color is shown in the table, with the corresponding CMYK values.
   - To define a new spot color
     1. Click the **Add New Color** button.
     2. In the table, in the first column (Name), replace "Color name" with the name of the new spot color.
   - To select the desired spot color from the Spot library picker
     1. Click the **Add Colors** button.
     2. Select the preferred spot color and click **OK**. The selected color is shown in the table, with the corresponding CMYK values.
2. Add or change the CMYK values as required.
3. To remove colors from the table
   - Use the **Remove All** button, or

- Select a color and click  to remove only the selected color.

4.2.1.30. Remap color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Remap color is a complex but powerful Action that allows the remapping of colors from one color space to another.

For each color in the document you can specify whether or not you want to map it to another color (by means of "remapping rules"), and whether or not the overprint settings should change.



Note:

- Use the **Analyze page** or **Analyze document** buttons to get an overview of the colors in the document being processed.
- To change a remapping rule, click **Change** and make the required changes; to add a new one, click **Add**.
- Keep in mind that the order of the rules is important. You can change the order by selecting a rule and clicking **Up** or **Down**. The rules are evaluated from top to bottom. Every matching rule is executed, until a matching rule is found that is set to Keep for both To and Overprint. In that case, no further rules are evaluated (see also example 2 below).
- You can remap colors, color spaces, color ranges and channels.

New in PitStop 2022

When mapping Device Gray to Device CMYK, you can now disable color management by selecting the **Force gray to keep same intensity** checkbox. That way, the gray value will only be mapped to the black component of the CMYK color space. In other words, the Gray brightness becomes equivalent K screen value.

Example: 30% gray will be remapped to 70% K, instead of a mix of C, M, Y and K.

Example 1

Suppose you have a CMYK PDF that you want to print in a single spot color, MySpot.cv.

To remap all the colors to this spot:

1. Under Attributes for Remap color, select the row that mentions **All other** and click **Change**.
2. In the **Color Remap Rule** popup, under **To:**, select **Color**.
3. Select the repository color MySpot.cv. You should have specified this color earlier in PitStop.
4. Select the desired overprint setting:
   - **Keep** the overprint settings as they are, do not change.

- Enable overprint: **On**
- Disable overprint: **Off**

5. Click **OK**.

To remap everything except, for example, 100% black text and objects to the selected target color MySpot.cv, you need a slightly more elaborated action:

1. Click **Add**.
2. Under **Remap**, select **Color** and **Device CMYK**.
3. Set the values to: C 0% M 0% Y 0% K 100%.
4. Under **To:**, select **Keep**.
5. Select the desired overprint setting.
6. Click **OK**.
7. Select **Add**.
8. In the **Color Remap Rule** popup, under **Remap**, select **Device CMYK**.
9. Under **To:**, select **Color**.
10. Select the repository color MySpot.cv. You should have specified this color earlier in PitStop.
11. Click **OK**.

The above Actions must be performed in the correct order. Under **Attributes for Remap color**, you should have three lines:

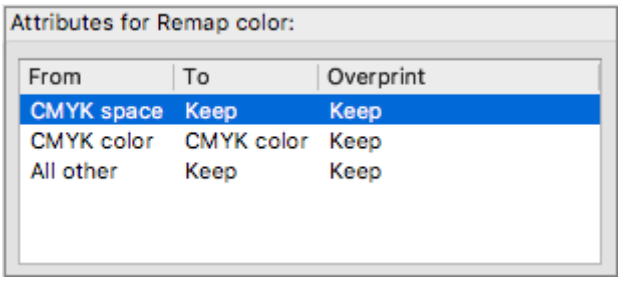
- The rule for "keep 100% Black" at the top
- Then the rule for "remap to MySpot.cv"
- "All other" at the bottom

Example 2

Suppose your document contains a rectangle in CMYK (100K).

When running the below Action, the rectangle won't be remapped: it will remain 100K, because of the first rule (= keep the color space). As a consequence, the other rules won't be checked anymore.

If the first rule would be removed (or placed at the bottom), the color of the rectangle would be remapped from 100K to 100C.



4.2.1.31. Remap spot color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to remap all spot colors in a document, or one particular spot color to:

- Gray
- The color's CMYK equivalent
- A custom CMYK equivalent
- Another spot color

You can apply the Action to either the fill or stroke color, or to both.



Note:

- From version 12 update 2 onwards, you can use regular expressions to define the color that should be remapped.
- From version 2021 onwards, you can use variables to define the CMYK values.

4.2.1.32. Remove ICC tag

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Removes the ICC tags either from the selected objects or from the whole document (if no selection is defined). You can remove the ICC tags from fill and/or stroke colors as required.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

In some workflows, e.g. without color management, ICC profiles are unwanted and may cause inconsistent color reproduction. In that case, you can use this Action to remove the ICC tags.

Related Actions

- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99

- *Check ICC profile version* on page 259

4.2.1.33. Remove rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Changes

What it does

Strips rendering intents from color managed objects in a PDF.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Change rendering intent* on page 86

4.2.1.34. Rename spot color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to change the name of spot colors in a document.

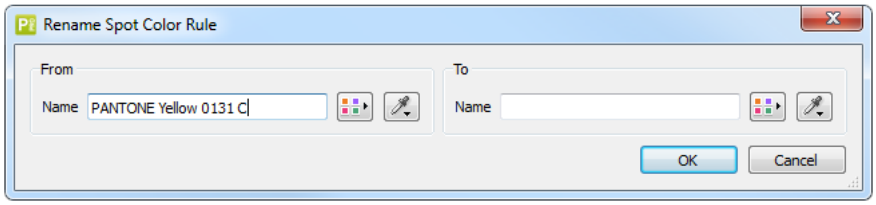
Note: From version 12 update 2 onwards, you can use regular expressions to define the source and target color. This is useful to rename variants of the same color, e.g. to rename “Varnish0”, “Varnish1”, “Varnish23” (i.e. "Varnish" followed by one or more digits) to “Varnish” (without any digits). To do so, build a rule that renames "Varnish([0-9])+" to "Varnish".

How to proceed

To rename one or more spot colors in a document

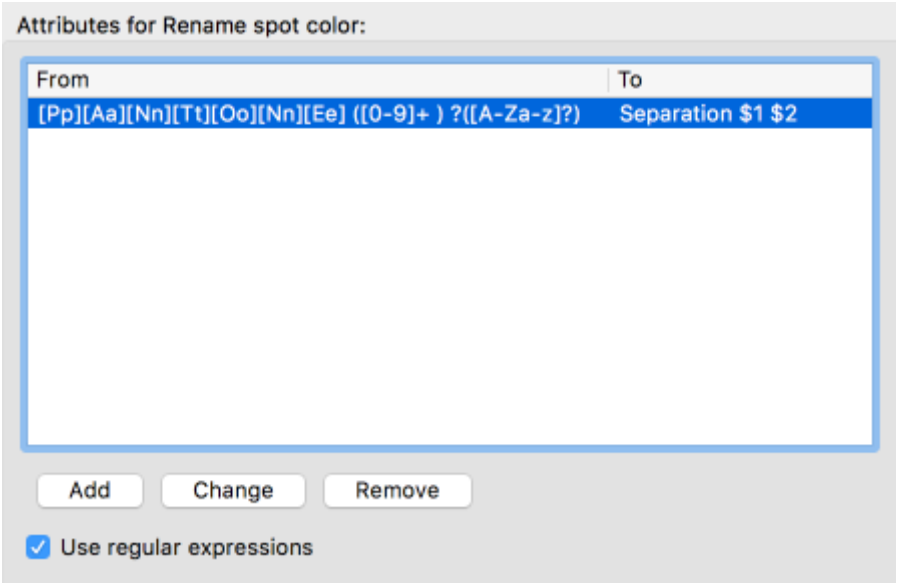
1. Select **Rename spot color**.
2. Optionally, select the **Use regular expressions** checkbox.
3. Click **Add**.
4. In the Rename **Spot Color Rule** dialog:
   - In the left part (under **From**), enter the name of the spot color that should be renamed.

- In the right part (under **To**), enter a new name for the selected spot color.



5. Click **OK**.
6. To create another rule (i.e. to rename another spot color), repeat steps 3-5.

Example



The above rule will rename *Pantone* to *Separation* in spot color names like Pantone 0123 U (which will then become Separation 0123 U).

4.2.1.35. Snap color to color set

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to remap any colors that vary a little from your desired colors back to the desired color. This Action can also remap images to Black or CMYK.

Snap color to color set can be useful to keep tight control over the range of colors in a document.

How to proceed

Define the color set to which the colors in the PDF must be changed as follows:

1. To remap variants of black to 100% black, select **Black**.

   Note: If you want to remap **all colors** in your document to black, **only** select the **Black** checkbox. Do not add any other color.

2. To add another color the colors in the document should be remapped to if they are close to it:
   a. Click **New**. A new entry appears in the text box.
   b. If you want to use a spot color (optionally), select the **Spot color** checkbox and type the name of the spot color in the text field. You should define a CMYK equivalent too (see next step). The name of the spot color is shown in the text box.
   c. Enter the required values for CMYK (expressed in %) in the fields below the New/Remove button. Your changes are shown in the text box.
3. From the **Map images to** list, select the preferred color space for images. You can choose between black, CMYK, and (if applicable) the spot color(s) defined in the previous step.

4.2.1.36. Tag object with an ICC profile

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Tags objects with a Gray, RGB, CMYK or Lab color space with a chosen ICC profile.

You can only tag the stroke or fill color or both. If an object is tagged already, the ICC tag will not be modified, unless you select the **Change ICC profile if object is already tagged** checkbox.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Check ICC tagging* on page 258
- *Check ICC profile version* on page 259

4.2.2. Checks

4.2.2.1. Check bleed

Belongs to

- **Category:** Prepress
- **Type:** Checks
- **Since version:** 2020

What it does
Allows you to check if bleed is missing. You should indicate the areas to be checked, that is the region(s) between the left, right, top or bottom corner of the trim box and the bleed box.

You should also specify where the bleed should start (= distance from the inside of the trim box).

Optionally you can enable the **Mirror margins according to page binding** checkbox and set a **white threshold for white** (by moving the slider or entering a value (in %)). The threshold for white makes sure that a color that is "almost white" (and looks white when printed) is considered white.

New as of PitStop 2021 is the slider to increase or decrease the **detection sensitivity**. A high bleed edge sensitivity will report missing bleed for e.g. tapered objects (because of the small gaps between them). A lower sensitivity value won't. The default value (which usually gives the best results) is 30%.



Note: When upgrading from older PitStop versions, existing Check bleed Actions get a detection sensitivity of 100%, because that best matches the old behavior.

The last option (**Ignore missing bleed smaller than**) allows you to ignore extremely small areas.



Note:

- This is a page-based, pixel-based check: it doesn't look at individual objects, but it renders the whole page and checks the pixels.
- Text objects that cross the trim box but don't reach the bleed box do not trigger bleed errors.

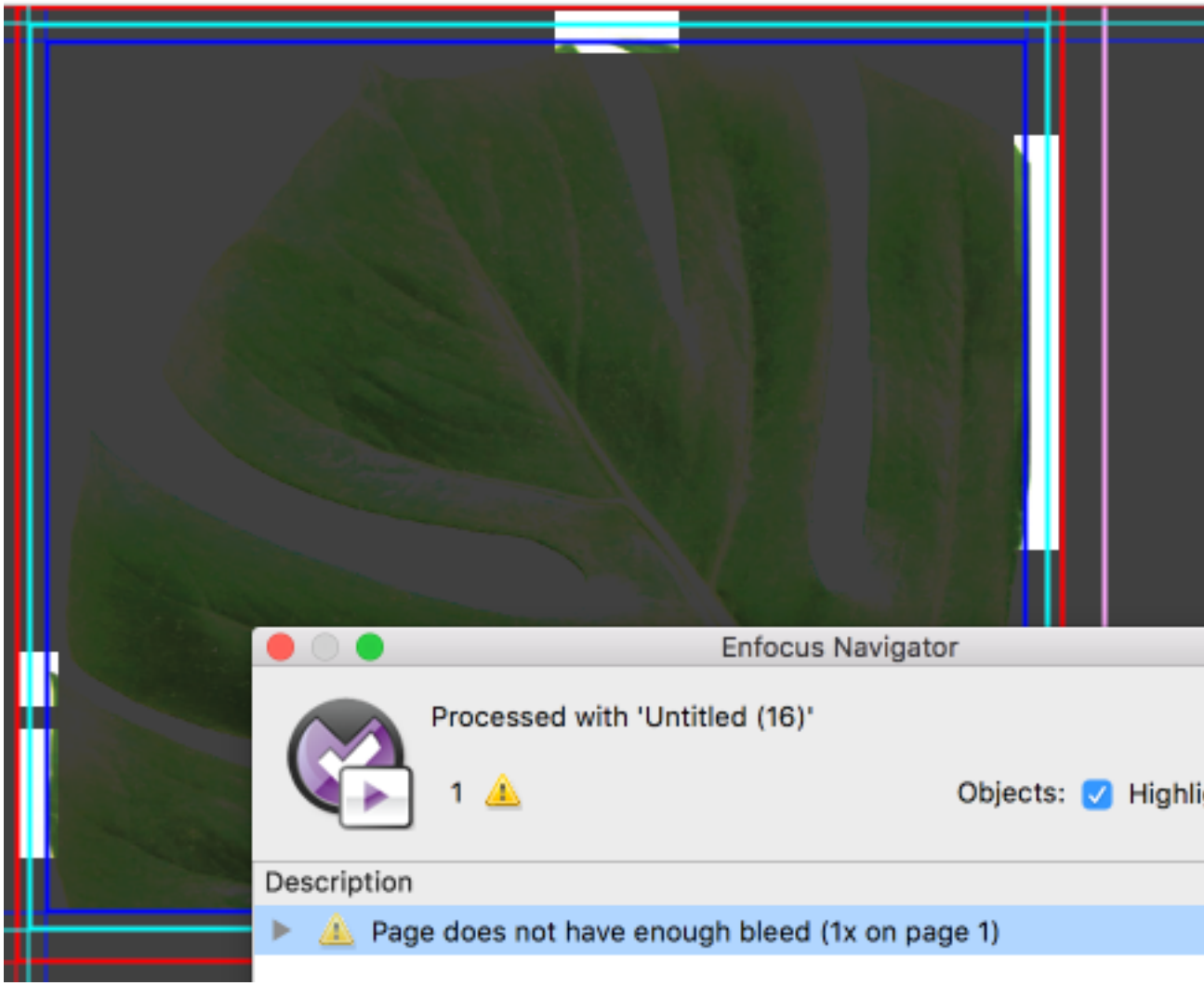
Important remark: The document must have a *valid trim and bleed box*. This is required for PitStop to know where the bleed should start and how big it should be.

Example

Example file with page boxes (media, bleed, trim box) shown:



When 'Highlight' is enabled in the Enfocus Navigator, the white areas show where bleed is missing:



Remark about the corners

By default, corners are checked for bleed if one of the touching sides is being checked. For example, if only the left side of the page should be checked, the upper and bottom left corner of the page will also be included in the bleed check.

There is one exception: if the Action is configured to NOT check the *inner* sides and the check depends on page binding (**Mirror margins according to page binding** selected), the inner corners (the bleed areas of the top and bottom that extend into the inner side) are NOT checked. This is not needed, because in that case, the corners are cut off anyway, so there's no need to check them.

Related Actions

- *Check bleed around contour* on page 251
- *Check bleed contours* on page 253
- *Add bleed* on page 212
- *Add bleed around contour* on page 215

4.2.2.2. Check bleed around contour

Belongs to

- **Category:** Prepress
- **Type:** Checks
- **Since version:** 2021

What it does

Allows you to check if bleed is missing around a contour (typically a dieline or a cut line).

Note that this Action only works on *selected* line art that is not filled. The contour must be closed and it must be a compound path of at least 3 nodes. You must also indicate the color of the contour.



Tip: If the line art you want to check is not a closed or compound path, you can use *Close path* on page 132 and/or *Combine subpaths* on page 132 to create one.

Note that text objects that cross the trim box but don't reach the bleed box do not trigger bleed errors.

Attributes

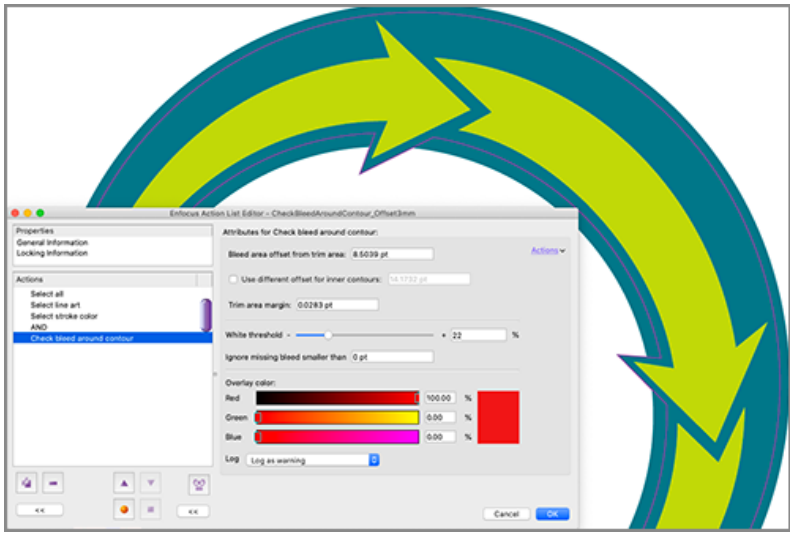
Attribute	Description
Bleed offset	The desired amount of bleed (starting from the contour).
Use different offset for inner contours	Optionally, if you want a different bleed distance value for the outside and inside of a compound shape, you can select this checkbox and enter the value of your choice for the inner contours.
Trim area margin	Indicates how close/far from the trim area the bleed check should start.
White threshold	The threshold for white makes sure that a color that is "almost white" (and looks white when printed) is considered white. The default value is 10%.
Ignore missing bleed smaller than	This option allows you to ignore extremely small objects, like jpeg artefacts.
Overlay color	The color used to highlight where bleed is missing (when viewing the result of the Action List through the Navigator). You could use this option to distinguish between 'missing bleed' (critical error, highlighted in red) and 'not enough bleed' (not critical, highlighted in orange). To get this, you need to add two instances of this Action to your Action List; one with the minimal bleed value (e.g. 2 mm) and red as overlay color, and

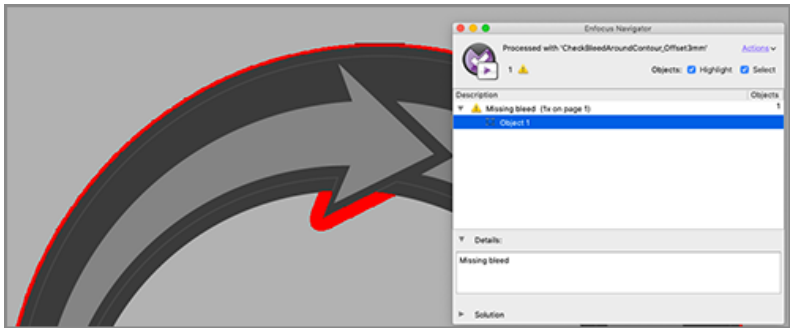
Attribute	Description
	one with the preferred bleed value (e.g. 4 mm) and orange as overlay color.

Example Action List

```
Select line art
Select spot color <!-- color of the contour -->
AND
Check bleed around contour
```

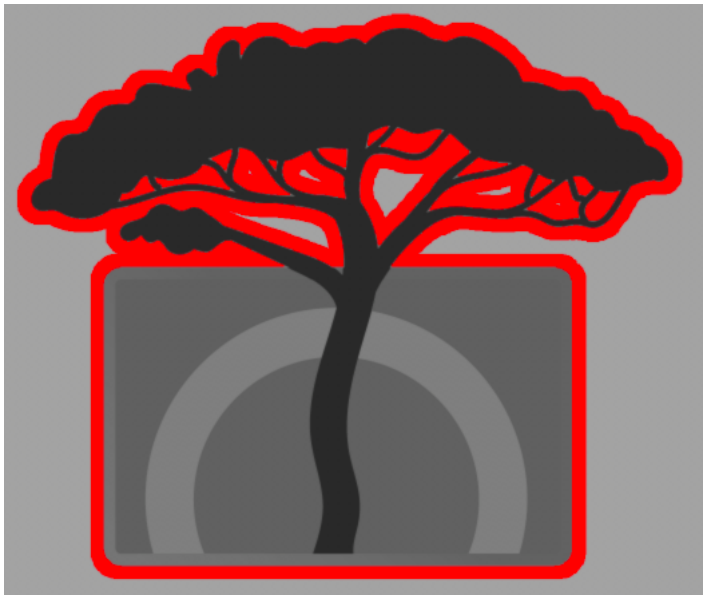
Example 1





Example 2

This Action also works with irregular shapes. Both internal and external missing bleed are highlighted in red (= the chosen overlay color).



Related Actions

- *Check bleed* on page 247
- *Check bleed contours* on page 253
- *Add bleed* on page 212

4.2.2.3. Check bleed contours

Belongs to

- **Category:** Prepress
- **Type:** Checks
- **Since version:** 2021

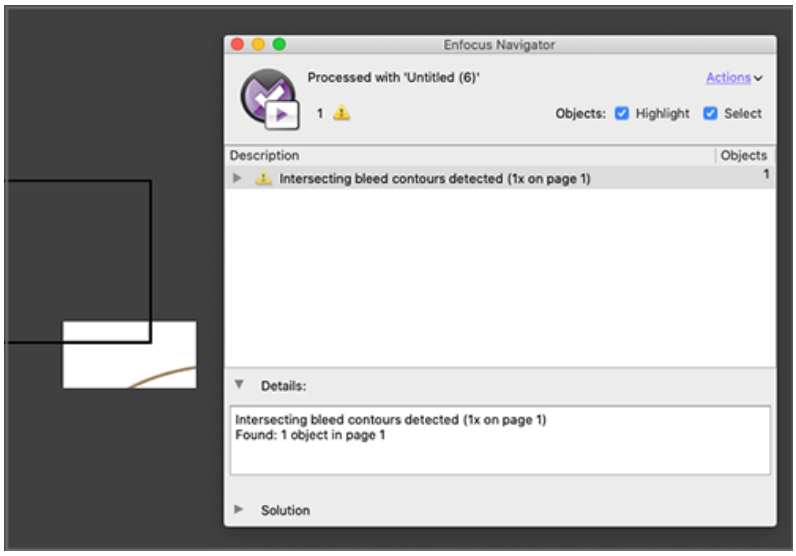
What it does

Allows you to check if bleed contours (typically dielines or cut lines) overlap. That way you can detect if there are objects that come too close to each other. That may for example happen when several different files are merged into one document.

Note that this Action only works on selected line art that is not filled. The contour must be closed and it must be a compound path of at least 3 nodes.

Tip: If the line art you want to check is not a closed or compound path, you can use *Close path* on page 132 and/or *Combine subpaths* on page 132 to create one.

Example



Related Actions

- *Check bleed* on page 247
- *Check bleed around contour* on page 251
- *Add bleed* on page 212

4.2.2.4. Check color type

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if a particular color space is used for particular objects.

For example, check if the **device-specific color space** is used for **text and line-art**.

You can ignore process colors in DeviceN color spaces, as required. (It may not be required to check for the presence of process colors, as they are by default available on the printer.)

In case of ICC Profile Colors, you can either check for all types or for one particular ICC space (ICC based gray, ICC based RGB, ICC based CMYK or ICC based Lab).

4.2.2.5. Check default color spaces

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether default color spaces are used and whether or not they are PDF/X-3 compliant.

4.2.2.6. Check DeviceN attributes

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the PDF's color space is DeviceN or NChannel with a particular attribute.

You can check the following attributes:

- Spot color definitions
- Process color mapping
- Mixing hints
- Solidities
- Printing order
- Dot gain

Related Actions

Select DeviceN with attributes on page 371

4.2.2.7. Check DeviceN colorants

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the non-process colors used in the DeviceN color space are defined in the colorants dictionary, so that they can be used on other devices.

About the DeviceN color space

The DeviceN color space is defined as a list of names. These names can refer to the process colors (CMYK, RGB or Gray) or spot colors. Spot colors can have an alternate in CMYK for output devices that do not recognize their name, or they can just be a name without color definition. If the color is just a name (for example: "Silver" or "MySpot"), it cannot be used on other devices.

Checking the colorants dictionary

You can use the Enfocus PitStop Inspector to check whether a particular spot color has been defined in the colorants dictionary. The colorants dictionary describes the colorants used in the DeviceN color space. Proceed as follows:

1. Select an object with the color you want to check (using the Enfocus Select Object Tool).

2. Click to display the Enfocus Inspector and select  > . Next to the Fill icons, you will see "DeviceN (Spot + process colors)". Below you will see the number of components and their names.
3. Click the **Actions** link (in the top right corner) and select **Color Picker**.
4. In the left part of the Color Picker dialog, navigate to the **Document Spot Colors** folder. This folder contains all spot colors used in the document (not only the ones used for the selected object).
5. Select the spot color you want to check. If the color is just a color name, without a color definition, the Alternate Color Space is Gray.

Related Actions

Select undefined DeviceN colorants on page 379

4.2.2.8. Check DeviceN for process color spaces

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the DeviceN process color space matches the PDF/X Output Intent color space, i.e. whether the DeviceN color space contains only process colors.

About the DeviceN color space

The DeviceN color space is defined as a list of names. These names can refer to the process colors (CMYK, RGB or Gray) or spot colors. Spot colors can have an alternate in CMYK for output devices that do not recognize their name, or they can just be a name without color definition. If the color is just a name (for example: "Silver" or "MySpot"), it cannot be used on other devices.

4.2.2.9. Check for NChannel colors with non-trivial process dictionary

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the PDF contains NChannel colors with non-trivial process dictionary.

About NChannel

NChannel is an extension of the DeviceN color space, a multi-component, device-dependent color space. NChannel color spaces give applications greater flexibility when representing colors that are not available on a target device.

NChannel is supported from PDF 1.6 (Acrobat 7.x) onwards. If you are opening a PDF in an earlier version of Adobe Acrobat, colors can print or display incorrectly.

About process dictionaries

NChannel requires a process dictionary which maps the names used in the colorants list to device colors. This allows giving aliases for process colors.

A "trivial" process dictionary uses aliases that are easy to understand, e.g. maps "Cyan" to the process color "Cyan".

A "non-trivial" process dictionary would use custom aliases, such as "My Process color".

Related Actions

- *Make DeviceN without NChannel information* on page 90

4.2.2.10. Check for pre-separated pages

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the PDF document contains any pages that already have been separated.

A pre-separated PDF contains pages that have been separated into their CMYK components. In offset printing each of these colors is printed with a separate plate. This means that each page in a PDF document is separated into its four constituent colors: cyan, magenta, yellow and black. For example, a pre-separated PDF file for a two-page CMYK print job, results in a PDF file with 8 pages.

This separation process is usually carried out by the RIP, and not in the source PDF document.

4.2.2.11. Check for solids and tints

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

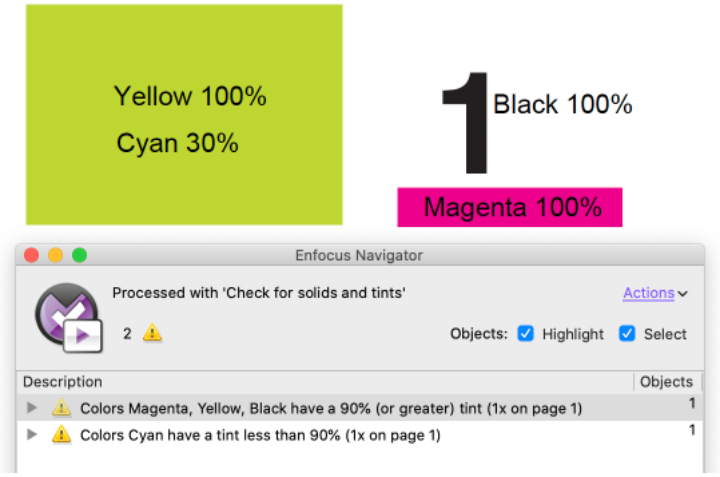
Checks if the PDF document contains any colors that have a tint below or above a set threshold.

The threshold is set in the **Effective solidness threshold** field. The default is 100%.

It's also possible to define a threshold for considering a colorant as a tint, by selecting the **Ignore tints that cover a surface area below** checkbox and entering a value of your choice (in ppm). You can take into account the printable surface area, the surface area of the own channel, or the surface area of all channels. This option is useful to avoid that colorants on pages with for example only 1 non-solid pixel in the rendered page would be marked as a tint.

Example

In this example, the threshold was set to 90%.



4.2.2.12. Check for spot color ambiguity

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Searches for ambiguous spot colors. Spot colors are considered ambiguous if the name of the spot color refers to more than one set of color values.

You can set a number of options, to make the check less strict. You can also include a check on DeviceN color spaces.

4.2.2.13. Check ICC tagging

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks objects to see whether or not they are ICC tagged or tagged with a particular ICC profile in a particular color space. You can check if the fill and/or stroke of the objects are ICC tagged.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Tag object with an ICC profile* on page 99
- *Check ICC profile version* on page 259

4.2.2.14. Check ICC profile version

Belongs to

- **Category:** Color
- **Type:** Checks

What it does
Checks if the ICC profile version is equal to or lower than a particular version number.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99

4.2.2.15. Check if DeviceN printing order is consistent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Check whether the DeviceN printing order is consistent and whether all colorants are defined in the DeviceN printing order.

4.2.2.16. Check if ICC profile differs from ICC profile in PDF/X Output Intent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the fill and/or stroke ICC profile differs from the ICC profile in the PDF/X Output Intent.

As of PitStop 2022, it's possible to compare the ICC profile either with the document Output Intents or with the effective Output Intents. The effective Output Intent is the intent that is actually used. For example, if different Output Intents are applied on different levels (document/page/object), the most specific one is applied.

You can either check the ICC profile of the fill or the stroke, or both.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

About PDF/X Output Intents

Output intents specify the intended printing process and paper type as described by a corresponding ICC profile. The PDF/X Output Intents are defined by the Ghent Workgroup; only printer profiles are allowed as Output Intents, whereas PDF/A also allows monitor profiles.

Output intents are generally specified by the print service provider, but there are also a number of standard Output Intents available, which can be found in the Enfocus Output Intent Panel. For more information, refer to the PitStop Reference Guide.

Note that as of PDF 2.0 it is possible to define Output Intents on page level, whereas before, only document Output Intents were allowed.

Related Actions

- *Remove ICC tag* on page 95
- *Select by tagged ICC Profile* on page 369

- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99
- *Select objects of which ICC profile is equal to ICC profile in PDF/X output* on page 373
- *Check ICC profile version* on page 259

4.2.2.17. Check if blending color space is defined

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the page blending color space has been defined in the PDF document.

You must set the required blending color space and the required luminosity softmask blending color.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The **page blending color space** is the blending color space assigned to a page; it is used when individual artwork does not have a blending color space.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85
- *Select by blending color space* on page 364

4.2.2.18. Check if solidities of DeviceN colorants are consistent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Check if solidities of DeviceN colorants are consistent.

Solidity refers to how spot colors are shown on screen. 100% solidity means that the colors are completely opaque on screen in areas where it is printed at 100% ink density. This Action checks if the solidities are the same for all colors in the DeviceN color space.

4.2.2.19. Check if the color spaces used match the blend colorspaces

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the color spaces used in the PDF match the blend colorspaces.

4.2.2.20. Check ink coverage (basic object check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Checks the total CMYK ink coverage of the color of the **objects** in the PDF.

You can for example check if the ink coverage is at least 300%.

When including images in the ink coverage check, the threshold will determine the minimum area in which the ink coverage has to be exceeded before reporting an error or warning. For example, when entering '0', even 1 dot exceeding the maximum ink coverage will be reported.

Related Actions

Select by ink coverage (basic object check) on page 366

4.2.2.21. Check ink coverage (total page check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Allows you to check the CMYK ink coverage either of all colors combined or per separation on a page (inside a particular page box).

You can for example check if the ink coverage in the media box is at least 300%.

In case of a separation-based check, you may exclude separations with 0% ink coverage (i.e. empty areas without content).

It's also possible to ignore small areas, for example areas smaller than 1 inch.

4.2.2.22. Check number of color plates (basic object check)

Belongs to

- **Category:** Color
- **Type:** Checks
- **Since Version:** 13 update 2

What it does

Checks if the PDF contains *objects* that occur on a certain number of color plates (separations). You can check the object's fill and/or stroke as required.

Related Actions

- *Check number of separations (total page check)* on page 263 (checks everything on a page)

4.2.2.23. Check number of separations (total page check)

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks the number of separations that occur in a PDF file. You can set a precise number (e.g. 5 separations) or a range (e.g. less than 5) and choose whether or not to exclude certain colors (e.g. CMYK plates, spot color All ...). You can also use regular expressions to indicate which separations should not be counted.



Note: From PitStop 2019 onwards, you can exclude C, M, Y and K separately. This is useful when checking black and white jobs, or jobs that have K and a spot color.

You can check the number of separations for the complete document, or for each page separately. The new page-based option allows you to work with a selection, so you can check specific pages, page ranges or other page based selections, for example, you could check if every even page has two color separations.

Note that this option is also useful if you want to know on which page an issue occurs, because the page number is mentioned in the Preflight Report and in the Navigator.

Checking ICC tagged objects

ICC tagging is a way to specify colors independent from the output device: objects are tagged with an ICC profile that contains the transformation from the object's color to a device-independent color. When outputting this on a specific device, that device-independent color is in turn converted to the output device's color space.

Because this conversion depends on the output device, and because it will rarely (if ever) result in less than 4 color plates being used, checking the number of separations on an ICC tagged object will always result in 4 separations.

For example, if you have a black (100% K) ICC tagged object, the number of separations reported by this Action will be 4 (C, M, Y, K) instead of 1 (only K) because some ink will be used on all plates in order to reproduce the color correctly.

4.2.2.24. Check number of spot colors

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks the number of spot colors in a document.

You must enter the number of spot colors the document must have.

If you select the option **Spot colors whose names differ only by their suffix are counted as one**, spot colors with the same name but with a different suffix (e.g. PANTONE 3258 C, PANTONE 3258 U, PANTONE 3258 M) are counted as one color instead of different (3 in this example) colors. For more information about suffixes, refer to *Change spot color suffix* on page 86.

Note that spot color "All" is also counted. This spot color appears on all printing plates (hence the name) and is used for registration and printer marks that lie outside the trim and bleed boxes.

Related Actions

- *Check number of separations (total page check)* on page 263 (this Action has an option to not count Spot Color All)

4.2.2.25. Check objects by tiling pattern

Belongs to

- **Category:** Color
- **Type:** Checks
- **Since version:** 2020

What it does

Allows you to check for tiling patterns in the fill or stroke of text and line art, or in the fill of image masks. You can search for colored or uncolored tiling patterns or both.

Note: You should select at least one checkbox above the divider and one below the divider.

Related Actions

- *Select by tiling pattern* on page 369

- *Select tiling pattern contents according to parent object selection* on page 379

4.2.2.26. Check Output Intent

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the desired color management Output Intent is used on page or document level. Note that the document can only have one Output Intent, whereas different pages in the document can have different Output Intents.

You can check for compliance with a particular PDF/X version and/or check if a particular ICC profile or ICC characterization is used.

Related Actions

Change Output Intent on page 85

4.2.2.27. Check rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Checks

What it does

Allows you to check the rendering intent of particular objects (Paths, Text, Paths or Text, Images, or all Rendering objects) in a PDF.

You can check whether or not they use rendering, and if they do, which type:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Change rendering intent* on page 86
- *Remove rendering intent* on page 96

4.2.2.28. Check required color set

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks for a restrictive range of tints in a PDF.

How to proceed

Define the color set to be checked:

1. To allow the use of 100% black, select **Black**.

   Note: If only black is allowed in the PDF, **only** select the **Black** checkbox. Do not add any other color.

2. To add another color that is allowed in the PDF:
   a. Click **New**. A new entry will appear in the text box.
   b. To allow a spot color (optionally), select the **Spot color** checkbox and type the name of the spot color in the text field. You should define a CMYK equivalent too (see next step). The name of the spot color will be shown in the text box.
   c. Enter the required values for CMYK (expressed in %) in the fields below the New/Remove button. Your changes will be shown in the text box.
3. If only one color should be used for images, select that color from the **Images must use only** list.

Related Actions

Snap color to color set on page 98

4.2.2.29. Check spot color by alternate color space

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Searches for spot colors with an alternate color space definition.

You can search for the following alternate color spaces:

- Device CMYK
- Device gray
- Device RGB
- ICC tagged gray
- ICC tagged RGB
- ICC tagged CMYK

- ICC tagged Lab
- Calibrated gray
- Calibrated RGB
- Lab

4.2.2.30. Check spot color by name

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if one or more particular spot colors are present in the document.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the spot color name.
- From version 13 update 1 onwards, there is an extra option to search for spot color(s) based on a list of names. This new option is useful if different spot color names refer to the same color. It also allows you to check for different spot colors in one go.

How to proceed

In the attributes of the Check spot color Action, proceed as follows:

1. Select the appropriate option from the list:
   - If you choose **Check all spot colors**, no other options have to be set.
   - If you choose one of the other options, you have to specify the name of the spot color(s) that have to be checked. Proceed with step 2.
2. Enter the name of the spot color(s) concerned:
   - In case of **Check spot color by regular expression**, you can use regular expressions. PitStop supports Boost Regular Expressions. For an overview of the options, refer to *http://www.boost.org/doc/libs/1_55_0/libs/regex/doc/html/boost_regex/syntax/perl_syntax.html*.
   - In case of **Check spot color by name** or **Check spot color by name from list**, you can simply type the name of the spot color(s) concerned or use the color picker  or the Grab color button . Note that, in case of a list, you must enter the names one by one, each on a separate line. It is for example not possible to select two colors in the document, and select them in one go, using the Grab color button . Instead, you must select the first color, grab it, then select the second color, and grab it and so on.
3. If the case of the spot color name (upper or lower case letters) does not matter, select the **Ignore case** checkbox.

Related Actions

Select spot color on page 376

4.2.2.31. Check spot color by PANTONE library

Belongs to

- **Category:** Color
- **Type:** Checks
- **Since Version:** 2018

What it does

Checks if the spot colors in the PDF are (are not) part of the selected PANTONE library.

The PANTONE libraries are by default installed with PitStop Pro and PitStop Server.

Extra options are:

- **Ignore non PANTONE spot color names** (to only consider the color type and to ignore differences with respect to the subcategory)
- **Check alternate color values** (to take into account the CMYK/LAB values)

Use case

You can use this Action to identify any "strange" colors of which you do not know how to print them.

Related Actions

- *Normalize PANTONE library names* on page 91
- *Select spot color* on page 376

4.2.2.32. Check spot color suffix

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the spot colors in the PDF have a given suffix. It's also possible to check for unknown suffixes.

You can find an overview of the available suffixes in the table below.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types.

For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Change spot color suffix* on page 86

4.2.2.33. Check usage of device color spaces for PDF/X

Belongs to

- **Category:** Color
- **Type:** Checks
- **New since:**PitStop 2022

What it does

Checks whether the device color space maps to the document Output Intent for the chosen PDF/X version (PDF/X-4 or PDF/X-6).

4.2.3. Informs

4.2.3.1. Gather color information

Belongs to

- **Category:** Color
- **Type:** Informs

What it does

Collects information about the color spaces used in a PDF and presents it in the log.

4.2.3.2. Gather ink information

Belongs to

- **Category:** Color
- **Type:** Informs

What it does

Calculates the amount of each color separation needed to print a page, and a complete document, i.e. how much of each page is actually covered by each ink.

This Action reports the result in % of the page size and also as inch2, cm2 or mm2 depending on your unit preferences. The ink usage report is also included as part of the Preflight Profile editor, so it can be generated within a Preflight Report by checking the **Inks** checkbox (at the bottom of the General section in the Preflight Profile editor). This check is off by default (because the calculation is time consuming).

4.2.4. Selections

4.2.4.1. Select black & white objects

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since Version:** 2018

What it does

Selects black and white images.

You can set a tolerance (an allowed deviation from '100% gray', default tolerance is '3') and tell PitStop how to determine what black and white is:

- **Calculate image average**: Take the color value of each pixel of the image (color and gray values) and calculate the average of this; decide based on this value whether or not it is "black and white".

- **Look for colored areas**: Search for colored areas and take only the values of colored pixels to decide whether or not it is "black and white". If most of the colored values are gray (or close to gray/taking into account the chosen tolerance), the image will be considered black and white; otherwise it will be considered a color image. This method will detect images that are mainly black and white but with a small colored area.

Remarks

- This Action works on all color spaces, on images, text and linear and radial shadings.
- Spot colors are always considered colored images, regardless of their name (e.g. even spot colors with the name 'black' will be considered colors).

Use Cases

- In digital printing, to save on ink, black and white images are preferably printed using black ink only. This Action provides an extra check to distinguish between black and white images with minor color tints (safe to use black) and black and white images with colored areas that definitely need color ink.
- Black text or thin lines (coming from CMYK) can be safely remapped to black only, thanks to this Action, which allows to filter real black text from colored text. Example Action List:

```
select text
select black & white objects
AND
remap color  <!--  target color black -->
```

Examples

The following image will be considered 'black and white' based on the average image calculation, but 'colored' based on the area calculation.



The image below is clearly 'black and white' and will be selected, regardless of the calculation method.



4.2.4.2. Select by blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Selections

What it does

Makes a selection based on the blending color space.

You must set the required blending color space and the required luminosity softmask blending color (or select the option **Undefined**).

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85

- *Check if blending color space is defined* on page 261

4.2.4.3. Select by color space

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects line art (fill and/or stroke) and/or other objects according to their color space.

Example

To select all ICC line art, proceed as follows:

```
Select by color space
<!-- Options:
1. Select both Fill and stroke color space.
2. For both, select "ICC tagged". Optionally, indicate the preferred number of color
 components.
3. Make sure the checkbox under Other objects is cleared
-->
Log selection
```

4.2.4.4. Select by color space in PDF/X Output Intent

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to make a selection based on the color space in the PDF/X Output Intent.

As of PitStop 2022 you should make clear which Output Intents should be taken into account. Options are:

- Document Output Intents (before PDF/X-6)
- Effective Output Intents (since PDF/X-6)
- Document Output Intents (PDF/A-2)

You can choose one of the following color spaces:

- CMYK
- RGB
- Gray

- Unknown

4.2.4.5. Select by ICC tag subtype

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows to make a distinction between ICC-based RGB, ICC-based gray and ICC-based Lab.

Related Actions

- *Check color type* on page 254

4.2.4.6. Select by ink coverage (basic object check)

Belongs to

- **Category:** Color; Prepress
- **Type:** Selections

What it does

Makes a selection of all objects that meet your ink coverage criteria.

You can for example select objects only if the ink coverage is at least 300%.

When including images in this selection, the threshold will determine the minimum area in which the ink coverage criteria have to be met in order to be selected. E.g. when entering '0', even an image of which only 1 dot meets the ink coverage requirement will be selected.

Related Actions

Check ink coverage (basic object check) on page 262

4.2.4.7. Select by number of color plates

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects that occur on a certain number of color plates (separations). You can make the selection based on the object's fill and/or stroke.

Example

You could for example search for objects with 4 color plates (dark gray), and afterwards change gray to CMYK Black. This will reduce the number of plates from 4 plates to 1 plate.

```
Select by number of color plates <!-- Choose 4 -->
Change Gray to CMYK Black <!-- Change Gray to CMYK Black on page 84 -->
```

Related Actions

Check number of color plates (basic object check) on page 263

4.2.4.8. Select by rendering intent

Belongs to

- **Category:** Color;Prepress
- **Type:** Selections

What it does

Selects color managed objects based on a particular rendering intent.

You can select paths, text, images, or all rendering objects, with one of the the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select rendering objects* on page 388

4.2.4.9. Select by spot color suffix

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects with spot colors that use a spot color with either a known suffix or a known suffix which is not of a particular type.

You can find an overview of the available suffixes in the table below.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types. For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Check spot color suffix* on page 268
- *Change spot color suffix* on page 86

4.2.4.10. Select by tagged ICC Profile

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select objects which have (not) been tagged with an ICC profile, or objects with a specific color space and a specific ICC profile.

You can distinguish between stroke and fill color, for example select objects of which the stroke color is ICC tagged.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Check ICC tagging* on page 258
- *Select by tagged ICC Profile* on page 369
- *Tag object with an ICC profile* on page 99
- *Check if ICC profile differs from ICC profile in PDF/X Output Intent* on page 260
- *Select objects of which ICC profile is equal to ICC profile in PDF/X output* on page 373
- *Check ICC profile version* on page 259

4.2.4.11. Select by tiling pattern

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does

Allows you to select text, line art and/or image masks with a tiling pattern. You can select only colored or uncolored tiling patterns, or both.



Note: You should select at least one checkbox above the divider and one below the divider.

Related Actions

- *Check objects by tiling pattern* on page 264
- *Select tiling pattern contents according to parent object selection* on page 379

4.2.4.12. Select color

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects by their fill or stroke color, or both.

How to proceed

Define the colors you want to select as follows:

1. Select the appropriate checkbox, depending on what you want to define (Fill color or Stroke color).

   Note: If both checkboxes are selected, objects that match both fill and stroke colors will be selected. This is equivalent to combining separate actions with the AND operator.

2. Select the appropriate color in one of the following ways:
   a. Select an object with the PitStop Select Objects tool and use the icon to grab the fill or stroke color (depending on what you're defining).
   b. Click the color picker icon and select the appropriate color.
   c. Select the required color space:
      - Device colors can be Gray, RGB or CMYK
      - Calibrated colors can be Gray or RGB
      - User Swatch (= user-defined colors)
3. Fine tune the color by moving the sliders.

4.2.4.13. Select color range

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select objects with a specific color, by specifying the color range of the fill and/or stroke color.

The available options depend on the chosen color space:

- Gray, CMYK or RGB: **search in converted values of other color spaces** (If selected, the result of the conversion is calculated in advance.)
- Separations: You can decide to select either all spot colors or only the spot colors with a particular name. You can type the name or click the **Load Spot Color** button to select it.
- DeviceN process colors: **allow spot colors in DeviceN color space**

Example

To catch all gray objects (either fill or stroke) with a brightness between 0% and 40 %, and turn them into CMYK objects with 100% Cyan color, you can do the following:

```
Select gray fill or stroke color
<!-- This is the "Select color range" Action with the options Fill and Stroke
 selected.
Select "Color space is gray", and in the Gray from field, enter values between 0% and
 40% -->
Change fill and stroke color
<!-- This is the "Change color" Action with Fill and Stroke selected.
Select "Device CMYK" and set Cyan to 100% -->
```

4.2.4.14. Select default color spaces

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select default color spaces or default color spaces that are not defined by PDF/X-3.

Default color spaces are defined on page level. They are used to systematically remap device-specific colors to device-independent colors.



Note: PitStop also provides an Action to ***change*** *default color spaces*.

4.2.4.15. Select DeviceN with attributes

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select the fill and/or stroke of DeviceN and/or NChannel objects.

You must specify which attributes must be present to select the object:

- Spot color definitions
- Process color mapping

- Mixing hints
- Solidities
- Printing order
- Dot gain

Related Actions

Check DeviceN attributes on page 255

4.2.4.16. Select gray

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to make a selection based on the gray color of the fill and/or stroke color of the objects in the PDF.

You can specify how much the actual gray in the document is allowed to deviate from "true" gray (i.e. gray which doesn't have tones of any other color; for RGB this means that the percentage of Red, Gray and Blue is the same; for CMYK, this holds for Cyan, Magenta and Yellow).

4.2.4.17. Select incorrectly defined process color spaces in DeviceN

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select objects that use a DeviceN color space containing a process color space which does not match the PDF/X Output intent.

Related Actions

Check DeviceN for process color spaces on page 256

4.2.4.18. Select non-compliant Output Intent

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects the whole document if the Output Intent is:

- **Not compliant** with a particular PDF/X or PDF/A version, OR
- **Compliant** with a particular PDF/X or PDF/A version, **but the ICC profile or ICC characterization is not as specified**.

You can check the compliance with the following PDF/X versions:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1
- PDF/A-2

4.2.4.19. Select objects of which ICC profile is equal to ICC profile in PDF/X output

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects of which the ICC profile is equal to the ICC profile in PDF/X output. Choose either fill, stroke or both.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Select by tagged ICC Profile* on page 369
- *Check ICC tagging* on page 258
- *Check if ICC profile differs from ICC profile in PDF/X Output Intent* on page 260
- *Tag object with an ICC profile* on page 99

- *Check ICC profile version* on page 259

4.2.4.20. Select page by gray surface

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 13

What it does

Selects gray pages in a PDF based on the total surface (%) of colored content on that page.

You can configure the following attributes:

- How big the non-gray area should be, e.g. less than 90% should be non-gray
- Whether or not a deviation from gray is allowed, e.g. if only "pure" gray should be selected, choose 0% as deviation.
- Which of the page boxes defines a page.

Use cases:

- Use this Action in combination with *Log selection* to detect whether a PDF should be printed in color or in black and white.
- Use this Action in combination with *Convert color* to select gray pages and convert the colors to grayscale (to save ink).

Example

The following Action List selects the pages in your PDF that have almost no colored content (less than 5% of the page - the page being defined by the trim box). There is a small tolerance allowed, meaning that colors that are "almost gray" are also considered "gray".

```
Select page by gray surface
                <!-- Select page if non-gray surface is less than 5% of the total
 page area  -->
                <!-- Ignore color that deviates less than 3% from gray -->
                <!-- Page area is defined by the trim box -->
```

Related Actions

- *Select gray* on page 372
- *Select page by ink coverage (non-Black only)* on page 374

4.2.4.21. Select page by ink coverage (non-Black only)

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 13

What it does

Selects gray pages in a PDF.

This Action detects the ink coverage of color content (CMY and spot colors) in a page and selects the pages for which the maximum ink coverage of each non-black separation is below a particular percentage (as defined in the Action). You can ignore small non-gray areas (e.g. a company logo) and limit the check to an area inside a particular page box as required.

Use cases:

- Use this Action in combination with *Log selection* to detect whether a PDF should be printed in color or in black and white.
- Use this Action in combination with *Convert color* to select gray pages and convert the colors to grayscale (to save ink).

Example

The following Action List selects all pages with CMY or spot color values lower than 5%. These pages may have a very small colored area (< 5 cm) or colors outside the trimbox.

```
Select gray page <!-- Select page if ink coverage of each non-Black separation is less
 than 5% -->
                 <!-- Ignore non-gray areas smaller than 5 cm -->
                 <!-- Only check inside the trim box -->
```

Related Actions

- *Check ink coverage (total page check)* on page 262 : checks the ink coverage of *all* colors (including black)
- *Select page by gray surface* on page 374

4.2.4.22. Select process colorant

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does

Selects the colorant(s) of your choice (Cyan, Magenta, Yellow, Black).

It's typically used with *Add trace path* (to draw a path around the selected process colors) or with *Check ink coverage (total page check)* (to check the ink coverage of one or more process colors).

Examples

Example 1:

Using the following Action List, you can draw a path based on the selected colorants (CMY in this example).

```
Select process colorant (CMY on) - channels on which the Action will work
```

```
Select all - objects that will be used to trace the path
Trace path (Use colorant selection on) - draws the path based on the selected
 colorants
```

Example 2:

```
Select process colorant
Check ink coverage (total page check)
```

Related Actions

- *Add trace path* on page 71
- *Check ink coverage (total page check)* on page 262

4.2.4.23. Select shading objects

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects all shading objects.

Shadings represent complex mathematical functions. That's why certain output devices may not be able to correctly interpret them. Shadings can also cause problems during color conversions.

Note: As of PitStop 7, shadings can be color converted.

4.2.4.24. Select spot color

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select either all spot colors in a PDF file, or one or more particular colors, based on their names.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the spot color name.
- From version 13 update 1 onwards, there is an extra option to select a spot color based on a list of names. This new option is useful if different spot color names refer to the same color, so you can easily run a fix on objects with differently named spot colors. It also allows you to select different spot colors in one go.
- From version 2018 onwards, you can select spot colors by a Pantone Library.

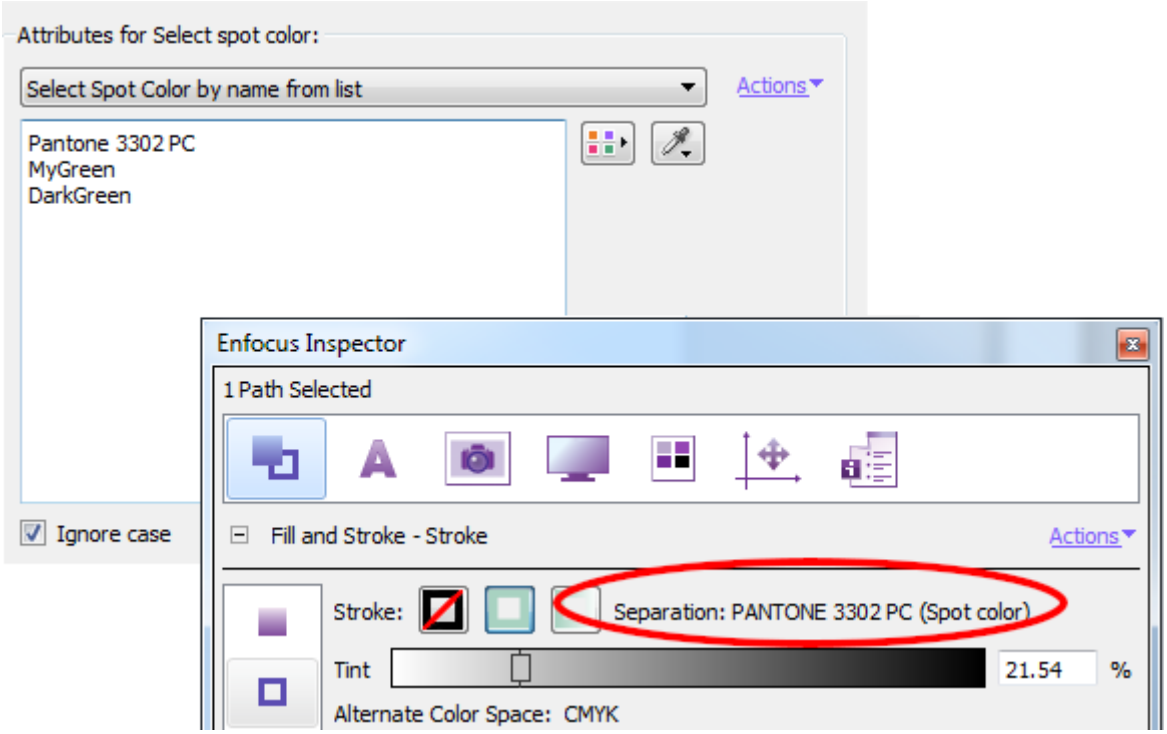
How to proceed

In the attributes of the Select spot color Action, proceed as follows:

1. Select the appropriate option from the list:
   - If you choose **Select all spot colors**, no other options have to be set.
   - If you choose **Select Spot Color by PANTONE color library**, you should select the library of your choice from another list that is displayed.

     You can further reduce your selection based on the alternate color values:
     - Ignore the alternate color values
     - Select only colors with correct alternate color values
     - Select only colors with wrong alternate color values
   - If you choose one of the other options, you have to specify the name of the spot color(s) that have to be selected. Proceed with step 2.
2. Enter the name of the spot color(s) concerned:
   - In case of **Select spot color by regular expression**, you can use regular expressions. PitStop supports Boost Regular Expressions. For an overview of the options, refer to *http://www.boost.org/doc/libs/1_55_0/libs/regex/doc/html/boost_regex/syntax/perl_syntax.html*.
   - In case of **Select spot color by name** or **Select spot color by name from list**, you can simply type the name of the spot color(s) concerned or use the color picker  or the Grab color button . Note that, in case of a list, you must enter the names one by one, each on a separate line. It is for example not possible to select two colors in the document, and select them in one go, using the Grab color button . Instead, you must select the first color, grab it, then select the second color, and grab it and so on.
3. If the spot color should be selected regardless of its case (upper or lower case letters), select the **Ignore case** checkbox.

Example



In this example, PitStop will search for three different spot color names (Pantone 3302 PC, MyGreen, DarkGreen, not taking into account the case of the names), which may (or may not) refer to the same color. Suppose the document contains a spot color called "PANTONE 3302 PC", then it will be found and selected.

Related Actions

- *Check spot color by name* on page 267
- *Check spot color by PANTONE library* on page 267

4.2.4.25. Select spot color by alternate color space

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects spot colors based on their alternate color space.

For example, select a spot color if its alternate color space is ICC tagged RGB or Device RGB.

Example

To convert a spot color's alternate color space to another color space, for example CMYK, proceed as follows:

```
Select spot color by alternate color space <!-- select the appropriate alternate color
 space(s) -->
```

```
Convert alternate color space to CMYK  <!-- (See Convert alternate color space to CMYK
 on page 87) -->
```

4.2.4.26. Select tiling pattern contents according to parent object selection

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does

Allows you to select the tiling pattern content depending on whether or not the parent object (e.g. text or line art) is selected.

There are two options:

- Select the tiling pattern content if the parent object is selected.
- Select everything except the tiling pattern content of parent objects that are not selected.

4.2.4.27. Select undefined DeviceN colorants

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects which use a DeviceN color space (including NChannel) that contains spot colors that are not defined in the colorants dictionary.

About the DeviceN color space

The DeviceN color space is defined as a list of names. These names can refer to the process colors (CMYK, RGB or Gray) or spot colors. Spot colors can have an alternate in CMYK for output devices that do not recognize their name, or they can just be a name without color definition. If the color is just a name (for example: "Silver" or "MySpot"), it cannot be used on other devices.

Checking the colorants dictionary

You can use the Enfocus PitStop Inspector to check whether a particular spot color has been defined in the colorants dictionary. Proceed as follows:

1. Select an object with the color you want to check (using the Enfocus Select Object Tool).
2. Click to display the Enfocus Inspector and select > . Next to the Fill icons, you will see "DeviceN (Spot + process colors). Below you will see the number of components and their names.

3. Click the **Actions** link (in the top right corner) and select **Color Picker**.
4. In the left part of the Color Picker dialog, navigate to the **Document Spot Colors** folder. This folder contains all spot colors used in the document (not only the ones used for the selected object).
5. Select the spot color you want to check. If the color is just a color name, without a color definition, the Alternate Color Space is Gray.

Related Actions

Check DeviceN colorants on page 255

4.2.5. Settings

4.2.5.1. Override color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Replaces any color management settings from the PDF Profile or general PitStop preferences with the settings defined here. These settings will be used when converting colors.

4.2.5.2. Restore previous color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Allows you to revert to the previous color management settings (if you have changed them before, in the same Action List).

Related Actions

Save color management settings on page 446

4.2.5.3. Save color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does
Allows you to save the current color management settings (changed in the Action List).

Related Actions

Restore previous color management settings on page 445

4.3. Document

4.3.1. Changes

4.3.1.1. Add unique document IDs

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Adds a unique document ID (generated at random) to your document.

Related Actions

Check document unique IDs on page 271

4.3.1.2. Change document encoding

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Changes the PDF encoding to binary or ASCII.

About document encoding

ASCII encoding was formerly required to ensure that PDF files could be safely transported via e-mail or the Internet. However, most e-mail software in use today handles non-ASCII documents normally, eliminating the need to ASCII-encode your document.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Check data format* on page 271
- *Select by document encoding* on page 380

4.3.1.3. Change initial view

Belongs to

- **Category:** Document
- **Type:** Changes
- **Since version:** 12 update 2

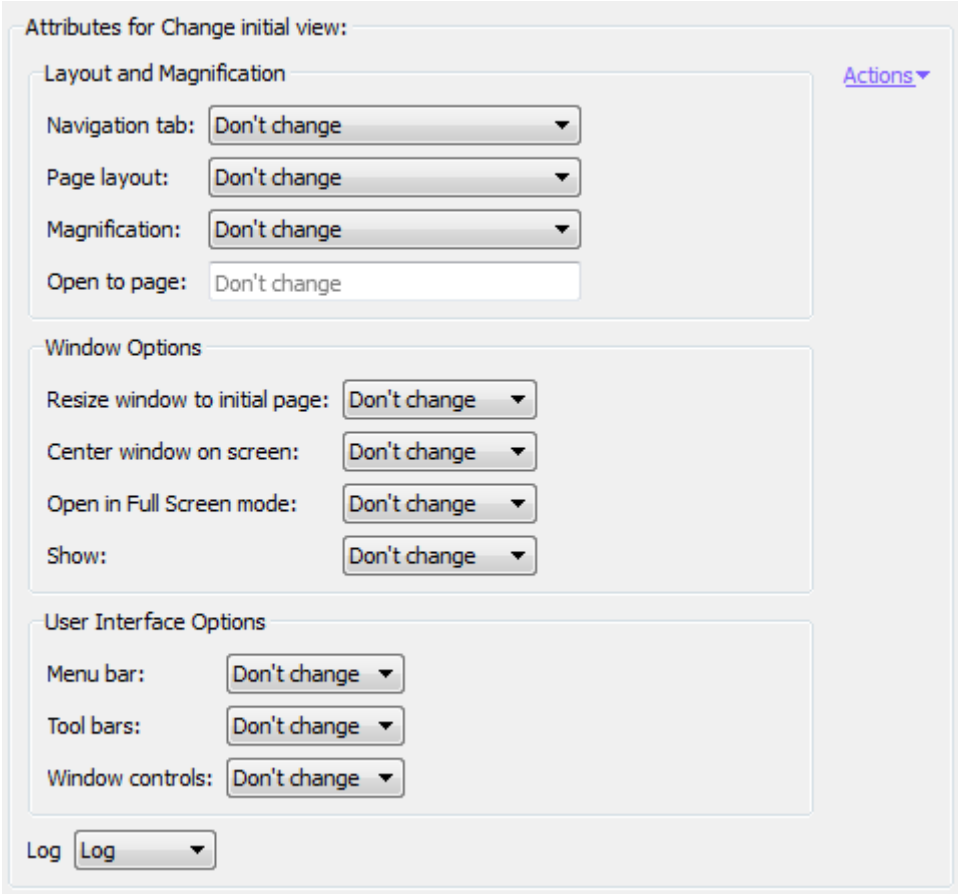
What it does

Allows the initial view settings of a PDF to be set or adjusted. The initial view is the way the PDF appears when it is opened in Adobe Acrobat or Adobe Reader (also when it is opened within a browser).

You can make a lot of changes, for example choose a particular page layout or magnification level, turn on or off certain window options, hide application toolbars or window controls ...



Note: The attributes for this Action, correspond to the Initial View options in Adobe Acrobat (See **File** > **Properties**, select the **Initial View** tab). If you do not change the attributes, these settings will be used. For a detailed overview of the meaning of each option, refer to the *Adobe help files*.



4.3.1.4. Change PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does

Allows you to change the text encoding of a PDF to comply with a particular PDF version.

Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change inline image syntax* on page 114

4.3.1.5. Impose document

Belongs to

- **Category:** Document
- **Type:** Changes
- **Since version:** 2021

What it does

Allows you to arrange the pages of the document so that once the printed signature sheets are folded and trimmed, the pages appear in the correct order.

Note:

- This Action expects that the number of pages of the input document is a multiple of 4. If that is not the case, empty pages will be added. For example, if the input PDF has 18 pages, 2 empty pages will be added. The imposed file will have 10 sheets in total (of which one is empty).
- If there are pages of different size, the sheet size is based on the largest page size.

Important remark

If you want to make changes to the resulting imposed document (for example add bleed), you can do so in the same Action List on condition that the additional Actions are preceded by a *Split Action List* Action.

Attributes

Attribute	Description
Layout tab	
Clip source page to <page box>	Determines what part of the source page should be visible on the imposed result. By default, this is the bleed box.
Spread type	Determines the order in which the pages will be arranged. Options: • **Printer**: Pages are arranged in such a way that when the document is *printed*, trimmed and assembled, the pages appear consecutively. • **Reader**: Pages are arranged in consecutive order, like when you *read* a book.
Binding edge	Options: • **Get from document** (default) • **Left**

Attribute	Description
	• **Right** This option allows handling documents that have content in right-to-left script (like Arabic).
Finishing tab	
Gutter width ...	Width of the space or margin between the pages on the resulting sheets. This value applies to all pages of the document.
Limit bleed into gutter to ...	Maximum amount of bleed allowed in the margin between the pages on the resulting sheets. If no limit is set, the entire gutter is used. This option can be useful to avoid issues with milling and gluing. **Note:** • The maximum amount of bleed in the gutter area is limited to 1/2 of the gutter size. • If the gutter width is 0, this option is grayed out.
Define sheet size manually	Allows you to determine the size of (the media box of) the imposed document. This can be useful if you want to add space for the printing marks, colorbars, gripper edge, etc. **Note:** The source pages are not automatically scaled to make them fit nicely on the new sheet size. If needed, you can run the *Scale to fit page size* Action to do that (before imposing the document).
Marks tab	
Insert print marks (trim, gutter, and fold)	Puts print marks on the sheets. **Note:** If there were print marks on the original sheets, they are removed (regardless of this option).

Example

- Input file: A PDF file with 6 pages (1-6).
- Resulting printer spread (4 sheets):



- Resulting reader spread (4 sheets):



4.3.1.6. Make viewer preferences PDF/X compliant

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Allows you to change the viewer preferences of the PDF document, to make them PDF/X compliant.

PDF/X-1a:2003 and PDF/X-3:2003 require the view area, view clip, print area and print clip to be set to the media (or bleed) box.

As of PitStop 2022 it's also possible to remove the viewer preferences (all or only the one(s) of your choice).

Related Actions

Check PDF/X viewer preferences on page 277

4.3.1.7. Optimize document structure

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Guarantees that the underlying document structure of your PDF is efficient, for example by improving the compression of the document as required.

4.3.1.8. Overlay PDF

Belongs to

- **Category:** Document
- **Type:** Changes
- **Since:** 2020

What it does

Enables you to use a PDF as overlay or underlay in another document.

Note:

- This Action provides the same functionality as the Place PDF tool (part of the PitStop Edit toolset) in PitStop Pro.
- There's also an Overlay PDF app that can be used in a Switch workflow. It's available for download on the *Enfocus Appstore*.

Tabs

Tabs	
Source	The **Source File** is the file that will be added to the currently opened PDF. It will be placed on top of the current PDF, unless you have selected the **Put source page content behind target page content** checkbox on the Misc tab. You should specify the source file via the **PDF file path**, which refers to the location of the PDF. You can browse to the PDF file or you can enter the file path, optionally using variables. **Use page box** allows you to set the page box that you want to use. Finally, you should choose the preferred behavior (**Repetition Policy**) in case the added PDF file has fewer pages than the target PDF file. There are three options: • **Stop overlaying after last source page is used** (default option): if selected, the last page(s) of the target document won't have an overlay. • **Repeat last page**: the last page of the source file will be used as overlay for the last page(s) of the target document (until all pages have an overlay). • **Repeat all pages**: PitStop will add overlay pages, starting again from the beginning of the source file until all pages have an overlay.
Target	The **Target Area** indicates where the overlay should be placed. You can enter the coordinates of the area (manually, or grab from a selection), or you can specify the target page box. The **Scaling options** allow you to specify how the page should be scaled, if the added PDF file has a different page size than the target file. Options are: • Do not scale • Scale to fit, preserving aspect ratio • Fit width / fit height, preserving aspect ratio • Scale to fill, preserving aspect ratio (scales the source page enough to fit the larger dimension of the target page while preserving the source page's aspect ratio) You can also determine how the source content should be **aligned** to the target area (center, top, bottom, upper left, right, ...)

Tabs	
Misc	On this tab, you have two options: • **Change the opacity** of the source by moving the slider to the left. The default is 100% opacity. • **Put source page content behind target page content** to have an underlay instead of an overlay.

Remark

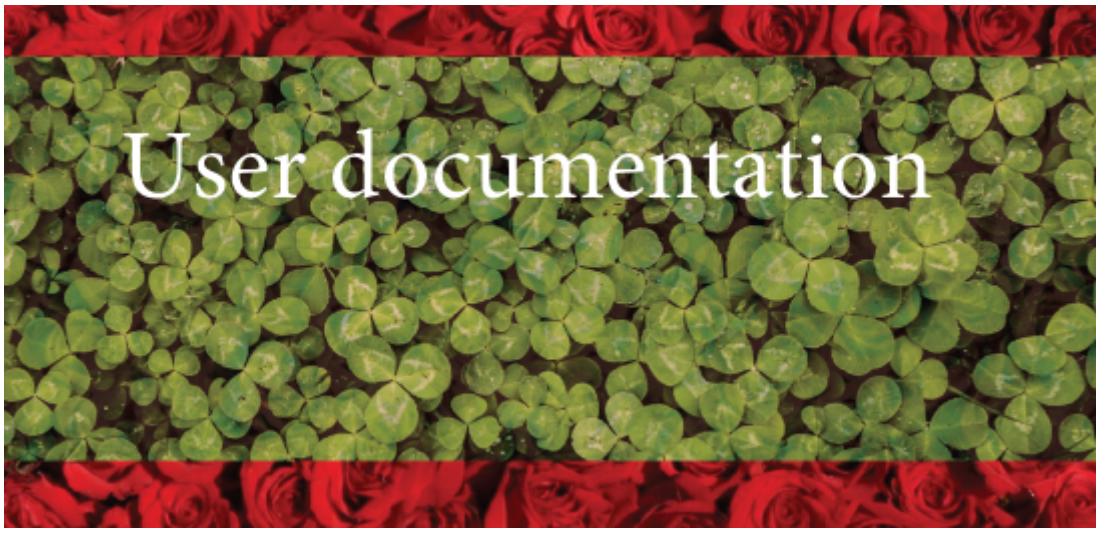
Note: The target page content for both overlays and underlays includes the content generated by previous runs of the Action. This is important in the case of underlays where, for an Action list with multiple underlays, the drawing order of the content generated by the instances of this Action is the reverse of the order in which the Actions themselves appear in the Action List.

Example:

The following Action List is run on a cover page which only contains a title in white. Both Actions have **Put source page content behind target page content** enabled.

```
Overlay PDF    (source file: PDF with an image of green clover, 80% opaque)
Overlay PDF    (source file: PDF with an image of roses, 100% opaque)
```

The result is a PDF with an image of roses in the background and the green clover on top of it.



4.3.1.9. Remove alternate presentations

Belongs to

- **Category:** Document
- **Type:** Changes
- **Since:** 2022

What it does

Removes the AlternatePresentations entry from the name dictionary of the selected document.

This is a fix for PDF/X-6, as PDF/X-6 does not allow alternate presentations.

4.3.1.10. Reorder pages

Belongs to

- **Category:** Page; Document
- **Type:** Changes
- **Since Version:** 2017

What it does

Allows you to change the order of the pages in a document.

There are three preconfigured options:

- Reverse pages (first page becomes last etc)
- Swap first and last page
- Swap even and odd pages

When you select one of these options, you can immediately see the new page order in the Preview section at the bottom of the pane.

Apart from that, you can configure for each individual page what the new page number should be. To do so, you should select 'Custom' from the list of options and enter the page numbers in the preferred order (one by one, or using the notation explained in the GUI).



Note:

- Any 'forgotten' pages (not listed in the custom order), will be added at the end.
- If a page is by accident listed twice, the first occurrence counts.

By default, page labels are re-ordered together with the pages, unless you clear the **Move page labels** checkbox.

Examples

In the table below you can find some examples. Remember that you can enter any combination you want; you're warned about syntax errors and you can preview the page order for a document of up to 1000 pages.

Notation	Meaning
One single page number 5	Put this page first, then add the other pages without changing the order. *5,* **1, 2, 3, 4, 6, 7, 8, 9, 10**
R followed by one page number R5	Put this page counting from the back first, then add the other pages without changing the page order. *6,* **1, 2, 3, 4, 5, 7, 8, 9, 10**

Notation	Meaning
One single page number followed by three dots 5...	Put this page first, add the following pages till the end of the document, finally add the missing pages (all without changing the page order). *5*, 6, 7, 8, 9, 10, **1, 2, 3, 4**
R number followed by three dots R5... R1...	Put this page counting from the back first, then put the following pages counting from the back of the document, finally add the other pages (7-10) *6*, 5, 4, 3, 2, 1, **7, 8, 9, 10** *10*, 9, 8, 7, 6, 5, 4, 3, 2, 1
(number, number) ... (2,1)... (6,5)...	Swap the pages in between the brackets and do the same for the rest of the document. Other pages are added at the end. *2, 1*, 4, 3, 6, 5, 8, 7, 10, 9 *6, 5*, 8, 7, 10, 9, **1, 2, 3, 4**
R number (number-number) number (number, number) R1 (3-6) 2 (8,7)	Put the last page first (10), then a page range (pages 3 to 6), then a particular page (2), then swap even and odd pages (swap 8 and 7), add leftover pages (1, 9). *10*, 3, 4, 5, 6, *2*, 8, 7, **1, 9**

Use case

When receiving PDFs in spreads, after having split the pages and added marks and bleeds, page 1 (which is actually the back cover) should be moved to the last page. Using this Action, that's very easy.

Remark

Due to a refresh issue in Adobe Acrobat, sometimes the page order seems not to be changed after successfully running the Action. Saving and reopening the document may solve the issue.

4.3.2. Checks

4.3.2.1. Check access control

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the document is protected in any way, for example with passwords, certificate IDs or file permission settings.

As of PitStop 2022, this Action has a number of attributes. You can now either check for the presence of a permission dictionary or for the presence of certain permission types (UR, UR3, DocMDP, DocMDP with a Signature references dictionary containing DigestLocation, DigestMethod or DigestValue).

Note that this check is useful to check for PDF/X-6 compliance (which allows UR3 and DocMDP).

4.3.2.2. Check Certified PDF state

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the Enfocus Certified PDF status of a PDF.

You can log whether

1. The Certified Preflight Profile matches a particular Profile. You can select a Profile from the database on your computer or from your disk/network (which hasn't been imported yet in PitStop).
2. The PDF being checked is Preflighted or Preflighted without errors.
3. All saved sessions or only the last saved session must be valid.



Note: A session is invalid if it refers to changes made by an external program.

Related Actions

See also *Remove Certified PDF workflow information* on page 229

4.3.2.3. Check contents compression

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF contains streams that are not compressed with some content compression method (CCITT, Flate, DCT or JBIG2). Compression allows you to make the file smaller.

4.3.2.4. Check data format

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the data format of a PDF is either Binary (=non-ASCII) or ASCII.

ASCII-encoding increases the file size, but allows files to be sent through older network protocols that cannot handle non-alphanumeric characters.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Select by document encoding* on page 380
- *Change document encoding* on page 100

4.3.2.5. Check document unique IDs

Belongs to

- **Category:** Doc
- **Type:** Changes

What it does

Allows you to check if the PDF has a unique document ID.

Related Actions

Add unique document IDs on page 99

4.3.2.6. Check file identifiers in document XMP metadata

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the PDF for missing file identifiers in the document metadata, for example: VersionID, DocumentID or RenditionClass.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

- *Check presence of document metadata stream* on page 313

- *Check if date is present in document XMP metadata* on page 307
- *Set XMP file identifiers* on page 156

4.3.2.7. Check for alternate presentations

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the PDF contains alternate presentations.

This mechanism is used for slideshow displays and is therefore not desired in a print document.

4.3.2.8. Check for garbage after the PDF End-Of-File marker %%EOF

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the PDF contains undesired characters after the end-of-file marker EOF.

If this is the case, the PDF is malformed. The last line of a PDF should only contain the EOF marker.

To solve this problem, you can do one of the following:

- Open the PDF in Adobe Acrobat and save it (using **File** > **Save As**).
- Process the PDF with PitStop Server (with the option **Full Save** enabled).

Related Actions

Check for unreadable data in front of the PDF header signature on page 273

4.3.2.9. Check for file structure problems

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether the structure of the PDF conforms to the file structure as defined by the PDF specification of your choice.

Options are:

- PDF/A-1
- PDF/A-2
- PDF/X-6

4.3.2.10. Check for unreadable data in front of the PDF header signature

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks for unreadable data in front of the PDF header signature.

Related Actions

Check for garbage after the PDF End-Of-File marker %%EOF on page 272

4.3.2.11. Check if compression filters are PDF/X compliant

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether compression filters used in the PDF are compliant with a specific PDF/X version.

Select the desired PDF/X version:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1
- PDF/A-2

4.3.2.12. Check if document does not need repair

Belongs to

- **Category:** Doc

- **Type:** Checks

What it does

Checks whether a PDF is damaged and needs to be repaired when it is opened.

A PDF file can be damaged, for example, if you downloaded it from the Internet and the file transfer was incomplete.

If a PDF is damaged, you can try to redistill it or save it in Adobe Acrobat, using **File** > **Save as**. If this doesn't solve the problem, you will have to recreate the PDF from the source file, or download it again (if the problem was caused by a corrupt download).

4.3.2.13. Check if document has enough high-ASCII bytes in the PDF header

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF header contains at least 4 high-ASCII bytes in the PDF header.

There are three checkboxes:

- **Check header has at least 4 high-ASCII bytes**
- **Check for single EOL character after version header**
- **Check version header format**

The PDF specs require that there should be 4 contiguous high-ASCII bytes in the PDF header, so to check the compliance with the PDF specs, the first checkbox should be selected.

The PDF/A specs require that the 4 contiguous high-ASCII bytes in the PDF header should be the first bytes immediately after the header line, so to check the compliance with PDF/A, checkbox 1 and checkbox 2 should be selected.

For PDF/A-2 and PDF/X-6, all three checkboxes should be selected.

For a check for PDF/A-1, only the first checkbox should be selected.

4.3.2.14. Check if document is optimized for Fast Web View

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Verifies if the document is optimized for the Web.

A document that has been optimized for the Web often has a significantly smaller file size. This is achieved by replacing images that occur more than once in the document with pointers to the first instance of these images. Also, the PDF document is restructured to allow page-at-a-time

downloading over the Internet: only the page viewed by the user is downloaded, thus avoiding long loading times for larger PDF documents.

4.3.2.15. Check if document requires PostScript LanguageLevel 3

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks a PDF to see if it contains PostScript Level 3-specific features such as transparency or smooth shadings.

About Adobe PostScript

Adobe PostScript is a page descripting language developed by Adobe in 1985. The language has changed over the years, resulting in different versions:

- Adobe PostScript Level 1: first, original version.
- Adobe PostScript Level 2: enhanced version; added support for different page sizes and better color printing.
- Adobe PostScript LanguageLevel 3: improved handling of graphics, supports more fonts, and speeds up printing.

For more information, refer to *http://www.adobe.com/products/postscript/pdfs/PLRM.pdf*.

4.3.2.16. Check number of pages

Belongs to

- **Category:** Page;Doc
- **Type:** Checks

What it does

Checks the number of pages in a PDF.

You can for example check if there are less/more than x page(s), or if the PDF contains an odd/even number of pages ...

4.3.2.17. Check object compression

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the compression of the PDF structure (possible as of PDF 1.5).

You can also check if the compression is compliant with PDF/X.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to check if the PDF contains such compressed streams, which you can afterwards remove if required.

Related Actions

- *Remove object compression* on page 231
- *Check optimal compression* on page 283

4.3.2.18. Check objects by tiling pattern

Belongs to

- **Category:** Color
- **Type:** Checks
- **Since version:** 2020

What it does

Allows you to check for tiling patterns in the fill or stroke of text and line art, or in the fill of image masks. You can search for colored or uncolored tiling patterns or both.

Note: You should select at least one checkbox above the divider and one below the divider.

Related Actions

- *Select by tiling pattern* on page 369
- *Select tiling pattern contents according to parent object selection* on page 379

4.3.2.19. Check PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Allows you to check if the text encoding of a PDF complies with a particular PDF version. Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Related Actions

- *Change PDF text string encoding* on page 101

4.3.2.20. Check PDF/X viewer preferences

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF document complies with the viewer preferences as required by the PDF/X specifications.

PDF/X-1a:2001 and PDF/X-3:2002 have no special viewer requirements.

PDF/X-1a:2003, PDF/X-3:2003, PDF/X-4 and PDF/X-4p require the view area, view clip, print area and print clip to be set to the media (or bleed) box. If set to the bleed box, PDF/X-3:2003 requires that at least one page has a bleed box, whereas PDX/-4(p) requires that all pages have a bleed box.

PDF/X-6 and PDF/X-6p do not allow a view area, view clip, print area or print clip.

Related Actions

Make viewer preferences PDF/X compliant on page 102

4.3.3. Informs

4.3.3.1. Gather filters information

Belongs to

- **Category:** Doc
- **Type:** Informs

What it does

Collects information about:

- The data format of the file (ASCII/binary)
- Whether or not compression is used
- The compression filters (if any), for example: ZIP, JPEG, LZW, ...

This information is presented in the Preflight Report under **General File Information** > **Compression**.

Related Actions

Check data format on page 271

Check contents compression on page 271

4.3.3.2. Gather Output Intent information

Belongs to

- **Category:** Doc
- **Type:** Informs

What it does

Collects information about the Output Intents used in a PDF document and presents it in the log.

In the report, you can find the following information (if Output Intents are used):

- ICC profile or ICC characterization name
- Registry name
- Additional information

4.3.4. Selections

4.3.4.1. Select by document encoding

Belongs to

- **Category:** Doc
- **Type:** Selections

What it does

Selects a document based on its encoding (binary or ASCII).

About document encoding

ASCII encoding was formerly required to ensure that PDF files could be safely transported via e-mail or the Internet. However, most e-mail software in use today handles non-ASCII documents normally, eliminating the need to ASCII-encode your document.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Check data format* on page 271

- *Change document encoding* on page 100

4.3.4.2. Select document

Belongs to

- **Category:** Doc
- **Type:** Selections

What it does

Allows you to select the whole document.

4.4. General

4.4.1. Changes

4.4.1.1. Change object order

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Changes the layer position of an object in a PDF.

You can choose to move the object forwards, backwards, to the front, or to the back depending on where you want your object to appear in the layer stack.

4.4.1.2. Copy or cut objects to clipboard

Belongs to

- **Category:** General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does

Allows you to cut or copy the selected objects to a clipboard. You should give the clipboard a name (by default: Untitled 1), to avoid confusion when copy-and-pasting different selections in

one Action List. You can use up to 1,000 clipboards if you wish, however it is important to realize that these clipboards are not saved; they are only used while the Action List in which they are used is run.

This Action should be preceded by a selection (i.e. to select the object you want to cut or copy) and followed by *Paste objects from clipboard* on page 74 in the same Action List. You cannot cut or copy something to a clipboard in one Action List and then paste it within another Action List.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut or copy.
3. Add a *Cut or copy objects to clipboard* Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 1, e.g. if you added "Select all" in step 1).
5. Add a *Paste objects from clipboard* on page 74 Action and set the attributes on the different tabs (e.g. to define the position of the pasted objects).



Note:

- Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.
- If there is nothing to select to cut or copy (i.e. the select Action of step 2 in the above procedure result in an empty selection), the content of the clipboard is not overwritten with an "empty" set of objects! The previous content (if any) is preserved and will be pasted once more. If you do not want this, you can select the **Clear clipboard after paste** checkbox in the attributes of *Paste objects from clipboard* on page 74 Action.

Related Action

- *Paste objects from clipboard* on page 74

4.4.1.3. Normalize line weight

Belongs to

- **Category:** General; LineArt; Position and size
- **Type:** Changes

What it does

Normalizes paths where a transformation matrix caused distortions, by removing the distortion, giving the path a uniform line weight equal to the average reported in the Inspector. The Action also works on sheared paths.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392
- *Check line weight* on page 296

4.4.1.4. Paste objects from clipboard

Belongs to

- **Category:** Add, General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does

Allows you to paste objects from the clipboard to one or more selected pages. You can paste them multiple times (with fixed distances or distributed across a distance) as required and indicate where they should be placed.

This Action must be preceded by a "copy/cut "Action (that moves the objects to the clipboard) and a "select" Action (that indicates where the objects should be pasted) in the same Action List.

If there are several "copy/cut" Actions in the Action List, you may want to give each of the clipboards an appropriate name, to make sure the different objects are pasted on the correct pages.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut/copy-and-paste.
3. Add a *Copy or cut objects to clipboard* on page 105 Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 2 -if you added "Select all" in step 2, step 4 is redundant).
5. Add a *Paste objects from clipboard* Action and select the name of the clipboard (as entered in step 2). Switch to the different tabs to define the region and the position of the copied objects (see table below).

Note: Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the clipboard that contains the objects to be pasted. Determine whether or not the clipboard should be cleared after the object was pasted. This option determines what happens if there are no objects to be copied (= if the select Action in step 2 of the above procedure results in an empty selection). • If checked, the clipboard will be empty, so nothing will be pasted. • If cleared, the clipboard will still contain content from the previous page and that content will be pasted.

Tabs	On this tab, do the following:
Attributes	Determine if the objects should be pasted in the foreground or in the background of the document.
Region	Determine the region where the objects should be moved to. The region is defined based on the page box of your choice and you can define margins within that page box, by grabbing the offsets from a selected area (using the **Grab position** button ). You can also specify a specific area the objects should not be placed in, also based on a page box and with the option to set margins. **Note:** The settings on this tab are only used if **Move graphic elements** is selected on the Position tab. If this is not the case, the original location of the graphic elements is preserved.
Repeat	If the objects should be pasted more than once on a page, change **No repeat** to: • **Distribute/Repeat fixed number of graphic elements** if you want to determine how often the copied objects should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the pasted objects evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the pasted objects. If you choose "repeat", you should define the exact distance between the pasted objects yourself. The distance can be between the bounding boxes of the pasted objects (choose: **Between edges**) or from center to center (choose: **Between centers**). **Note:** Remember that you can use Smart Preflight variables to define the distances.
Position	If the selected objects should be moved, select **Move graphic elements**. Indicate how the objects should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

Related Action

- *Copy or cut objects to clipboard* on page 105

- *Add copied graphics* on page 63

4.4.1.5. Rasterize page content, keeping text

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Allows you to rasterize complex graphics in PDF, for example to reduce the rendering complexity for a file for viewing on the iPad.

You can set the resolution of the generated bitmap (ppi), the preferred compression (JPEG, JPEG2000, ZIP, None), the required quality (maximum, high...), and decide whether or not to keep line art unchanged.

New since PitStop 13 update 2 is the option to turn off anti-aliasing. This is useful to avoid thin white lines that may appear when rasterizing images.

4.4.1.6. Rasterize selection

Belongs to

- **Category:** General
- **Type:** Changes
- **Since Version:** 2019

What it does

Allows you to rasterize selected content.

Rasterizing objects means converting them to an image. This is typically done to reduce the complexity of a file to speed up processing.

Note that it may not be possible to convert multiple objects to one image: PitStop tries to create as few images as possible without changing how the file looks. To achieve this, it takes into account layers, color space, position of the objects etc. For example, rasterizing two objects with two different color spaces, will result in two images; objects on different layers will result in different images, and objects that do not overlap will only become one image if no other objects are inbetween (because this would change how the file looks).

Note that this functionality is also integrated in PitStop Pro (accessible through the menu bar (**PitStop Pro** > **Object** > **Rasterize selection**) or the context menu of a selection).

Options

By default, rasterizing does not affect the way the objects look. However, in some cases it may be acceptable to have a slightly different look; in that case you may enable (some of) the advanced options (for example: conversion to a different color space). These options are marked with a warning icon to indicate that using them may change the appearance of the file.

Option	Choices
Resolution (ppi) of the generated bitmap	Enter the value of your choice.

Option	Choices
	Note: Do not misuse this Action to change the resolution of an image; the result will be far better when using a dedicated Action like *Resample image* on page 117.
Compression	Choices are: • JPEG • JPEG2000 • ZIP • None
Quality	Choices are: • Minimum • Low • Medium • High • Maximum
Use anti-aliasing	Select or clear the checkbox. Turning off anti-aliasing may be useful to avoid thin white lines that may appear when rasterizing images.
Convert new resulting image(s) to indexed color space	Select or clear the checkbox.
Blend to	This option allows specifying a color space conversion on the selected objects, which may slightly change the appearance of the document. Choices are: • Page blending space • Gray • RGB • CMYK
Ignore blend and overprint restrictions	Select or clear the checkbox. Normally, overprint and blend spaces are respected when creating a single, merged image. However, if this is not possible (because it might change the appearance), an error will be reported. In that case, you may decide to ignore the blend and overprint restrictions, especially if they do not offer much added value.
Ignore original layer structure	Select or clear the checkbox. Normally, the layer structure is preserved and images remain on the same layer as the

Option	Choices
	original object. If you enable this option, the layer structure and the layer properties are ignored, meaning that hidden layers and layers that do not print are also included in the new image. The new image will not be on any layer. The layers themselves will not be removed.
Force into single image	Select or clear the checkbox. If selected, all the above options are enabled in order to force the selected objects into one single image.
Force into separate images	Select or clear the checkbox. If selected, the selected objects will be rasterized and saved as separate images. This option is compatible with the **Blend to (color space)** option.
Keep the original content and place the new resulting image(s)	Choices are: • at the front of the page • at the back of the page • in front of the original content • behind the original content

4.4.1.7. Remove associated files

Belongs to

- **Category:** General, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes associated files.

This fix can be used to make PDF files compliant with PDF 2.0.

Related Actions

- *Check for associated files* on page 278

4.4.1.8. Remove file specification from streams

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Removes links to embedded or external files from PDF streams.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will remove the link to these files.

4.4.1.9. Remove PostScript

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Removes all fragments of embedded PostScript in a PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

See also

- *Check for embedded PostScript fragments* on page 279
- *Select embedded PostScript fragments* on page 381

4.4.1.10. Replace page content by bitmap

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Converts the page content to a bitmap. You can choose the resolution of the generated bitmap (ppi), the compression method (JPEG, JPEG2000, ZIP, none) and the quality level.

New since PitStop 13 update 2 is the option to turn off anti-aliasing. This is useful to avoid white lines in flattened PDF files.

Other options are:

- **Apply overprint** to take into account the overprint settings
- **Blend to ...** to specify a color space conversion, which may slightly change the appearance of the document. Choices are: the page blending space, Gray, RGB and CMYK.

4.4.2. Checks

4.4.2.1. Check encoding of name objects

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Allows you to check if the encoding of font names, separation names or structure type names is UTF8.

This may not be the case if you receive PDFs from Japanese or Chinese designers.



Note: This Action verifies if the name *data* is valid UTF8 data. Note that this does not necessarily mean that the name actually is UTF8 encoded. It just checks if it would be a valid string when interpreted as UTF8.

4.4.2.2. Check file specification keys

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches the PDF for file specification keys.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will search for this type of links and check if they contain either the required file specification keys or the PDF 2.0 specific keys.

Related Actions

- *Check for file specifications* on page 279
- *Remove file specification from streams* on page 111
- *Remove file specification keys* on page 193

4.4.2.3. Check for associated files

Belongs to

- **Category:** General, PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if a PDF file contains associated files.

This is a PDF 2.0 feature. If you don't want PDF 2.0 features in your file, you can remove the associated files using a dedicated *Action*.

For more information about associated files, refer to *PDF 2.0 Application Note 002: Associated Files*.

Related Actions

- *Remove associated files* on page 111

4.4.2.4. Check for embedded PostScript fragments

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches for fragments of embedded PostScript in a PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

- *Select embedded PostScript fragments* on page 381
- *Remove PostScript* on page 111

4.4.2.5. Check for external streams

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains links to external data.

4.4.2.6. Check for file specifications

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains URLs or links to embedded or external files in PDF streams.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files, or to websites (URLs). This Action allows you to check if the PDF contains such links.

You can check for either URL or file specifications, and search for embedded, non-embedded, or both types of links.

Related Actions

- *Check file specification keys* on page 278
- *Remove file specification from streams* on page 111

4.4.2.7. Check for invisible objects without fill and stroke

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches the PDF document for any objects that have no fill or stroke color associated with them.

Designers sometimes leave such objects in a document rather than deleting them.

Related Actions

- *Select invisible objects without fill and stroke* on page 382
- *Remove invisible objects without fill and stroke* on page 231

4.4.2.8. Check for reference Xobjects

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks the PDF for the presence of XObjects.

XObjects are PostScript objects, such as background images, that are defined only once in a PDF file, but used several times (e.g. on several pages). Using XObjects can speed up printing but requires extra printer memory.

XObjects are supported as of PDF 1.4.

Related Actions

Select XObjects on page 384

4.4.2.9. Check for unknown objects

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains unknown objects.

Unknown objects in this context are objects that are not defined in the PDF 1.3 standard. The PDF/X standards require all objects in the document to be “known”, or defined in the PDF 1.3 specification.

This avoids differences in output between older and newer RIPs, for example. Older RIPs may not be able to process certain objects, and produce blank pages, whereas a more recent RIP can deal with those objects correctly and will produce the intended output.

4.4.2.10. Check if visual content exists

Belongs to

- **Category:** General
- **Type:** Checks
- **Since:** 2020

What it does

Enables you to check if a group of graphical shapes (e.g. an embedded image, such as a logo or line art) is visible in the PDF document. You can either check if the group of shapes is found, not found or how many times it occurs.

Note that the Action is able to find rotated shapes, partially cropped images, bigger or smaller shapes and shapes that are more or less similar (depending on the configuration, see below).



Note: The Action can detect all types of shapes (vector, raster, pixels, ...) embedded in the PDF. External images and simple geometric shapes are not supported.

How it works

The page the Action is running on is rasterized in the background. This may take a while.When this is finished, PitStop scans the page and searches for control points that are similar to the ones in the shape you want to check and uses this information to detect them.

Simple geometric shapes are not supported, because they do not provide enough control points.

Use cases

- Automatic artwork replacement
- Checking for incorrect or wrongly placed logos
- Checking for missing or invisible logos
- Also useful for packshots (for example to find outdated or old images)

How to proceed

1. Select the group of shapes (e.g. a logo) you want to check using the PitStop Select Objects tool .
2. In the attributes of the Action, click the **Grab selection** button. The selected image will be shown in the field above the button. Note that, if the image is too large (+15 cm) or too small (-1 cm), you'll get a warning.
3. Enter a label (e.g. "PitStop logo"). This is a mandatory field. Note that the label is only used for logging purposes.
4. From the 'Log a message' list at the top, select the appropriate option:

   Log a message ...

   - for each visual object that was found
   - if no visual object was found
   - if amount of visual objects meets criteria (this option allows you to set a threshold, e.g. log a message if more than one logo is found).

   Note: If you run the Action List with the above mentioned options, the check will include rotated shapes, shapes that are somewhat bigger and somewhat smaller and shapes that have a certain visual similarity. The attributes explained below allow you to make the check more precise.

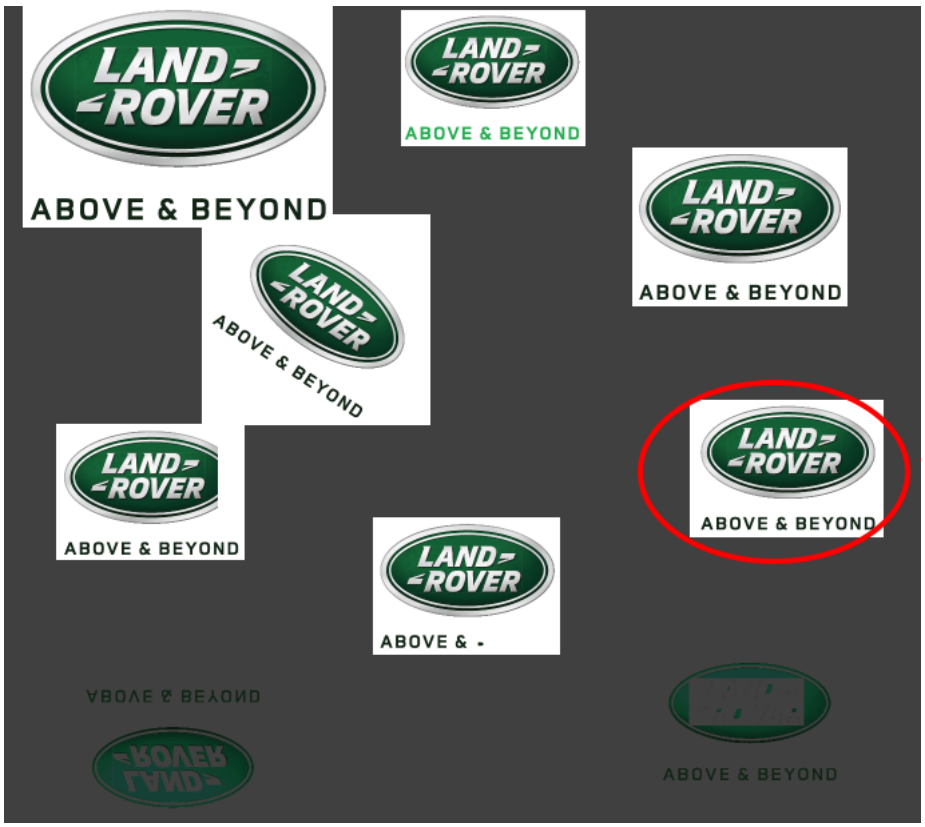
5. Configure the following options as required:

Attribute	Meaning
Scan resolution (ppi)	Default value is 300, the minimal value (to get a good result) is 72. To use the resolution of the visual object in the document, clear this field before grabbing the visual object. The current resolution will be entered automatically. Note that a higher resolution will slow down processing, but increase accuracy (as more control points will be checked), whereas a lower resolution will speed up processing but decrease accuracy. The optimal value also depends on the complexity of the visual object: a very complicated object will be difficult to track on a low resolution.
Restrict size	Make sure to enter the largest side of the visual content in the first field. Note that (specifically in case of a rotated object) the Action considers the sides of the object, not of the bounding box. **Note:** Take into account that there's an error margin; the actual reported shapes may be a bitt smaller or larger.
Restrict rotation	Make sure to set the rotation to 0 degrees if you don't want to report rotated content. In all other cases, enter the value of your choice. Note that you can enter a number of values (separated by a comma) or use a range (using a hyphen) or a combination.

Attribute	Meaning
	Note: Take into account that there's an error margin of 2 or 3 degrees.
Restrict visual similarity	This option enables you to find objects that are partly hidden by other objects or to find objects that should not be in the document. It also works on colors, for example to find logos with a color difference; note however that there should be enough contrast for PitStop to be able to detect it. **Note:** Take into account that there's an error margin. We advise playing with the values to find a value that is optimal for the visual content you want to detect.

Example

The image below shows that the Action is able to detect a logo, even if it's slightly different in size or color, or when it's rotated, cropped or partly hidden. The marked logo is the one that was grabbed in the Action. Using the Action's attributes you can restrict the found instances.



4.4.2.11. Check optimal compression

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the latest and most efficient compression mechanisms have been applied in the PDF document.

Previous versions of Adobe Acrobat (2.1, 3.0, 4.0) featured less advanced compression mechanisms.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to check if the PDF contains such compressed streams, which you can afterwards remove if required.

Related Actions

- *Check object compression* on page 276
- *Remove object compression* on page 231

4.4.2.12. Log selection

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Allows you to log the presence or absence of a selection you made with another Action in the same Action list.

This Action is useful if you want to check something for which no "Check" Action is available. For example, if you want to check if the PDF contains red text, you can first select all red text, and then use Log selection to display a message either if the document does or does not contain red text.

Note that you can also log the presence or absence of layers.

How to proceed

1. From the list at the top of the pane, choose the appropriate option:
   - To display a message if the selection was found, select *Log a message if* **objects are selected**.

- To display a message if the selection was NOT found, select *Log a message if* **no objects are selected**.

2. Indicate whether or not the following information should be logged as well (if applicable):
   - The type of page and document objects
   - The annotation objects

   Note: By default, annotations aren't logged. Even if Log selection applies to a selection made by *Select annotations*, nothing will be logged, unless the **Report the annotation objects** checkbox is selected.

3. Enter the message that should appear in the Report if the selection was found/not found (depending on the choice made in step1).

   Note: You can configure different descriptions for different languages (for example: *JPEG images* in English versus *JPEG afbeeldingen* in Dutch). The language shown in the log file depends on the language (See **Edit** > **Preferences** > **Preferences**).

4. Select the desired log level.

   Note: In this case, it doesn't make sense to choose "Don't log", since the result of this Action is always shown in the Enfocus Navigator.

Example

To check for the presence of red text in a document, you could create the following Action List:

```
Select fill and stroke color
        <!-- Add Select color on page 370. Select fill and stroke and determine the
 color you want to check for, for example using the Grab fill and Grab stroke icon -->
Select text segments
        <!-- Select text segments on page 445 -->
AND
        <!-- AND on page 405 : necessary to combine the two previous Actions -->
Log selection
        <!-- Choose "Log a message if objects are selected".
             Configure an English message, for example "This document contains some
 text in red".
             Select "Log as warning". -->
```

If you run this Action List, all red text will be selected and logged as a warning. In the Enfocus Navigator, if you select an object in the Description field, you will see the description ("Red text") under Details. You will also find a warning in the Preflight Report (e.g. "This document contains some text in red (x times on pages y-z)").

Alternatively, if you only want a warning if no red text is found, in the attributes of **Log selection**, choose "Log a message if no objects are selected" and configure a message such as "This document does not contain any red text".

4.4.3. Selections

4.4.3.1. Select clipping objects

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects clipping objects, i.e. objects of which the shape masks other artwork. Only areas inside the clipping objects are visible.

You could use this Action to select clip text of which you want to change the font.

Related Actions

Select objects that are completely clipped away on page 428

4.4.3.2. Select embedded PostScript fragments

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects all fragments of embedded PostScript in the PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

- *Check for embedded PostScript fragments* on page 279
- *Remove PostScript* on page 111

4.4.3.3. Select forms

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Allows you to select all forms in a PDF document.

Forms are rectangular frames in a PDF wich contain objects, for example an image or a placed PDF.

Example

To select all forms and log them as an error:

```
Select forms
Log selection <!-- enter "Forms were found in this document" and select "Log as error"
 at the bottom -->
```

Related Actions

- *Log selection* on page 284

4.4.3.4. Select form contents according to form selection

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Allows you to select or deselect the content of selected forms.

Forms are rectangular frames in a PDF wich contain objects, for example an image or a placed PDF.

For more information, refer to *the PitStop Pro Reference Guide on the Enfocus website* (See Chapter "Editing forms").

Related Actions

Select forms on page 382

4.4.3.5. Select invisible objects without fill and stroke

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects objects that have no fill or stroke color associated with them. Even though these objects are not visible in the document, you might want to remove them.

Related Actions

- *Select objects that use neither stroke nor fill* on page 393 (same functionality)

- *Check for invisible objects without fill and stroke* on page 280
- *Remove invisible objects without fill and stroke* on page 231

4.4.3.6. Select objects that have a clipping path

Belongs to

- **Category:** General
- **Type:** Selections

What it does
Selects objects of which the shape (partly) masks other artwork. Only areas inside the clipping objects are visible.

Related Actions

- *Select clipping objects* on page 381
- *Select objects that are completely clipped away* on page 428

4.4.3.7. Select parent content object

Belongs to

- **Category:** General
- **Type:** Selections

What it does
Allows you to select parent content objects, for example the page the object belongs to.

4.4.3.8. Select tiling pattern contents according to parent object selection

Belongs to

- **Category:** Color
- **Type:** Selections
- **Since version:** 2020

What it does
Allows you to select the tiling pattern content depending on whether or not the parent object (e.g. text or line art) is selected.

There are two options:

- Select the tiling pattern content if the parent object is selected.
- Select everything except the tiling pattern content of parent objects that are not selected.

4.4.3.9. Select XObjects

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects any XObject in the PDF file.

XObjects are PostScript objects, such as background images, that are defined only once in a PDF file, but used several times (e.g. on several pages). Using XObjects can speed up printing but requires extra printer memory.

XObjects are supported as of PDF 1.4.

Example

To log the presence of XObjects, use:

```
Select XObjects
Log Selection
```

4.4.4. Settings

4.4.4.1. Override color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Replaces any color management settings from the PDF Profile or general PitStop preferences with the settings defined here. These settings will be used when converting colors.

4.4.4.2. Override default image recompression

Belongs to

- **Category:** General; Image
- **Type:** Settings

What it does

Overrides the default recompression quality setting (used by PitStop when changing images) with the one defined in this Action.

How it works

If PitStop is used to change images (e.g. to convert the color, to resample the image...), the images are decompressed first, then changed, and afterwards recompressed according to the default settings (maximum for JPEG, lossless for JPEG2000). With these default settings, files may grow to an unacceptable size compared to the original input PDF file. In that case, you can use Override default image recompression to make the files smaller.

4.4.4.3. Override page box defaults

Belongs to

- **Category:** General; Page
- **Type:** Settings

What it does

Replaces the default order (Media > Crop > Art - Bleed - Trim) of the page boxes in a PDF document with the order defined in this Action.

4.4.4.4. Override rounding rules

Belongs to

- **Category:** General
- **Type:** Settings

What it does

Replaces the default rules used for comparing text size, line weight and/or coordinates to the ones set in this Action.

You have the choice to:

- Leave text size, line weight and/or coordinates unchanged
- Use the default rules, or
- Use decimals.

Example

PitStop applies a number of rounding rules when comparing the actual values in a PDF to the ones set in a check (Profile check or "check" Action). For example, if you want to check if the text point size is equal to 10 points, PitStop will give a warning if there is a difference of 0.1 point.

If you don't want to log such small differences, use this Action to overrule the default behavior. Example of such an Action List:

```
Select all
Override rounding rules <!-- Select: Text size: decimals 0 -->
Check if text point size is equal to 10.0 pt <-- Check text point size on page 356  --
>
```

Remark

We recommend using points as measurement unit because in the background, PitStop Pro converts all the different measurement units (p, in, cm, mm) into points and applies the rounding rules to this value (with its decimals).

4.4.4.5. Restore previous color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Allows you to revert to the previous color management settings (if you have changed them before, in the same Action List).

Related Actions

Save color management settings on page 446

4.4.4.6. Save color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Allows you to save the current color management settings (changed in the Action List).

Related Actions

Restore previous color management settings on page 445

4.4.4.7. Split Action List

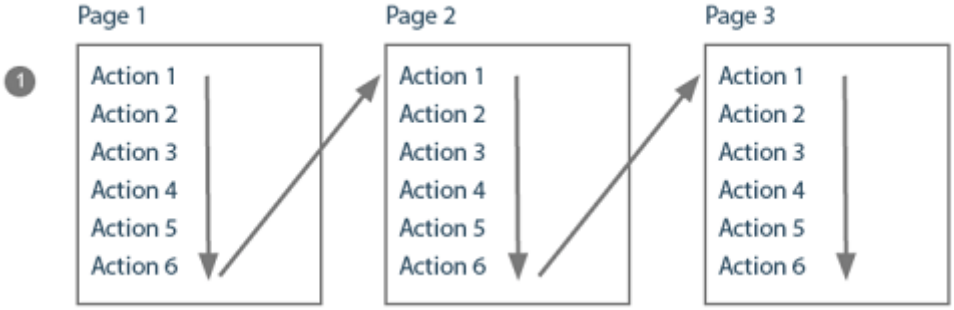
Belongs to

- **Category:** General
- **Type:** Settings
- **Since Version:** 2019

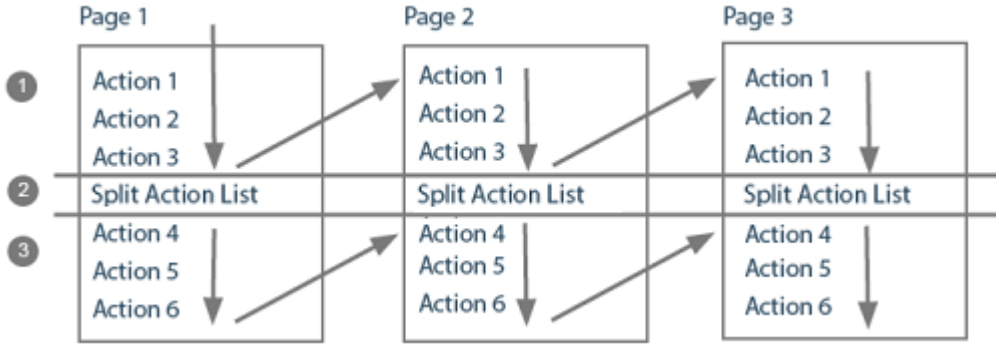
What it does

This Action changes the way the content of an Action List is processed:

- Without this Action/default behavior: All Actions are executed one after the other, page after page, until the end of the document. There is no way to get back to the beginning of the document, for example to copy something from the end of the document to the beginning.



- With this Action:
  1. First all Actions **preceding** *Split Action List* are executed, one after the other, page after page, until the end of the document.
  2. Then the changes are saved. If anything is copied to the clipboard, it's preserved.
  3. Next, the Actions **following** *Split Action List* are executed on the saved document, starting from the beginning of the document until the end or until another *Split Action List*. Note that after saving, the selection is lost, so a selection has to be made after *Split Action List*.



This approach makes it possible to go through a document multiple times.

Example Action Lists

The following Action List copies the content of page 5 to page 2:

```
select page range                <!--Page range is "5" -->
copy content to clipboard        <!--Clipboard name e.g. content pg 5 -->
split Action List
select page range                <!--Select the target page: Page range is "2" -->
paste objects from clipboard     <!--Clipboard name chosen higher -->
```

The following Action List splits pages and reorders them in one and the same Action List:

```
split pages in half              <!--To split the spreads -->
split Action List
select all                       <!--Make the selection -->
reorder pages                    <!--Specify the new page order,
                                     based on the split pages  -->
```

Related Actions

This Action is typically used to reorder split pages and to copy content backwards (from later pages to earlier pages). In that case, the following Actions may be useful:

- *Split pages in half* on page 183
- *Reorder pages* on page 177
- *Copy or cut objects to clipboard* on page 105
- *Paste objects from clipboard* on page 74

4.5. Image

4.5.1. Changes

4.5.1.1. Add alternate images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

If you are working with PDFs that contain very high resolution images and render slowly on screen, you can speed up rendering by adding alternate images and then clicking the PitStop **Speed Up Image Display** button (available in the Enfocus View Modes toolbar (Acrobat 8 and 9) or the PitStop View Panel (Acrobat X and XI)).

You can use this Action to add low resolution alternate images.

How to proceed

1. Select the preferred downsampling.

   Bicubic looks best but is slowest; subsampling looks worst but is fastest.
2. Specify the preferred resolution.

   72dpi is good for screen viewing.
3. Set **Resample above** to a higher value than the dpi chosen above.

   PitStop suggests a value, but you can change it as required.
4. Select **Convert to RGB** for even faster on screen rendering, but in RGB color values.

Related Actions

- *Select by alternate images* on page 384
- *Check for alternate images* on page 285

- *Remove alternate images* on page 116

4.5.1.2. Apply a gaussian blur to an image

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Allows you to apply a Gaussian blur to the selected images.

You can define the radius of the blur, by moving the slider. A higher radius will result in a higher amount of blur.

Applying a Gaussian blur is useful to reduce image noise and detail.

4.5.1.3. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

4.5.1.4. Change image brightness and contrast

Belongs to

- **Application:** PitStop Pro
- **Category:** Image
- **Type:** Changes

What it does

Allows you to make brightness and contrast adjustments to pixel images of all color spaces (e.g. RGB) and image types (e.g. JPEG).

Note: This option is also available in the PitStop Inspector (by selecting  > ).

4.5.1.5. Change image compression

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Change image compression changes the compression of selected images.

Color and Gray images can be compressed with JPEG, JPEG2000, ZIP or LZW compression (ZIP and LZW are lossless, JPEG lossy).

Monochrome images can be compressed with CCIT Group 3 & 4, ZIP or RunLength compression.

In addition, an ASCII Hex or 85 filter can be applied.

4.5.1.6. Change inline image syntax

Belongs to

- **Category:** Image, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does

Allows you to change the L key (or Length key) of a PDF to comply with a particular PDF version.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Compatibility with the current document version
- Compatibility with PDF 1.7 (no Length key)
- Compatibility with PDF 2.0 (write Length key)
- Keep presence of the Length key
- Fix the Length key (so it matches the actual inline image data length)

Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change PDF text string encoding* on page 101
- *Check inline image syntax*
- *Select inline image syntax* on page 387

4.5.1.7. Change OPI info

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Updates the OPI information of the document, for example if you have changed an OPI path with the PitStop Inspector in PitStop.

Note: This Action is mainly meant for OEMs, who can change OPI dictionaries through the PitStop Library. If an image with OPI information is encountered during processing, PitStop Library will call the OEM's code to replace it with the OEM's values.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

4.5.1.8. Convert images to indexed color space

Belongs to

- **Category:** Color;Image
- **Type:** Changes

What it does

Changes the color of images to the indexed color space.

About the indexed color space

The indexed color space uses no more than 256 colors, and is as such particularly suited for use in Web applications. Images are typically converted to indexed color mode in order to **decrease their file sizes**. When an image is converted to indexed color, a color lookup table is created, in which the colors that were used in the image are stored and indexed. Using an indexed color table lets you reduce the file size of an image while maintaining the visual quality that you need.

4.5.1.9. Crop images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Allows you to crop images to match a clip mask and/or a particular page box.

New in 13 update 1: You can now remove the unwanted white borders (e.g. of scanned images), by selecting the **Crop white borders of image** checkbox. This option also works on stencil marks and is particularly useful as it enables subsequent Actions to work on the size of visible objects.

4.5.1.10. Remove alternate images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Removes alternate images from a PDF.

If you are working with PDFs that contain very high resolution images and render slowly on screen, you can speed up rendering by adding alternate images and then clicking the PitStop **Speed Up Image Display** button (available in the Enfocus View Modes toolbar (Acrobat 8 and 9) or the PitStop View Panel (Acrobat X and XI)).

As these alternate images are not necessary for print, you may use this Action to remove them and only keep one version. You have three options:

- **Default for printing** only preserves the images that are marked "default for printing" (recommended if you know that the alternate images have been correctly marked for printing)
- **Lowest resolution** only preserves the version with the lowest resolution, regardless of the printing setting (best for print production)
- **Highest resolution** only preserves the version with the highest resolution, regardless of the printing setting (best for on-screen viewing)

Related Actions

- *Check for alternate images* on page 285
- *Select by alternate images* on page 384

- *Add alternate images* on page 112

4.5.1.11. Remove OPI

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Removes OPI (Open Prepress Interface) information from a PDF.

OPI images are treated special as they are assumed to be preview images. They will for example not be preflighted as other images would be. If you don't use OPI in your workflow, run this Action to remove irrelevant OPI information and get correct editing and preflighting of documents.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Change OPI info* on page 115
- *Select images with OPI info* on page 386

4.5.1.12. Resample image

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Resamples, i.e. changes the resolution of the selected image(s).

How to proceed

1. Select the preferred resampling or interpolation method:
   - **Average Resampling**: computes the average pixel color of the pixels in the sample area, and replaces the entire area with this average.
   - **Bicubic resampling**: calculates the values of the new dots on the basis of a weighted average of the pixels in the same area.
   - **Bicubic B-Spline resampling**: is a modified bicubic interpolation with more sharpening effects and is recommended for upsampling.

- **Bilinear resampling**: uses weighted interpolation between 4 pixels in the original image.



Note: Bicubic gives the best result for photographs (but takes the longest to compute).

2. Enter the preferred resolution, for example 72 ppi for screen viewing.
3. To only resample images with a resolution below a particular threshold, select the **Resample above ... ppi** checkbox and enter a value.

   For example, if you enter 150 ppi, only images with a resolution above 150 ppi will be resampled.

4.5.1.13. Sharpen an image with unsharp mask

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Allows you to sharpen edges in pixel images by applying the unsharp mask filter.

This filter:

- Compares adjacent pixels (specified by **Radius** and **Threshold**) to determine which pixels to correct.
- Increases the contrast of these pixels (specified by **Amount**).

You can modify the amount of contrast to be applied when correcting pixels (Amount), the distance (Radius) and the brightness difference (Threshold) between adjacent pixels.

The effects of the unsharp mask filter are far more pronounced on-screen than in high-resolution output. For print, experiment to determine which options work best for your image.



Note: This option is also available in the PitStop Inspector (by selecting  > ).

4.5.2. Checks

4.5.2.1. Check if JPEG2000 compressed images are PDF/X compliant

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Check if JPEG2000 compressed images are PDF/X-4 or PDF/X-6 compliant.

You might want to remove or replace non-compliant images.

4.5.2.2. Check for alternate images

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Searches a PDF for alternate images.

Alternate images are low resolution versions of images that are used for on-screen proofing because they render more quickly. PitStop can check for the presence of all alternate images or only those that are set to print as default.

Related Actions

- *Add alternate images* on page 112
- *Select by alternate images* on page 384
- *Remove alternate images* on page 116

4.5.2.3. Check for corrupt images

Belongs to

- **Category:** Image
- **Type:** Checks
- **Since version:** 2020

What it does
Detects images with corrupt image data.

This Action enables you to find corrupt images early in the production process, so you can take corrective action.

4.5.2.4. Check for images with 16 bits per channel

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Searches a PDF for images with 16 bits per channel.

These images have a much larger color range than standard 8 bit images. Note that not all of these colors can be accurately reproduced on press.

4.5.2.5. Check image compression

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks image filters to ensure that the images in the PDF are not compressed using a particular compression method.

You can check for the following compression methods:

- CCITT
- JPEG
- ZIP
- LZW
- RunLength
- JBIG2
- JPEG2000

By default, soft-mask images are not included, unless you select the **Also check soft-mask images** checkbox.

4.5.2.6. Check image compression ratio

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks the compression ratio of the images in a PDF against a particular threshold.

You can check the compression ratio of images compressed with one of the following compression methods:

- CCITT
- JPEG
- ZIP
- LZW
- RunLength
- JBIG2
- JPEG2000

Example

If the JPEG images in your PDF should not be compressed at all, use the following values:

```
Compression ratio of JPEG images must be        <!-- Choose JPEG -->
equal to 100                                    <!-- Choose  "equal to" and "100" -->
```

A compression ratio of "100" means "no compression"; a compression ratio of "50" means "50%" , ...

4.5.2.7. Check image interpolation

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks if images in the PDF have been resampled.

4.5.2.8. Check inline image syntax

Belongs to

- **Category:** Image; PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks the presence and/or validity of the L key (or Length key) of a PDF.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Inline images must not have the Length key
- Inline images must have the Length key
- Inline images must have a valid Length key.

Note that PDF 2.0 allows (but does not impose) the presence of an L key, but if it's present, it must match the actual inline image data length.

Related Actions

- *Select inline image syntax*

- *Change inline image syntax*

4.5.2.9. Check number of images on page

Belongs to

- **Category:** Image
- **Type:** Checks
- **Since:** 2020

What it does

Checks the number of images on a page.

Use case

Badly created PDF files can have hundreds of images, which can take a long time to rip. This Action can help you detect the pages with more images than expected. Such pages can then be simplified using *Rasterize selection* or similar tools.

Related Actions

- *Select page by number of images* on page 388
- *Rasterize selection* on page 109

4.5.2.10. Check OPI path

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

If your document contains objects with OPI information, you can use this Action to detect images that cannot be found in the location specified in the OPI pointer.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Change OPI info* on page 115
- *Check OPI type* on page 289
- *Gather OPI information* on page 359

- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

4.5.2.11. Check OPI type

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks which OPI types are allowed in a PDF.

You can check for the following OPI types:

- None
- 1.3
- 2.0
- both 1.3 and 2.0

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Change OPI info* on page 115
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

4.5.2.12. Check resolution

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks the resolution of particular image types (color or grayscale images, 1-bit images or any images) against a particular value, e.g. checks if the resolution is not more/less/... than x ppi.

This Action checks for the **effective** resolution; if the image has been resized, this is the resolution after scaling.

As of PitStop 2018 you can disregard any soft-mask images that are used in the PDF, by selecting the **Ignore soft-masks** option. The resolution of a soft-mask image can be lower than what it acceptable for images, but as this does not affect the end result, it's safe to exclude them from the resolution check.

Note that the log message also mentions the resolution of the matching images.

Related Actions

Select by image resolution on page 385

4.5.3. Informs

4.5.3.1. Gather image information

Belongs to

- **Category:** Image
- **Type:** Informs

What it does

Collects information about the images used in a PDF and presents it in the log.

The following information is logged:

- Type
- Color Space
- Physical Resolution
- Effective Resolution
- Page found
- Angle
- Skew
- Flipped
- Custom Transfer
- Custom Halftone
- Custom BG (black generation)
- Custom UCR (undercolor removal definitions)

4.5.3.2. Gather OPI information

Belongs to

- **Category:** Image
- **Type:** Informs

What it does

Collects information about the OPI (Open Prepress Interface) used in a PDF and presents it in the log.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Change OPI info* on page 115
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

4.5.4. Selections

4.5.4.1. Select by alternate images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects either **all images with alternates** or **all images with alternates that are default for printing**.

An alternate can be a high resolution version of an image that is used in the PDF to preview the image on screen. If you want to make sure that the correct image is set to print, choose **all images with alternates that are default for printing**.

Related Actions

- *Add alternate images* on page 112
- *Check for alternate images* on page 285
- *Remove alternate images* on page 116

4.5.4.2. Select by image resolution

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Makes a selection of images based on their resolution, for example all images with a resolution between 320 and 400 ppi.

You can select all images, or limit your selection to color or gray scale images, or to monocolor images only.



Note: This Action checks for the **effective** resolution; if the image has been resized, this is the resolution after scaling.

Related Actions

Check resolution on page 290

4.5.4.3. Select by image size

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select images by their width or height (expressed in pixels).

You can for example select images with a width or height equal to (or more or less than) 64 pixels.

4.5.4.4. Select image by filter type

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select images according to the compression type they use.

You can choose one or more of the following filters:

- ASCII hex
- CCITT
- ZIP
- RunLength
- JPEG2000
- ASCII 85
- JPEG
- LZW
- JBIG2

Optionally, you can also include soft-mask images (of the chosen filter types) in your selection (i.e. the images that mask an image). These are not included by default.

4.5.4.5. Select images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects all the images in a PDF document.

Example

The following selects everything in a PDF except for the images:

```
Select all
Select images
NOT
AND
```

4.5.4.6. Select images with OPI info

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects all the images in a PDF document that contain OPI (Open Prepress Interface) information.

OPI images are treated special as they are assumed to be preview images. They will for example not be preflighted as other images would be.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Example

The following finds any such images and logs them as a caution:

```
Select images with OPI info
Log selection <!-- In the field, type your message (ex. 'Images with OPI comments were
 found in this PDF'), then select Log as warning at the bottom -->
```

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289

- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Change OPI info* on page 115

4.5.4.7. Select image type

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select a particular type of images.

You can select one of the following image types:

- 1-Bit images
- Grayscale images
- Color images
- Stencil mask
- Indexed images

Example

The following will convert color images to Grayscale but will not alter Black & White images:

```
Select image type <!-- In the popup, select Color -->
Convert color <!-- In the popup, select Grayscale -->
```

4.5.4.8. Select rendering objects

Belongs to

- **Category:** LineArt;Text;Image
- **Type:** Selections

What it does

Selects all objects with a rendering intent.

This includes paths, text and images with any of the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

Note: This Action does not allow you to make a selection based on **one particular** rendering intent. To select objects by **one** of the listed rendering intents, use *Select by rendering intent* on page 367.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select by rendering intent* on page 367

4.5.4.9. Select single image page images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects single image page images, i.e. images that cover the entire page.

4.5.5. Settings

4.5.5.1. Override default image recompression

Belongs to

- **Category:** General; Image
- **Type:** Settings

What it does

Overrides the default recompression quality setting (used by PitStop when changing images) with the one defined in this Action.

How it works

If PitStop is used to change images (e.g. to convert the color, to resample the image...), the images are decompressed first, then changed, and afterwards recompressed according to the default settings (maximum for JPEG, lossless for JPEG2000). With these default settings, files may grow to an unacceptable size compared to the original input PDF file. In that case, you can use Override default image recompression to make the files smaller.

4.6. Layers

4.6.1. Changes

4.6.1.1. Add objects to layer with name

Belongs to

- **Category:** Layers
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Allows you to add any selected objects to a specific layer. You can identify the layer concerned by entering a string (e.g. Layer1). Optionally, you can at the same time remove the added objects from the other layers.

How to proceed

1. Add a "select" Action to the Action List, to select the objects you want to add, for example *Select all* on page 410.
2. Add **Add objects to layers** to the Action List.
3. Enter the name of the layer.
4. Optionally, select **Remove from other layers**.

Example

To add all annotations to a particular layer and remove them from another layer, use the following Actions:

```
Select annotations <!-- Select annotations on page 397 -->
Add objects to layers <!-- Enter a name, e.g. AnnotationLayer and select Remove from
 other layers-->
```

Related Actions

- *Add objects to layer* on page 119
- *Remove objects from layers* on page 125

4.6.1.2. Add objects to layer

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to add any selected objects to a specific layer. You can identify the layer concerned by selecting it using another Action in the same Action List.

Optionally, you can at the same time remove the added objects from the other layers.

How to proceed

1. Add a first "select" Action to the Action List, to select the **layer** to which you want to assign the objects.
2. Add a second "select" Action to the Action List, to select the **objects** to be added.



Note: You don't have to specify operators in between the two "select" Actions. However, you can also use **combined** "Select" Actions to specify the layer or the objects concerned (see example 2).

3. Add **Add objects to layers** and select the **Add to selected layers** radio button.

Examples

Example 1: The following Action List will add all annotations to Layer1 and remove them from the other layers:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 Layer1 -->
Select annotations <!-- Select annotations on page 397 -->
Add objects to layers <!-- Select Remove from other layers -->
```

Example 2: The following Action List will add XObjects and annotations to LayerA and LayerB:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 "equals [AB]"; enable Use regular expressions -->
Select XObjects <!-- Select XObjects on page 384 -->
Select annotations <!-- Select annotations on page 397 -->
OR
Add objects to layers
```

Related Actions

- *Add objects to layer with name* on page 119
- *Add objects to layer* on page 119

4.6.1.3. Change layer properties

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to change certain properties, i.e. default visibility and presence in the Layers panel ("layer configuration") of the layers selected by another Action in the same Action List.

Example

To change the properties of **all** layers in the PDF, create the following Action List:

```
Select layers <!-- Select layers on page 389 -->
Change layer properties
```

Related Actions

- *Check layer properties* on page 293
- *Select objects in layers by layer properties* on page 390

4.6.1.4. Fix layers

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to perform a number of fixes to the layers in a PDF.

Options:

- Remove alternate layer configurations, only keep default configuration
- Add missing layer configuration names (e.g. "config_1", "config_2", ...)
- Make layer configuration names unique
- Remove order from layer configuration if layers are missing
- Remove AS (AutoState) entry from layer configurations. (AutoState entries are application specific usage entries).

Note: Layer configuration refers to the Layers panel.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Check layers on page 293

4.6.1.5. Flatten layers

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Removes the selected layers. You can choose whether or not to remove the objects on these layers as well:

- To keep all objects, regardless of their visibility, select **Make all elements visible**. All objects (including hidden objects) will become visible after the layers have been removed.
- To keep all objects **based on their default visibility**, select **Preserve the initial view of the PDF**. Objects on layers with **default** visibility turned on are preserved (and remain visible). All other objects (i.e. by default hidden objects) are removed.
- To keep all objects **based on their current visibility**, select **Preserve the current view of the PDF**. Objects on visible layers are preserved, regardless of their default visibility state. All other objects (i.e. currently hidden objects) are removed.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Flatten objects in layer on page 123

4.6.1.6. Flatten objects in layer

Belongs to

- **Category:** Layers
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Removes the selected objects from ALL layers and at the same time removes all empty layers.

You can choose whether or not to remove hidden objects:

- To keep all objects, regardless of their visibility, select **Make all elements visible**. All objects (including hidden objects) will become visible after the layers have been removed.
- To keep all objects **based on their default visibility**, select **Preserve the initial view of the PDF**. Objects on layers with **default** visibility turned on are preserved (and remain visible). All other objects (i.e. by default hidden objects) are removed.
- To keep all objects **based on their current visibility**, select **Preserve the current view of the PDF**. Objects on visible layers are preserved, regardless of their default visibility state. All other objects (i.e. currently hidden objects) are removed.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Flatten layers on page 122

4.6.1.7. Remove empty layers

Belongs to

- **Category:** Remove; Layers
- **Type:** Changes

What it does

Removes empty layers selected by another Action in the same Action List.

Example
The following Action List will remove **all** empty layers in the PDF:

```
Select layers <!-- Select layers on page 389 -->
Remove empty layers
```

To remove Layer1 and 2, if they are empty:

```
Select layers by name <!-- Select layers by name on page 390 - Choose "equals Layer
 [12]" and "Use regular expressions" -->
Remove empty layers
```

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Remove objects from layers on page 125

4.6.1.8. Remove objects from layers

Belongs to

- **Category:** Layers
- **Type:** Changes

What it does

Allows you to remove objects from the selected layers in a PDF document.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

How to proceed

1. Add a first "select" Action to the Action List, to select the **layer** from which you want to remove objects.
2. Add a second "select" Action to the Action List, to select the **objects** to be removed.



Note: You don't have to specify operators in between the two "select" Actions. However, you can also use **combined** "select" Actions to specify the layer or the objects concerned (see example 2).

3. Add **Remove objects from layers**.

Examples

Example 1: The following Action List will remove all objects from Layer1:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 Layer1 -->
Select all <!-- Select all on page 410 -->
Remove objects from layers
```

Example 2: The following Action List will remove XObjects and annotations from LayerA and LayerB:

```
Select layers by name <!-- Select layers by name on page 390 and set the layer name to
 equals [AB]; enable "Use regular expressions" -->
Select XObjects <!-- Select XObjects on page 384 -->
Select annotations <!-- Select annotations on page 397 -->
OR
Remove objects from layers
```

Related Actions

- *Add objects to layer with name* on page 119
- *Add objects to layer* on page 119

4.6.1.9. Rename layer

Belongs to

- **Category:** Layers
- **Type:** Changes
- **Since version:** 12 update 3

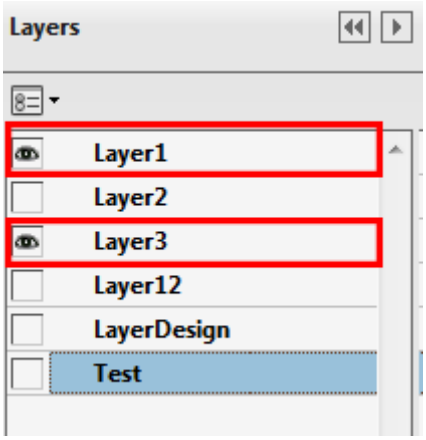
What it does

Allows you to change the name of the layers in a document.

Note: You can also use regular expressions to define the source and target layer name.

Example

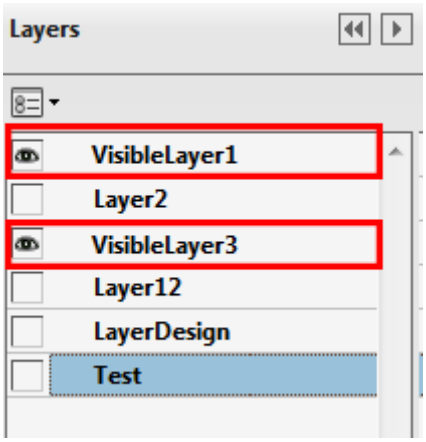
Suppose you want to rename the layers that are visible in your document, in this example Layer1 and Layer3 (but not Layer2, Layer12 or any other layer).



Proceed as follows:

1. Select the **Rename Layer** Action.
2. Under Attributes for Rename layer, configure the source and target layer as follows:
   - **From**: Layer([13])
   - **To**: VisibleLayer$1
3. Select the **Use regular expessions** checkbox.
4. Click **OK**.
5. Run the Action List.

Result:



4.6.2. Selections

4.6.2.1. Select layers

Belongs to

- **Category:** Layers

- **Type:** Selections
- **Since version:** 12 update 3

What it does
Selects ALL layers in a PDF document.

Related Actions

Select layers by name on page 390

4.6.2.2. Select layers by name

Belongs to

- **Category:** Layers
- **Type:** Selections
- **Since version:** 12 update 3

What it does
Allows you to select layers with a particular layer name.



Note: You can use regular expressions to define the layer name (if you select **Equals/ Does not equal** as operator method).

Example

To select "Layer1" and "Layer3" but not e.g. "Layer2", "Layer12" or any other layer, choose the following attributes:

```
Select layers where name equals [13] <!-- to exclude e.g. Layer2 and Layer12 -->
Select Match case <!-- to exclude e.g. layer1 -->
Select Use regular expressions <!-- to make sure [13] is considered a regular
 expression instead of a string  -->
```

4.6.2.3. Select objects in layers by layer properties

Belongs to

- **Category:** Layers
- **Type:** Selections

What it does

Allows you to select content based on the layer properties of the layer it's placed on.

You can select content that is:

- **Optional**: placed on a layer
- **Not optional**: not placed on a layer
- **By default visible**: visible when the document is first opened (applies to both layered and "normal" content)
- **By default invisible**: invisible when the document is first opened

- **Visible**: set to "visible" e.g. by the user or by an application such as PitStop (regardless of the initial visibility state)
- **Invisible**: set to "invisible" e.g. by the user or by an application such as PitStop (regardless of the initial visibility state)

Example

The following Action List allows you to select layered content that is by default visible. Normal content (that is visible by default) is not selected.

```
Select objects in layers by layer properties <!-- Choose "Select content that is
 optional" -->
Select objects in layers by layer properties <!-- Choose "Select content that is
 visible" -->
AND <!-- This operator makes sure that only content is selected that is optional and
 visible at the same time -->
```

Related Actions

- *Change layer properties* on page 120
- *Select objects in layers by name* on page 391

4.6.2.4. Select objects in layers by name

Belongs to

- **Category:** Layers
- **Type:** Selections

What it does

Allows you to select objects inside layers with a certain name.

How to proceed

1. Select whether the layer name should (not) be equal to or (not) contain the value you specify.
2. Optionally, enable **Match case** or **Use regular expressions**.



Note: The option **Use regular expression** is available as of PitStop 12 update 2, if you select **equals** or **does not equal**. This option allows you to define the layer name using a regular expression (e.g Layer[1-3] will match the following layer names: Layer1, Layer2 and Layer3).

Related Actions

- *Select objects in selected layers* on page 391
- *Select objects in layers by layer properties* on page 390

4.6.2.5. Select objects in selected layers

Belongs to

- **Category:** Layers

- **Type:** Selections
- **Since version:** 12 update 3

What it does

Selects objects in the layer(s) selected by another Action in the same Action List.

Example
To select the objects on **all** layers of the PDF, create the following Action List:

```
Select layers <!-- Select layers on page 389 -->
Select objects in selected layers
```

Related Actions

- *Select objects in layers by name* on page 391
- *Select objects in layers by layer properties* on page 390

4.6.3. Checks

4.6.3.1. Check for empty layers

Belongs to

- **Category:** Layers
- **Type:** Checks
- **Since version:** 12 update 3

What it does
Allows you to check if the selected layers are empty. The Action must be preceded by another Action that selects the layer(s) concerned.

Example

To check if the PDF contains any empty layers:

```
Select layers <!-- Select layers on page 389 selects ALL layers -->
Check for empty layers
```

Related Actions

Remove objects from layers on page 125

4.6.3.2. Check if layer is PDF/X-4 compliant

Belongs to

- **Category:** Layers

- **Type:** Checks

What it does

Checks if the layers in a PDF document comply with the PDF/X-4 specification.

About layers in PDF/X-4

The PDF/X-4 standard allows the use of layers (OCGs = Optional Content Groups) in PDF. These layers can have different states (ON or OFF). The state of all OCGs must be defined in an Optional Content Configuration Dictionary (OCCD). This dictionary must be used by compliant readers to switch on or off the layers.

4.6.3.3. Check layer properties

Belongs to

- **Category:** Layers
- **Type:** Checks

What it does

Checks certain properties, i.e. default visibility and presence in the Layers panel ("layer configuration") of the layers selected by another Action in the same Action List.

Example
To check the properties of **all** layers in the PDF, create the following Action List:

```
Select layers <!-- Select layers on page 389 -->
Check layer properties
```

Related Actions

- *Change layer properties* on page 120
- *Select objects in layers by layer properties* on page 390

4.6.3.4. Check layers

Belongs to

- **Category:** Layers
- **Type:** Checks

What it does

Checks the layers in a PDF.

You can set a number of different checks, such as:

- Document must not have layers, i.e. optional content is not allowed.
- The document catalog dictionary must not contain OCProperties key.

- Document must not have alternate layer configurations, i.e. only one Layers panel ("layers palette") is allowed.
- Layer configuration (i.e. the Layers panel) must have a name.
- Multiple layer configurations (i.e. Layers panels) must not have the *same* name.
- Layer group must not be missing from order, i.e. the Layer group must be present in the order of the Layer panel.
- Layer configuration (i.e. the Layers panel) must not contain application specific usage entry.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

4.6.4. Informs

4.6.4.1. Gather layer information

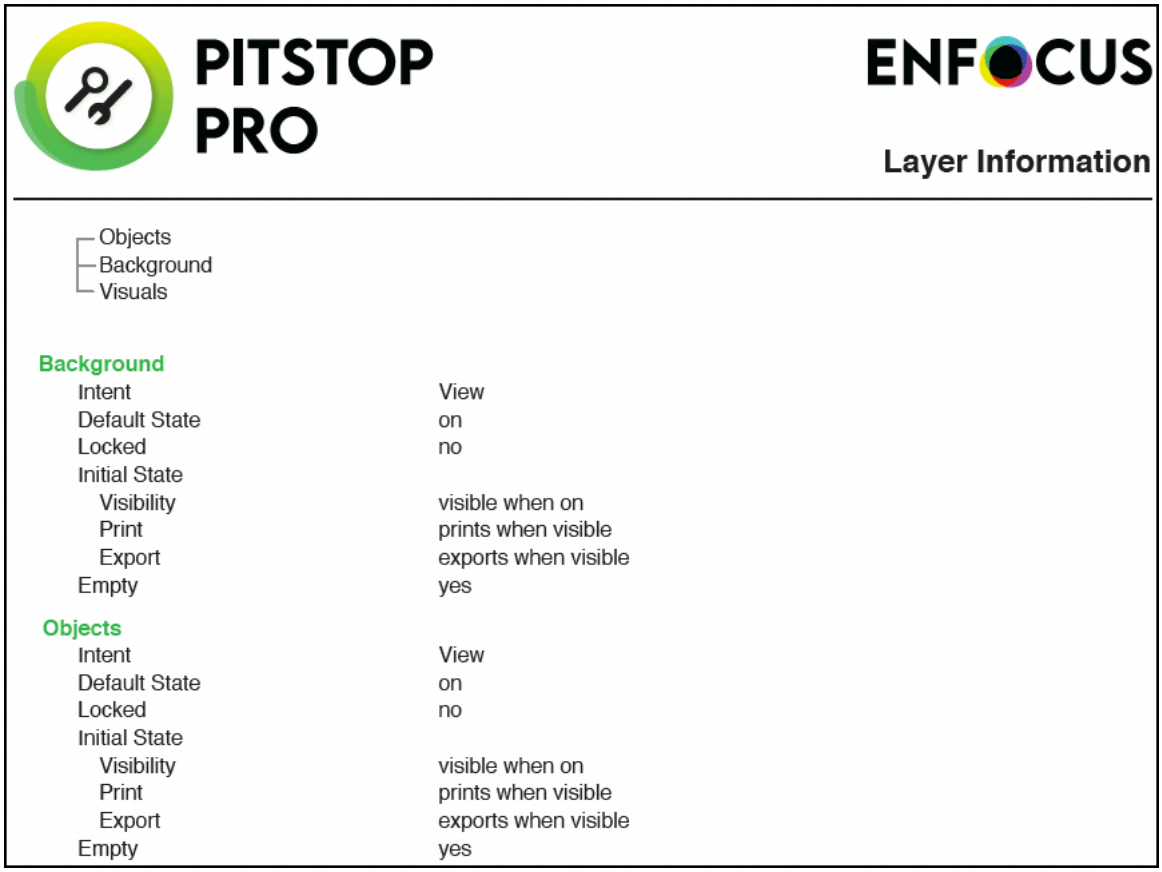
Belongs to

- **Category:** Layers
- **Type:** Informs
- **Since Version:** 2017

What it does

Collects information about the layers used in a PDF and presents it in a report.

You will get a clickable tree view (representing the sequence of the layers), followed by an overview of all layers (listed alphabetically) with their attributes.


PITSTOP PRO

ENFOCUS

Layer Information

- Objects
- Background
- Visuals

Background

Intent	View
Default State	on
Locked	no
Initial State	
Visibility	visible when on
Print	prints when visible
Export	exports when visible
Empty	yes

Objects

Intent	View
Default State	on
Locked	no
Initial State	
Visibility	visible when on
Print	prints when visible
Export	exports when visible
Empty	yes

4.7. Line Art

4.7.1. Changes

4.7.1.1. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for

output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.

Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

4.7.1.2. Change dash pattern

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Changes the pattern of dashed lines or converts them to continuous lines.

How to proceed

To use continuous lines, click .

To create a dashed pattern, click  and configure the following fields:

- In the **On** fields, enter the desired length of the dashes.
- In the **Off** fields, enter the desired size of the spaces between the dashes.
- In the **Phase** field, enter a value to indicate where the dash pattern should begin. For example, if you have chosen dashes of 5 cm each, if you have specified a phase of 2 cm, the first dash will have a length of 3 cm (5 cm - 2 cm).

4.7.1.3. Change fill and/or stroke

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to turn on or off the fill and/or stroke for the selected objects.

4.7.1.4. Change fill type

Belongs to

- **Category:** LineArt;Text

- **Type:** Changes

What it does

Allows you to change the fill type of the selected objects to either Non-Zero Winding (Fill) or Even-odd (Eofill).

About the fill type

The fill type is an attribute of polygons and loops: compound paths with intersecting lines. To determine whether a point is part of the shape, two different rules can be applied:

- The **Non-Zero Winding** rule (or standard rule). This rule supposes that you draw a line from a point inside the shape to the outside of the shape, without passing through a vertex. You must now count the number of times edges wind around the point inside the shape, in a counter-clockwise direction:
  - For every edge that crosses the line from the point inside the shape in one direction, add 1 to the winding number.
  - For every edge that crosses the line in the opposite direction, subtract 1.

  If the winding number is not equal to zero, the shape area to which the point belongs, is filled. For more information, refer to *http://www.wikipedia.org/wiki/nonzero-rule*.
- The **Even-odd rule**: This rule also supposes that you draw a line between a point inside the shape outline and a point outside its outline.
  - If that line crosses the line of the shape an odd number of times, the shape area to which the point belongs, is filled.
  - If the number of crossings is even, the area is not filled.

Checking the fill type of line art

To see which rule is applied, check the object's fill attributes:

1. Select the object, using the Enfocus Select tool .
2. Click to display the Enfocus Inspector and select > .
3. At the bottom, check which button is selected:
   - If **Fill** is selected, the **Non-zero Winding rule** applies.
   - If **Eofill** is selected, the **Even-odd** rule applies.

4.7.1.5. Change flatness

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to set the flatness of a PostScript curve.

The flatness determines how the objects in a document are printed on a PostScript printer.

The default setting for flatness is 1. Increasing this value will speed up printing, but can reduce the print quality (resulting in visible segments in the curve). Decreasing this value will slow down printing, but will improve the print quality.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

4.7.1.6. Change line cap

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes how the end of a vector line looks like.

How to proceed

- To have the line end exactly, click  **butt**.
- To put a round end on the line, click  **round**.
- To have corners projected beyond the length of the line, click  **projecting square**.

4.7.1.7. Change line join

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes how a corner on a vector line looks like.

How to proceed

- To have a sharp corner, click  **miter**.
- To put a round corner on the line, click  **round**.
- To flatten the corners, click  **bevel**.

4.7.1.8. Change line weight

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes the thickness of a selected line to the desired line weight.

Related Actions

- *Select by line weight* on page 392
- *Check line weight* on page 296

4.7.1.9. Change miter limit

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes the length of the extension of a corner on a vector line.

The miter limit is the limit when a join switches from mitered (pointed) to beveled (squared-off). To allow “pointier” angles, you can increase the miter limit.

4.7.1.10. Change stroke adjustment

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Allows you to enable or disable stroke adjustment.

Stroke adjustment takes care of the rendering of paths on a raster device (printing device, computer monitor, etc.).

Example

If stroke adjustment is **turned off**, the device will draw the pixel only if it covers the path for more than 50%.

This means that a 1 pixel wide line can be drawn in different ways:

- If the line is drawn nicely on top of a pixel of the screen, the line will look fine.

- If the line is spread over 2 pixels of the screen, the width will be 2 pixels on some places and 1 pixel on other places, turning the line into an ugly, jaggy line.

If stroke adjustment is **turned on**, a correction will be made in such a way that the line looks nice and has the same width (1 pixel) everywhere.

4.7.1.11. Close path

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Joins the connection between the first and the last anchor point of a path (as required).

4.7.1.12. Combine subpaths

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Combines two selected paths.

About subpaths

A path is considered the combination of the path itself which represents most graphic state properties such as color, line-weight, etc. and the subpaths which represent the lines. For example, a doughnut is a single path with a single fill and stroke color, which consists of two subpaths (=two circles).

Related Actions

- *Select subpaths* on page 396
- *Split in subpaths* on page 141

4.7.1.13. Combine and divide shapes

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **Since version:** 2018

What it does

Allows you to combine the selected objects into one shape or vice versa, divide a shape in multiple parts.

In case of combining shapes, you should indicate how the overlapping parts should be handled:

- **Unite**: Combines the selected objects into a single shape.
- **Intersect**: Keeps the areas where objects are stacked on top of each other.
- **Exclude**: Keeps the areas where an odd number of objects are stacked on top of each other.
- **Minus front**: Keeps the areas of the bottom shape which are not overlapping with the overlying shapes.
- **Minus back**: Keeps the areas of the top shape which are not overlapping with the underlying shapes.

If you want to keep the original shapes, select **Create copy**. The changes will be made on the copy and the original shapes will be kept as they are.

Combine/Divide Shapes is also an option in the PitStop Pro > Object menu and in the context menu when you make a selection, and a tab in the PitStop Inspector.

Note: If used on 'open' paths, the paths are closed before the operation is executed. The result may be unexpected.

Examples

```
Select line art
Combine and divide shapes <!-- Choose an option -->
```

Suppose you're running this Action List on a file with the following 3 partly overlapping objects:



The table below shows the result of each of the options.

Chosen option	Result
Unite	 Note that the new shape gets the color of the front/top shape.
Intersect	As there is no part where all three objects are stacked on each other, the intersection is empty and all shapes are removed.
Exclude	
Minus front	

Chosen option	Result
Minus back	
Divide	 Once divided, you can for example move the different parts apart. 

Related Actions

Select line art on page 393

4.7.1.14. Convert stroke to fill

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **Since version:** 2018

What it does

Converts a stroked path to a filled path.

The stroke properties become the fill properties of the newly created object.

There are two methods to make the conversion:

- **Placing the objects with stroke or fill in a knockout group** This method puts everything in a form. This may be undesirable; if so, you can select the second option.

  Clipping the object with fill by the object with stroke This method works in a different way, without knockout groups, it simply cuts away the stroked object. Note that exceptionally small hairlines may be visible (depending on the renderer used).

In most cases, there will be no visual difference between both methods.

Examples

Some examples where this Action can be useful:

- You want to combine shapes (*Combine and divide shapes* on page 133). This is not possible with objects that have no fill.
- You want to remove one dash of a dashed line. This is only possible after you have converted the stroke to a filled path.

4.7.1.15. Crop line art

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **Since version:** 2018

What it does

Performs a hard crop on line art.

This is useful to remove redundant data, for example content that is masked away. This reduces the complexity and makes the file faster to process and easier to edit. Note that PitStop 2018 comes with a standard Action List "Clean Up Content" that makes use of this Action.

There are three ways to crop line art:

- **Crop line art to clip mask** Allows you to "execute" clipping masks on line art: the objects are cropped to their clipping mask, while the clipping path itself and anything that was clipped away is removed, without causing any visual difference. During this process, strokes are contourized (converted to fill paths). As a consequence, 'redundant' (because invisible) line art is removed, which reduces the file size and speeds up the rendering and processing of your artwork files.
- **Crop line art to the page box of your choice**: Removes all line art outside the specified page box.
- **Crop line art to forms**: Removes all line art outside the form (if applicable).

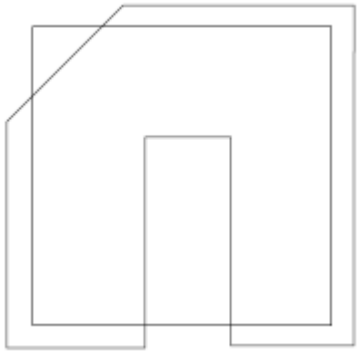
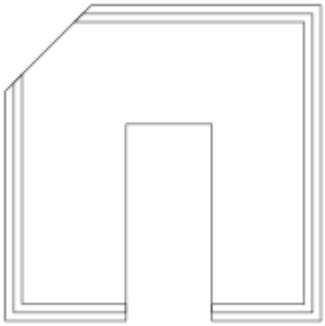
In case of knockout behavior, there are two methods to crop the line art:

- **Placing the stroke and fill objects in a knockout group** This method puts everything in a form. This may be undesirable; if so, you can select the second option.
- **Clipping the fill object by the stroke object** This method works in a different way, by cutting away the stroked object. No forms/knockout groups are created. Note that exceptionally small hairlines may be visible (depending on the renderer used).

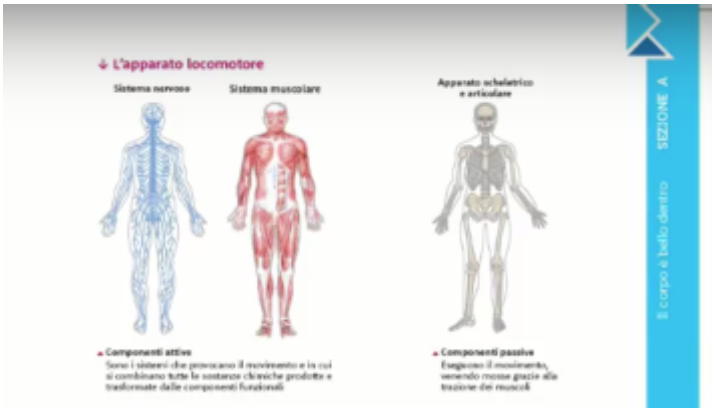
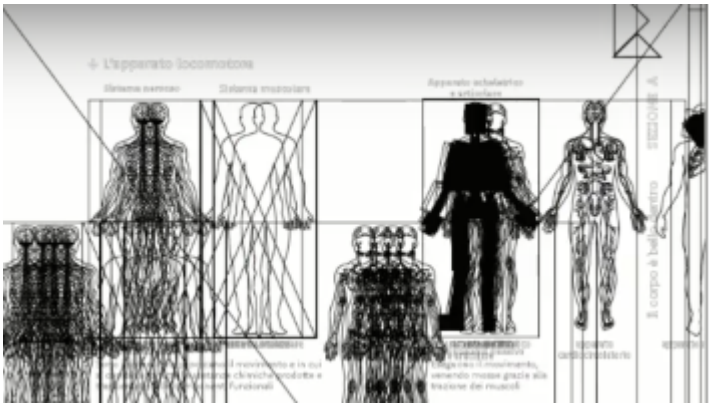
In most cases, there will be no visual difference between both methods.

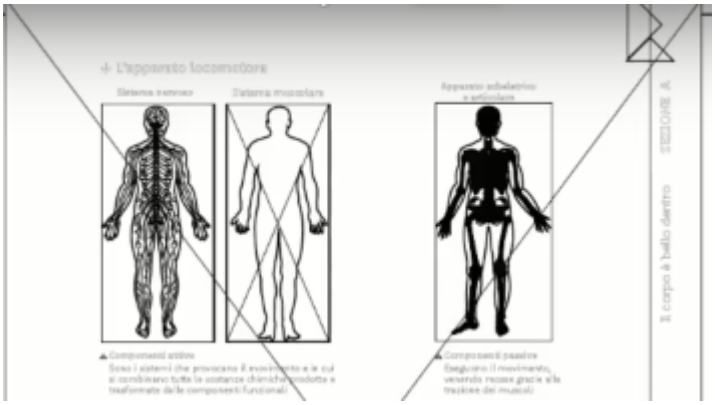
Example 1

	Clipped image. There is no visual difference before and after cropping/running the Action.

	Clipped image in wireframe mode BEFORE cropping/running the Action.
	Clipped image in wireframe mode AFTER cropping/running the Action.

Example 2

	How the page looks. There is no visual difference before and after cropping/running the Action.
	Page in wireframe mode BEFORE cropping/running the Action.

	Page in wireframe mode AFTER cropping/running the Action.

Want to know more?

There is a nice movie explaining this Action. Check it out on our learning platform (www.enfocus.com/learn): *PitStop 2018 features*.

4.7.1.16. Fix negative dash pattern phase

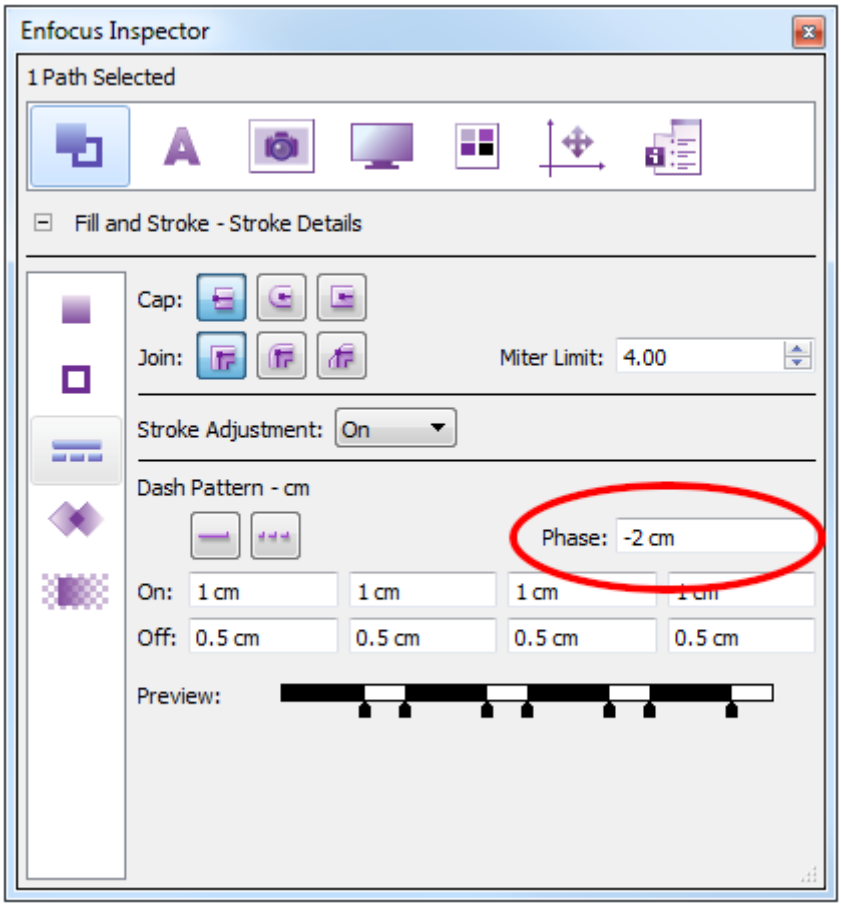
Belongs to

- **Category:** LineArt
- **Type:** Changes
- **Since version:** 13

What it does

Converts a negative dash pattern phase into a positive phase without any visual change.

The dash pattern phase specifies the distance into the dash pattern to start the dash. Negative values may not be supported by the RIP.



Example:

Applying this Action to the dashed pattern in the above example (phase = - 2 cm) will result in a new phase of 4 cm. This positive value is calculated by adding the total length of the dash pattern (6 cm) to the negative phase (-2 cm).

Related Actions

- *Select objects with negative dash pattern phase* on page 394
- *Fix negative dash pattern phase* on page 137

4.7.1.17. Match fill and stroke colors

Belongs to

- **Category:** Color; LineArt
- **Type:** Changes
- **Since version:** 12 update 3

What it does

Changes the stroke color to match the fill color or vice versa.

Use case

Suppose you want to print very small text. To improve the readability, you convert the text to outlines and add a stroke. However, the stroke color is black by default. This may not be desired, e.g. if your text is in color. In that case, you can run this Action with the option **Change the stroke color to match the fill color**.

Related Actions

Change color on page 84

4.7.1.18. Normalize line weight

Belongs to

- **Category:** General; LineArt; Position and size
- **Type:** Changes

What it does

Normalizes paths where a transformation matrix caused distortions, by removing the distortion, giving the path a uniform line weight equal to the average reported in the Inspector. The Action also works on sheared paths.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392
- *Check line weight* on page 296

4.7.1.19. Open path

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Removes the connection between the first and the last anchor point of a path.

4.7.1.20. Reverse path

Belongs to

- **Category:** Line Art
- **Type:** Changes
- **New Since:** PitStop 2022

What it does

Changes the direction of the starting and ending point of the selected path.

4.7.1.21. Separate stroke and fill

Belongs to

- **Category:** Line Art
- **Type:** Changes

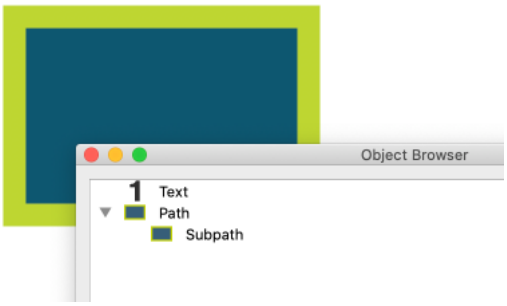
What it does

Splits stroke and fill of line art that has both a stroke and a fill.

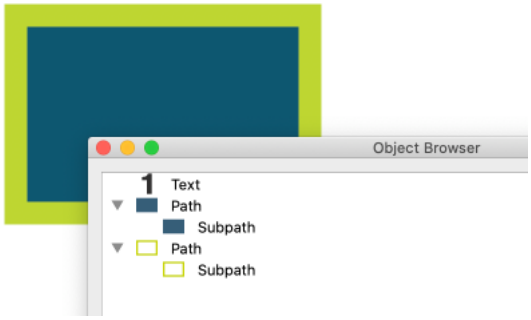
This is for example useful if you want *to add bleed around a contour*, which is able to extend line art, but only if it's not both stroked and filled.

Example

Before:



After:



Related Actions

- *Add bleed around contour* on page 215

4.7.1.22. Split in subpaths

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Allows you to split any compound path into separate paths, for example to give them a different color.

Splitting compound paths in

In , you can as well split compound paths. Proceed as follows:

1. Select the compound path (by using the PitStop Select Objects tool).
2. Right-click it.
3. Click **Path** > **Compound Path** > **Release Compound Path**.

Related Actions

- *Combine subpaths* on page 132
- *Select subpaths* on page 396

4.7.2. Checks

4.7.2.1. Check line art by length

Belongs to

- **Category:** LineArt
- **Type:** Checks
- **Since Version:** 2019

What it does

Checks if the line art has a particular length. You can either check the length of individual line art or the total length of all line art in the document.

The exact length is mentioned in the Preflight Report and the Navigator.

Use case

Users with a cutting table may want to know the length of a cut path so they can estimate how long the job will take to cut on the table.

4.7.2.2. Check line weight

Belongs to

- **Category:** LineArt; Prepress
- **Type:** Checks

What it does

Checks if the line weight of the selected objects is higher or lower than a particular value.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392

4.7.2.3. Check for objects with negative dash pattern phase

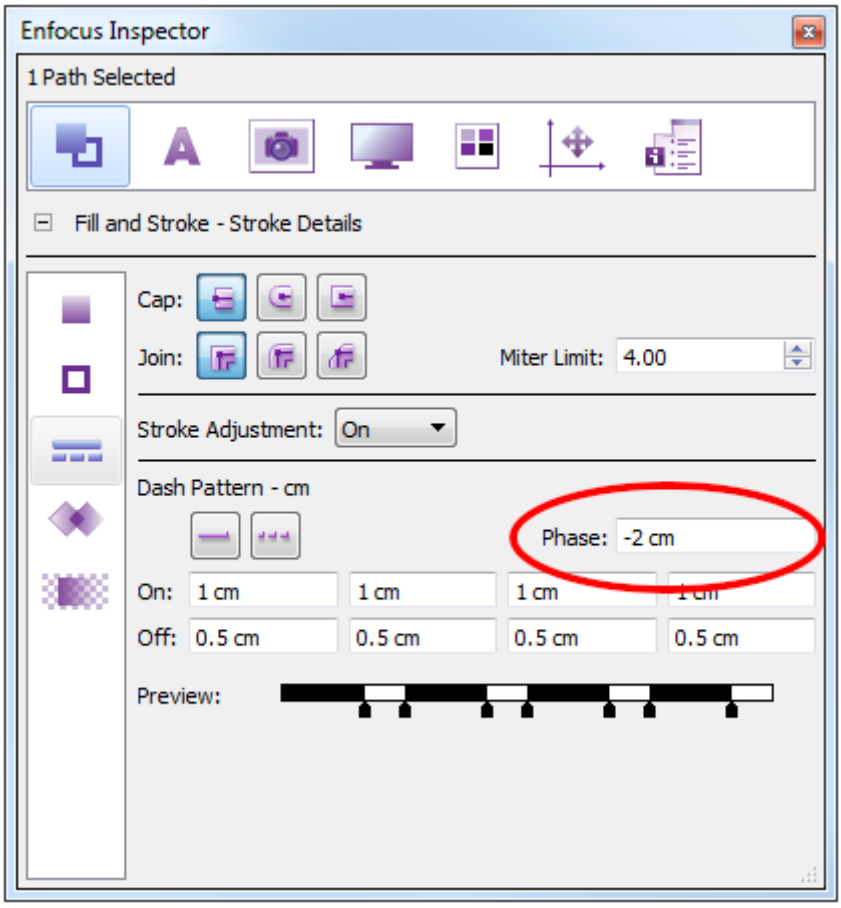
Belongs to

- **Category:** LineArt
- **Type:** Checks
- **Since version:** 13

What it does

Detects if the document contains a dash pattern phase with a negative value.

The dash pattern phase specifies the distance into the dash pattern to start the dash. Negative values may not be supported by the RIP.



Related Actions

- *Select objects with negative dash pattern phase* on page 394
- *Fix negative dash pattern phase* on page 137

4.7.2.4. Check for zero fill line art

Belongs to

- **Category:** LineArt
- **Type:** Checks
- **Since version:** 2020

What it does

Detects if the document contains line art of which the fill is empty ('zero-width filled lines').

This type of line art may be visible in a PDF but usually it doesn't print or rasterize, so it's important that it is detected in advance.



Note: Zero fill clip paths are also detected.

4.7.2.5. Check maximum path length

Belongs to

- **Category:** Line Art
- **Type:** Checks

What it does

Checks for a maximum amount of nodes in a path.

4.7.2.6. Check number of paths on page

Belongs to

- **Category:** Line Art
- **Type:** Checks

What it does

Checks the number of paths on one page.

You can for example log a warning if the PDF contains more than 4 paths on a page.

Related Actions

Select page by number of paths on page 395

4.7.2.7. Check thin objects

Belongs to

- **Category:** Line Art
- **Type:** Checks
- **Since version:** 2019

What it does

Allows you to check if the document contains objects with a stroke smaller than a set threshold.

If desired, you can indicate that for objects of which stroke and fill have the same color, the width of the fill and stroke should be added together.

This Action is typically used to check for thin white lines that may be visible on small screens (e.g. on an iPad screen).

Related Actions

Select thin objects on page 396

4.7.2.8. Check total number of nodes on page

Belongs to

- **Category:** Line Art
- **Type:** Checks
- **Since version:** 13 update 1

What it does

Checks how many nodes are present on each page, depending on the set threshold (e.g. less than/more than (...) the set number of nodes). This Action is useful to detect complex pages, which may take a considerable amount of time to rip and therefore may cause a production bottleneck.

Related Actions

- *Select page by total number of nodes* on page 395

4.7.3. Selections

4.7.3.1. Select by line weight

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Selects objects with a particular line weight.

For example, select objects with line weight *less than 0.0123* inch.

Related Actions

- *Select by line weight* on page 392
- *Check line weight* on page 296

4.7.3.2. Select closed paths

Belongs to

- **Category:** Line Art
- **Type:** Selections
- **Since Version:** 2018

What it does

Selects the closed paths in a file.

Use case: To be able to manipulate the contents of a file based on the dieline (closed paths), you may select the dieline from within a PDF file containing other paths of the same color and width.

Related Actions

- *Select subpaths* on page 396

4.7.3.3. Select line art

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Allows you to select objects that are drawn as line art (i.e. vector and not raster).

4.7.3.4. Select line art by total number of nodes

Belongs to

- **Category:** Line Art
- **Type:** Selections
- **Since Version:** 2019

What it does

Selects paths based on the number of nodes. The number of nodes can be counted based on compound paths or subpaths.

This Action can be useful in combination with *Select closed paths* on page 392 or with *Rasterize selection* on page 109.

Related Actions

- *Select page by total number of nodes* on page 395

4.7.3.5. Select objects that use neither stroke nor fill

Belongs to

- **Category:** LineArt;Text
- **Type:** Selections

What it does

Selects vector or path objects that contain no stroke or fill color value in a PDF.

Related Actions

Select invisible objects without fill and stroke on page 382 (same functionality)

4.7.3.6. Select objects with negative dash pattern phase

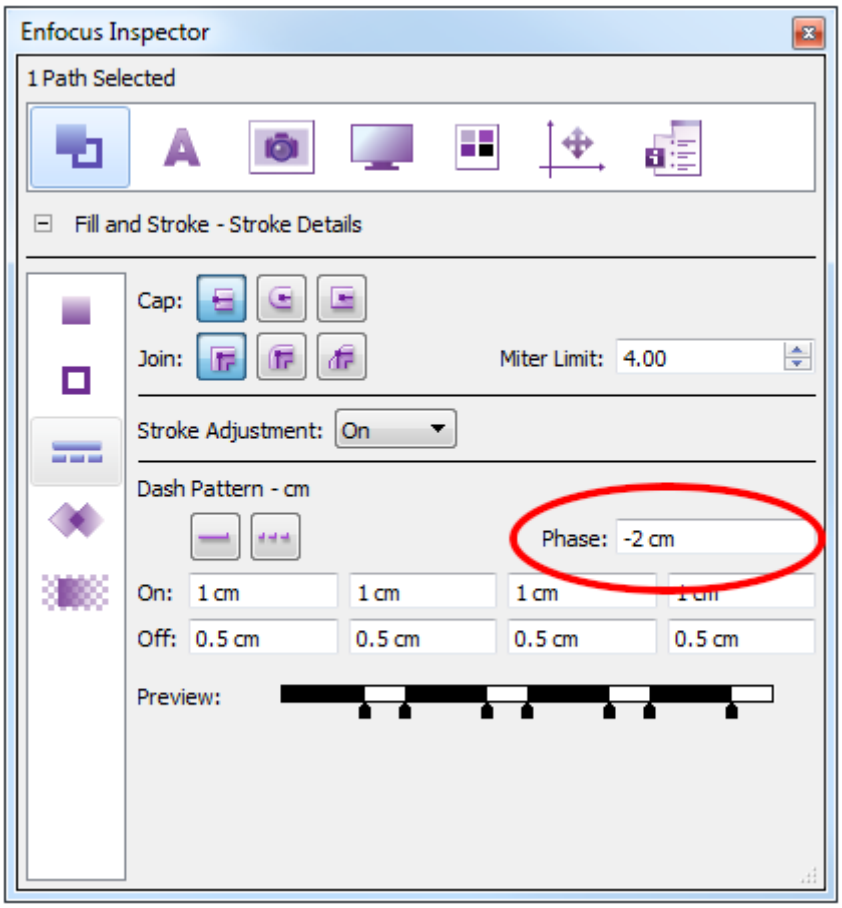
Belongs to

- **Category:** LineArt
- **Type:** Selections
- **Since version:** 13

What it does

Select documents that have a dash pattern phase with a negative value.

The dash pattern phase specifies the distance into the dash pattern to start the dash. Negative values may not be supported by the RIP.



Related Actions

- *Check for objects with negative dash pattern phase* on page 294
- *Fix negative dash pattern phase* on page 137

4.7.3.7. Select page by number of paths

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Allows you to make a selection based on the number of paths on a page.

You could for example select all pages with less than 4 pages.

Related Actions

Check number of paths on page on page 297

4.7.3.8. Select page by total number of nodes

Belongs to

- **Category:** Line Art
- **Type:** Selections
- **Since version:** 13 update 1

What it does

Selects pages based on the number of nodes present on that page. You can set the threshold (e.g. less than/more than (...) e.g. 10.000 nodes) as required. This Action is useful to select (and afterwards change) complex pages with lots of points, which may take a considerable amount of time to rip and therefore may cause a production bottleneck. A common way of handling this issue is to select the offending pages and convert them to bitmaps.

Note: The new default Action List "Find complex pages (over 5,000 nodes) and rasterize them at 600 dpi" includes this functionality.

Related Actions

- *Check total number of nodes on page* on page 297
- *Select line art by total number of nodes* on page 393

4.7.3.9. Select rendering objects

Belongs to

- **Category:** LineArt;Text;Image
- **Type:** Selections

What it does

Selects all objects with a rendering intent.

This includes paths, text and images with any of the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

Note: This Action does not allow you to make a selection based on **one particular** rendering intent. To select objects by **one** of the listed rendering intents, use *Select by rendering intent* on page 367.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select by rendering intent* on page 367

4.7.3.10. Select subpaths

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Selects the subpaths if the entire path is selected.

About subpaths

A path is considered the combination of the path itself which represents most graphic state properties such as color, line-weight, etc. and the subpaths which represent the lines. For example, a doughnut is a single path with a single fill and stroke color, which consists of two subpaths (=two circles).

Related Actions

- *Combine subpaths* on page 132
- *Split in subpaths* on page 141

4.7.3.11. Select thin objects

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Allows you to select objects based on the maximum thickness of the fill or stroke.

If desired, you can indicate that for objects of which stroke and fill have the same color, the width of the fill and stroke should be added together.

This Action is typically used to select and afterwards remove thin white lines that may be visible on small screens (e.g. on an iPad screen).

Example

If you choose the following options:

```
Select objects with width of Filled rectangle
```

```
smaller than 0.0353 cm
Calculate whole thickness when stroke and fill have the same color <!-- selected -->
```

Following objects will be included in the selection:

- Objects with different stroke and fill color, must have a **fill** smaller than 0.0353 cm.
- Objects with the same stroke and fill color, must have a **fill** and **stroke** (added together) smaller than 0.0353 cm.

Related Actions

Check thin objects on page 297

4.8. Metadata

4.8.1. Changes

4.8.1.1. Add missing creation and modification date

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Inserts the creation and modification date.

In some legacy PDF applications it was possible to create a PDF file without a creation or modification date. This Action fixes this issue.

Related Actions

Check creation and modification date on page 301

4.8.1.2. Change annotation flags

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Allows you to enable or disable the annotation flags of your choice.

Following flags can be changed:

- Invisible
- Print
- NoRotate
- ReadOnly
- ToggleNoView
- Hidden
- NoZoom
- NoView
- Locked
- LockedContents

Related Actions

- *Check annotation flags settings* on page 298
- *Check annotations print setting* on page 299
- *Use flags to select annotation* on page 404

4.8.1.3. Change annotations print setting

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Change annotations' print setting allows you to set the selected annotations to **Printing** or **Non-Printing**.

4.8.1.4. Change binding

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Allows you to redefine a document's binding; you can set binding to the right or to the left.

Most European language documents are bound on the left.



Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Check binding* on page 300

- *Select by binding* on page 399

4.8.1.5. Change document info

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Changes the document information as found in the document properties in Acrobat.

You can change, remove or replace the following details:

- Producer
- Title
- Subject
- Author
- Creator
- Keywords

If you want to replace document info, you can make use of fixed strings and/or variables, such as the user name, company, date ...

Example

To replace the current keywords in your document with the document title and the word "PDF", proceed as follows:

1. Run the Change document info Action to remove the current keywords:

```
Change document keywords <!-- select Remove -->
```

2. Run the Change document info Action to insert the new keywords:

```
Change document keywords <!-- select: Set to PDF, %Document Title% -->
```

Related Actions

- *Check document info* on page 301
- *Select by document info* on page 400

4.8.1.6. Change document information dictionary compliance

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Makes the information dictionary compliant with the chosen PDF version.

About the info dictionary

The info dictionary contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document Properties.

The specifications for the info dictionary depend on the PDF version:

- PDF 1.7: The info dictionary is optional. If it's present, it may contain the following entries: Title, Author, Subject, Keywords, Creator, Producer, CreationDate, ModDate and Trapped.
- PDF 2.0: The info dictionary is optional. If it's present, it may be empty, or contain CreationDate and/or ModDate. The other entries are deprecated.
- PDF/X-6: There should be no info dictionary, or if there is one, it should be empty.



Note: There is one exception to the above: if there is a PieceInfo dictionary in the document catalog dictionary, the info dictionary is required and must contain the ModDate entry.

Note that as of PDF 2.0, the *info* dictionary is officially called *information* dictionary.

Options

- **PDF 1.7**: PitStop only adds an info dictionary (including ModDate) if document level PieceInfo is present.
- **PDF 2.0**: PitStop removes deprecated entries from the info dictionary (if necessary). If document level PieceInfo is present, it makes sure there is an info dictionary that contains ModDate.
- **PDF/X-6**: PitStop removes the info dictionary if there is one, except if document level PieceInfo is present; then it makes sure there is an info dictionary that contains ModDate.
- **Current document version**: PitStop detects the current PDF version and makes sure the info dictionary is compliant with the current PDF version.
- **None (leave it unchanged)**: This option prevents PitStop from interfering with the info dictionary at the time of saving the file.

4.8.1.7. Change Output Intent

Belongs to

- **Category:** Color; Metadata
- **Type:** Changes

What it does

Changes a PDF's Output Intent to comply with a particular PDF/X or PDF/A version, using a particular ICC profile and/or ICC characterization.

Note that you can change the document Output Intent or the page level Output Intent.

Related Actions

Check Output Intent on page 265

4.8.1.8. Change PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes

What it does

Changes the Acrobat and PDF version of a PDF.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.



Note: Changing the PDF version will not change the attributes of a higher version PDF to those of a lower one - it only changes the version **number**. As higher versions of Acrobat always save the PDF version number up to their version, even if nothing has changed, this Action can be useful to reset the PDF version to the one used to create the PDF.

Example

If you configure this Action to change the PDF version to PDF 1.5, both the PDF version and the Acrobat version will be changed. The new PDF version will be PDF 1.5; the new Acrobat version will be 6.0.

If you change the PDF version to PDF 2.0, the Acrobat version will remain unchanged.

Related Actions

- *Select by PDF version* on page 400
- *Check PDF/Acrobat compatibility* on page 311

4.8.1.9. Change PDF/A version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Changes the version key tag in a PDF/A document to another version key.

The following version keys are supported:

- PDF/A-1a
- PDF/A-1b
- PDF/A-2a

- PDF/A-2b
- PDF/A-2u

About PDF/A version keys

PDF/A is a specialized subset of the PDF specification, also known as "PDF for **A**rchive".

The PDF/A version key identifies the version of the PDF/A standard the document complies with. If the version key is not set correctly, the document is not PDF/A compliant. Note that changing the **key** does not change the compliance of the document! It will only allow you to continue with your workflow.

Related Actions

- *Remove PDF/A version key* on page 154
- *Check PDF/A version key* on page 312

4.8.1.10. Change PDF/X version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Changes the version key tag in a PDF/X document to another version key.

The following version keys are supported:

- PDF/X-1a:2001
- PDF/X-32002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDFX/-4p

About PDF/X version keys

PDF/X is a specialized subset of the PDF specification, also known as "PDF for Exchange".

The PDF/X version key identifies the version of the PDF/X standard the document complies with. If the version key is not set correctly, the document is not PDF/X compliant. Note that changing the **key** does not change the compliance of the document! It will only allow you to continue with your workflow.

Related Actions

- *Remove PDF/X version key* on page 155

4.8.1.11. Change ProcSet resources

- **Category:** Metadata, PDF 2.0

- **Type:** Changes
- **New since:** PitStop 2021

What it does

Adds, removes or does not change the ProcSet entry as specified in the attributes of this Action.

You can as well have PitStop make the appropriate change based on the document's PDF version (see Options).

This Action is useful to make a PDF compliant with a particular PDF version.

About ProcSet resources

Procedure sets are categories of related PDF operators used in content streams. The ProcSet entry in a content stream's resource dictionary holds an array that consists of the procedure sets used in that content stream, for example: /ProcSet [/PDF /Text] . Procedure sets are used only when the content stream is printed to a PostScript output device.

ProcSet resources were used in older PDF versions, but as of PDF 1.4 this feature is considered obsolete. As of PDF 2.0, this feature is deprecated.

For more details, refer to *the PDF Reference* (See 14.2 Procedure Sets).

Options

- **Add ProcSet (default)**
- **Remove ProcSet**
- **Do not change the ProcSet presence** (so if the ProcSet entry is defined, just keep it; if it's not, do not add it)
- **Add, remove or don't change ProcSet, dependent on the document's PDF version**, PitStop behaves as follows:
  - PDF 1.3 and earlier: Add ProcSet resources
  - PDF 1.4 - PDF 1.7: Do not change the ProcSet presence
  - PDF 2.0: Remove the ProcSet resources

4.8.1.12. Change trapped flag

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Modifies the trapped flag.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

4.8.1.13. Fix PDF/A extension schema definitions in document XMP metadata

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does
Fixes issues with the PDF/A extension schema definitions in document XMP metadata.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

About XMP schema definitions

PDF/A supports the predefined schema definitions of the XMP 2004 specification. However, as these only cover general metadata requirements, custom XMP schemas ("extension schemas") are also supported to meet company- or industry-specific requirements, on condition that a description of these extension schemas is embedded in the XMP.

4.8.1.14. Fix version compatibility with PDF/A-2

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Fixes the header and catalog version of the PDF to make it compliant with PDF/A-2.

Related Actions

- *Check version compatibility with PDF/A-2*

4.8.1.15. Fix version compatibility with PDF/X-6

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Fixes the header and catalog version of the PDF to make it compliant with PDF/X-6 or PDF/X-6p.

Related Actions

- *Check version compatibility with PDF/X-6*

4.8.1.16. Flatten form fields

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Allows you to convert form fields to normal objects in a document.

This Action is useful if you have output issues with form fields as content, for example because the output device or the PDF renderer does not support form fields.

Related Actions

- *Check form fields* on page 304
- *Remove form fields* on page 152

4.8.1.17. Make document metadata consistent

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Makes sure that the metadata in the different metadata locations has the same values. In case of inconsistencies, the most recent value is used.

If multiple creators are not considered an inconsistency, select the **Allow multiple creators** checkbox. In that case, the "Creator" property will not be changed, even if it is not the same in the different metadata locations.

How it works

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

- *Check if document metadata is consistent* on page 308
- *Select if document metadata is inconsistent* on page 403

4.8.1.18. Remove action dictionaries

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes action dictionaries ("actions") from a PDF.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

You may want to remove these actions, as they are not allowed in a PDF/X file. The Remove action dictionaries Action will only remove the **action**; the object (the bookmark, annotation) the actions are linked to will not be removed. For example, if you remove the action from a bookmark, the bookmark is still visible, but not clickable anymore.

Related Actions

Check for action dictionaries on page 305

4.8.1.19. Remove additional actions

Belongs to

- **Category:** Metadata
- **Type:** Changes

- **Since:** 2022

What it does

Removes additional action entries from Root, Page, Widget and Field dictionaries.

This is a fix for PDF/X-6, as PDF/X-6 does not support additional actions.

4.8.1.20. Remove attachments

Belongs to

- **Category:** Metadata
- **Type:** Changes
- **Since Version:** 13 update 2

What it does

Removes attachments and attachment annotations from a PDF. This may be useful to reduce the file size.



Note: After running the Action, the attachment reference may still be visible in the Attachments pane. After saving and closing the file, it will be gone.

This Action does not work on PDF Portfolios, as this would result in empty PDF files.

4.8.1.21. Remove form fields

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes any PDF form fields from a document.

You may lose data if you do this.

Related Actions

- *Check form fields* on page 304

4.8.1.22. Remove Javascript

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes JavaScript code (which might perform unwanted actions) from a PDF.

This language is often used to add interactive functionality to PDF files. However, in a print production environment, these scripts serve no purpose and may result in increased file sizes.

Related Actions

Check for Javascript on page 306

4.8.1.23. Remove marked content

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Strips PDF generator defined content from a PDF.

Marked content is content tagged with special messages so that the application that opens it can read it in a particular way.

Related Actions

Check marked content on page 311

4.8.1.24. Remove metadata

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes the selected metadata from a PDF. This is typically done to reduce the file size.

You can remove the following types of metadata:

- Annotations
- Thumbnails
- Article threads
- Page labels
- Acrobat capture info
- Bookmarks
- Structural information (= removes all tags, including Tagged PDF tags)
- PieceInfo
- Job ticket
- Named destinations (includes annotations and bookmarks)
- Metadata streams (to reduce the size of the file) - new option since PitStop 13 update 2



Note: In PitStop 2019, the 'Remove structural information' checkbox has been split up into two separate checkboxes: 'Structural information' and 'PieceInfo'. Action Lists from

earlier versions with 'Remove structural information' enabled, will have both checkboxes selected.

4.8.1.25. Remove name from XObjects

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes Name from form XObject and image XObject stream dictionaries. This is typically done to fix deprecated PDF 1.x features.

4.8.1.26. Remove PDF/A version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

This Action removes the PDF/A version key from the PDF file.

Related Actions

- *Change PDF/A version key* on page 146
- *Remove PDF/A version key* on page 154

4.8.1.27. Remove PDF/X version key

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

This Action removes the PDF/X version key from the PDF file.

Related Actions

- *Change PDF/X version key* on page 146
- *Check PDF/X version key* on page 312

4.8.1.28. Remove unused destinations

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Destinations identify locations or views in a PDF you can point to using bookmarks or links. As destinations increase the file size, you may want to remove the destinations that are not used, to reduce the file size.

See also: *Check unused destinations* on page 314

4.8.1.29. Set correct document XMP name spaces

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

The XMP metadata standard (used for labeling metadata in PDFs) defines namespaces for defined sets of core properties. This Action checks if the correct document XMP namespaces are used, and fixes issues as required.

Related Actions

Check if document XMP name space uses correct prefix on page 309

4.8.1.30. Set XMP file identifiers

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Adds missing file identifiers to the PDF's XMP metadata stream, for example: the Version ID, the DocumentID, the RenditionClass.

Related Actions

Check file identifiers in document XMP metadata on page 272

4.8.2. Checks

4.8.2.1. Check annotation flags settings

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Allows you to check if particular annotation flags are enabled or disabled.

Flags that can be checked:

- Invisible
- Print
- NoRotate
- ReadOnly
- ToggleNoView
- Hidden
- NoZoom
- NoView
- Locked

How to proceed

1. Select all flags you want to check.
2. Choose the appropriate option:
   - If **The flag must be on** is enabled, a message will be displayed if the selected flags are disabled.
   - If **The flag must be off** is enabled, a message will be displayed if the selected flags are enabled.

Related Actions

- *Check annotations print setting* on page 299
- *Use flags to select annotation* on page 404

4.8.2.2. Check annotations print setting

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Check annotations' print settings allows you to log annotations with a particular print setting (print or non-printing).

Related Actions

Check annotation flags settings on page 298

4.8.2.3. Check annotations type

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Check annotations' type allows you to log the occurrence of particular types of annotations in a PDF, for example: text, hyperlinks, movies,...

4.8.2.4. Check appearances of annotations and interactive form fields

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the document contains annotations and interactive form fields according to the specifications of a particular PDF/X version.

This is useful if you want to print the document (as annotations and interactive form fields cannot be printed) or if your output device or PDF renderer does not support form fields.

Related Actions

- *Check form fields* on page 304
- *Flatten form fields* on page 150
- *Remove form fields* on page 152
- *Check for annotations inside art box or trim box* on page 318

4.8.2.5. Check article threads

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks for the existence of article threads in a PDF file.

Article threads are electronic threads defined by the author of the PDF. They indicate which elements in a PDF belong together as part of a single story, even if they do not follow each other sequentially in the layout of the document.

4.8.2.6. Check binding

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if binding is left or right.

Most European language documents are bound on the left.



Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Select by binding* on page 399
- *Change binding* on page 143

4.8.2.7. Check bookmarks

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains bookmarks.

Bookmarks are links in the left hand side bar of a PDF that take you to different sections.

4.8.2.8. Check creation and modification date

Belongs to

- **Category:** Metadata
- **Type:** Check

What it does

Checks the creation and modification date.

You can indicate which metadata location should be checked, for example only the most recently changed one, or "any" metadata location (if it doesn't matter), ...

About metadata locations in a PDF file

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

Add missing creation and modification date on page 141

4.8.2.9. Check document info

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Searches for the requested document info in the document properties of the PDF.

You can check:

- Title
- Subject
- Author
- Keywords
- Producer
- Creator

Use the **Compare with** field to enter (part of) the name of the document info you are looking for.

Use the operator methods **equals** and **doesn't equal** if you are looking for an exact match; use **contain** or **doesn't contain** if the entered value is just part of the document info you are looking for.

Select the **Match case** checkbox if you want the search to take into account the lower and upper cases of the entered value.



Note: From version 12 update 2 onwards, you can use regular expressions to define the value in the **Compare with** field (if you select **Equals/Does not equal** as operator method).

Related Actions

- *Change document info* on page 143

- *Select by document info* on page 400

4.8.2.10. Check document information dictionary compliance

Belongs to

- **Category:** Metadata; PDF 2.0
- **Type:** Checks
- **Since:** 2022

What it does

Checks if the information dictionary is compliant with the chosen PDF version (PDF/X-6 or PDF 2.0).

For more information about the information dictionary, refer to *Change document information dictionary compliance* on page 144.

Related Actions

- *Change document information dictionary compliance* on page 144

4.8.2.11. Check document permissions

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Allows you to check the permission settings of a PDF, such as (low/high resolution) printing, copying, editing, ...

About document permissions

The table below gives an overview of the permissions that can be set in a PDF.

Document permission	If enabled...
Assembly	Users can insert, delete and rotate pages, and create bookmarks and thumbnails.
Content accessibility	Accessibility software (such as a screen reader) is allowed to use the content of the document.
Fill-in or changing	Users can fill in and change forms.
Annotating	Users can make annotations.
Copying	Users can select and copy contents to the clipboard.
Editing	Users can make modifications to the document.

Document permission	If enabled...
Low resolution printing	Users can print a low-resolution bitmapped image of the pages (for personal use).
High resolution printing	Users can print the document with a high resolution output.
Printing	Users can print the document.

To view a summary of the document permissions, proceed as follows:

1. Open Adobe Acrobat.
2. Select **File** > **Properties**.
3. Switch to the **Security** tab. The document restrictions are displayed in the lower part of the dialog.

4.8.2.12. Check document security

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Checks if a particular encryption was used to secure the PDF file.

Options:

- A PDF version (1.3 - 2.0)
- A combination of "none" and a PDF version (1.3 - 2.0)
- None
- None or Standard (= no custom security)
- Custom (enter a custom name in the text field)

4.8.2.13. Check document trapped flag

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Allows you to check the value of the trapped flag in a PDF.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

The trapped flag is stored in the info dictionary and/or in the XMP metadata stream, but the data can be inconsistent; that's why you must indicate where the trapped flag must be taken from, e.g. from the most recent metadata location.

Related Actions

- *Change trapped flag* on page 148
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

4.8.2.14. Check external hyperlink annotations

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the annotations in the PDF contain hyperlinks to files, applications, and/or web pages.

4.8.2.15. Check for action dictionaries

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains particular action dictionaries, i.e. action types.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

You may want to remove these actions, as they are not allowed in a PDF/X file. The Remove action dictionaries Action will remove the action only; the object (the bookmark, annotation) the actions are linked to will not be removed. For example, if you remove the action from a bookmark, the bookmark is still visible, but not clickable anymore.

Related Actions

- *Remove action dictionaries* on page 151

4.8.2.16. Check for additional actions

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains action dictionaries, i.e. action types, other than the standard ones.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

Related Actions

- *Remove action dictionaries* on page 151
- *Check for action dictionaries* on page 305

4.8.2.17. Check for annotations inside printable area

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Searches a PDF for any annotations that appear in the printable area of the PDF.

4.8.2.18. Check for deprecated attributes in XMP metadata

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the XMP metadata streams in the PDF contain attributes that are outdated.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that

is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

Check if XMP metadata is well-formed on page 310

4.8.2.19. Check for Javascript

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains instances of the JavaScript programming language.

This language is often used to add interactive functionality to PDF files. However, in a print production environment, these scripts serve no purpose and may result in increased file sizes.

Related Actions

Remove Javascript on page 152

4.8.2.20. Check form fields

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Looks for the presence of form fields in a PDF.

Related Actions

- *Remove form fields* on page 152

4.8.2.21. Check for XFA forms

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks whether the PDF contains XFA forms.

An XFA form is a web form and is not suited for printing documents. XFA stands for XML Forms Architecture. It's an XML specification, which is rather vague and does not specify any rendering.

Optionally, you can also check if a NeedsRendering key is present in the PDF document (**log if NeedsRendering key is present**).

4.8.2.22. Check for XMP schema definitions as required by PDF/A

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks whether the PDF contains XMP schema definitions for identifying the document, as required by the PDF/A specification.

4.8.2.23. Check if date is present in document XMP metadata

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks for the date in the XMP metadata of a PDF.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

- *Check file identifiers in document XMP metadata* on page 272
- *Check presence of document metadata stream* on page 313

4.8.2.24. Check if document is produced by PDFWriter

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF was produced by PDFWriter.

PDFs created with PDFWriter are not suitable for high-end printing.

4.8.2.25. Check if document XMP metadata types are valid

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if metadata streams defined in a PDF conform to the XMP schema.

About XMP metadata streams

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

- *Check if XMP metadata is well-formed* on page 310
- *Make document metadata consistent* on page 151
- *Select if document metadata is inconsistent* on page 403

4.8.2.26. Check if document XMP name space uses correct prefix

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

The XMP metadata standard (used for labeling metadata in PDFs) defines namespaces for defined sets of core properties. This Action checks if the correct prefixes are used.

Related Actions

Set correct document XMP name spaces on page 155

4.8.2.27. Check if document metadata is consistent

Belongs to

- **Category:** Metadata

- **Type:** Checks

What it does

Checks if metadata that is present in different metadata locations is identical.

How it works

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Extra checks

Optionally you can check if metadata in one location (selected from the list) is also present in the other location; if all metadata should be present in both locations, select **any metadata location**.

If multiple creators are not considered an inconsistency, select the **Allow multiple creators** checkbox.

Related Actions

- *Make document metadata consistent* on page 151
- *Select if document metadata is inconsistent* on page 403

4.8.2.28. Check if metadata streams do not have a compression filter

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if metadata streams do not have a compression filter.

A compression filter is used to reduce the file size of a PDF. If no compression filter has been used, you may want to add one; if a compression filter has been used, you may want to check which one (e.g. to see if it complies with certain specifications).

Related Actions

Check presence of document metadata stream on page 313

4.8.2.29. Check if URLs in Link Annotations are valid

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks the validity of the hyperlinks in annotations with hyperlinks to web pages, i.e. checks if the target web page exists.

If you're using a proxy server, you should enter the proxy server address and port, and your user name and password. Otherwise, the check cannot be performed.

Related Actions

Check external hyperlink annotations on page 304

4.8.2.30. Check if XMP metadata is well-formed

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the XMP metadata streams in the PDF conform to the XMP specifications.

If the XMP metadata is not well-formed, the document cannot be made PDF/X-4 compliant.



Tip: PitStop provides an Action to solve these problems: *Fix non well-formed XMP metadata* on page 244.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the Additional Metadata button, then select Advanced).

4.8.2.31. Check marked content

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Logs content that has been identified with a marked content tag in a PDF.

Marked content is content tagged with special messages so that the application that opens it can read it in a particular way.

Related Actions

Remove marked content on page 153

4.8.2.32. Check PDF/Acrobat compatibility

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Allows you to checks if a particular Acrobat or PDF version is used in a PDF document.

You can for example check if the Acrobat version is equal to or higher/lower than a particular version.

Note: As of PitStop 2020, you can check a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). If the versions are different, PitStop uses the version from the Adobe extension. If there is no version specified in the Adobe extension, the header version or catalog version are considered, and the highest version number is taken.

4.8.2.33. Check pdfxid prefix in XMP name space

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the pdfxid prefix in the XMP namespace is correct.

The namespace prefix is required for PDF/A.

4.8.2.34. Check PDF/A version key

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks the PDF/A version key.

Related Actions

- *Change PDF/A version key* on page 146
- *Remove PDF/A version key* on page 154

4.8.2.35. Check PDF/X version key

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks the PDF/X version key.

Related Actions

- *Change PDF/X version key* on page 146

4.8.2.36. Check presence of document metadata stream

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains metadata, i.e. descriptive information about the file, such as the title, the author, the creation date ...

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

- *Check if date is present in document XMP metadata* on page 307

- *Check file identifiers in document XMP metadata* on page 272

4.8.2.37. Check thumbnails

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains thumbnails.

4.8.2.38. Check Trapnets for PDF/X

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks whether trapnet information in a PDF is compliant with PDF/X-1, PDF/X-3 or PDF/X-6 standards.

About trapping

In printing, even the slightest misregistration of the plates can cause gaps or color shifts between colored objects to appear. **Trapping** is a technique that compensates for misregistration by expanding adjacent colored objects so that they overlap. Trapping can be performed by the source application, in the PDF, by dedicated trapping tools, or during the RIP-process.

If the traps in a document were added before the PDF document was created, they are included in the PDF file as **trap networks**. A page may have more than one trap network, e.g. one for each intended output device, but all the different trap networks are stored in the same trap network, also called **trapnet annotation**. When printed, the trapnet annotation provides all the required trapping information for the page.

About the PDF/X Requirements for trapping

When trapnet annotations are found in the document, **PDF/X-1a:2001** requires that:

- The **trapped flag** in the document is set to either True or False (Unknown is not allowed).
  - If the trapped flag is **False**, the document does not contain trapnet annotations.
  - If the trapped flag is **True**, the document is completely trapped, and the document contains trapnet annotations.
- **Font substitution** is not used.
- The **CMYK** color space is used.

When trapnet annotations are found in the document, **PDF/X-3:2002** requires that:

- Trapping occurs only when all the **fonts in the document are embedded**.
- The **CMYK** color space is used.

In **PDF/X-6 and PDF/X-6p**, trapnet annotations are not allowed.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Change trapped flag* on page 148

4.8.2.39. Check unused destinations

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Destinations identify locations or views in a PDF you can point to using bookmarks or links. As destinations increase the file size, you may want to check for and remove destinations that are not used.

This Action allows you to **verify** if there are any unused destinations in a PDF document.

The Action *Remove unused destinations* allows you to **remove** them from the PDF.

4.8.2.40. Check version compatibility with PDF/A-2

Belongs to

- **Category:** PDF 2.0, Metadata
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the version of the PDF complies with PDF/A-2.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). PDF/A-2 requires that both the version specified in the header and the version specified in the document catalog are 1.x (so the version should be lower than 2.0).

Related Actions

- *Fix version compatibility with PDF/A-2* on page 149

4.8.2.41. Check version compatibility with PDF/X-6

Belongs to

- **Category:** PDF 2.0, Metadata
- **Type:** Checks

- **New since:** PitStop 2022

What it does

Checks if the version of the PDF complies with PDF/X-6 or PDF/X-6p.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). PDF/X-6 and PDF/X-6p require that both the version specified in the header and the version specified in the document catalog are 2.0 (or higher).

Related Actions

- *Fix version compatibility with PDF/X*

4.8.3. Informs

4.8.3.1. Gather pages information

Belongs to

- **Category:** Metadata; Page
- **Type:** Informs

What it does

Collects information about the pages (number of pages and range) in a PDF and presents it in the log.

4.8.4. Selections

4.8.4.1. Select annotations

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations of a particular type in a PDF document.

Example

To delete all annotations of the type "Movie" and "Sound" in a PDF, configure the following Action List:

```
Select annotations <!-- select Movie and Sound -->
```

```
Remove selection
```

4.8.4.2. Select annotations appearance streams contents according to annotation selection

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows you to select content based on the selected annotations.

About annotation appearance streams

An appearance stream determines the visual appearance of an annotation (e.g. borders, colors,...). Different from *Select annotations* on page 397 (which only selects the annotation **content**), this Action allows you to also include the appearance stream in your selection, so that other actions can be applied to it. You could for example check for RGB objects only inside appearance streams.

This Action has two options:

- **Select the annotation content if the annotation is selected**: If the annotation is selected, all the PDF objects in the appearance stream will be selected too.
- **Select everything except the annotation content of annotations that are not selected**: This is the inverse of the first option; everything in the PDF is selected, except for the objects inside appearance streams of unselected annotations.

Example

To select all annotations of the type "Text" and change their color, configure the following Action List:

```
Select annotations <!-- select Text only - See Select annotations on page 397 -->
Select annotations' appearance streams contents according to annotation selection <!--
 choose first option -->
Change color <!-- Pick the desired fill/stroke color - See Change color on page 84 -->
```

To select and change the color of the whole document, including text annotations but excluding video, sound, ... configure the following Action List:

```
Select annotations <!-- select Text only - See Select annotations on page 397-->
Select annotations' appearance streams contents according to annotation selection <!--
 choose the second option -->
Change color <!-- Pick the desired fill/stroke color - See Change color on page 84 -->
```

4.8.4.3. Select annotations by print setting

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations based on their print setting.

Example

To select all printing annotations and remove them

```
Select annotations by print setting <!--Option: Select annotations if set to print -->
Remove selection
```

To select all printing annotations and set them to non-printing

```
Select annotations by print setting <!-- Option: Select annotations if set to print --
>
Change annotations' print setting <!-- Option: Set annotation to Non-Printing -->
```

See also: *Change annotations print setting* on page 142

4.8.4.4. Select by binding

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows the selection of a PDF based on its binding (left-edge or right-edge binding).

Most European language documents are bound on the left.



Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Check binding* on page 300
- *Change binding* on page 143

4.8.4.5. Select by document info

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows you to make selections based on document info, such as the title, subject, author, keywords, producer or creator of the PDF. You can specify where the information must be taken from, and what the expected value is.

Note: From version 12 update 2 onwards, you can use regular expressions to define the value in the **Compare with** field (if you select **Equals/Does not equal** as operator method).

Example

Suppose you want to select a document of which the author is Anne Banks. It doesn't matter where this information is taken from.

Attributes:

- Document info: author
- Read value from: any metadata location

  Note: If you select **Both metadata locations**, the name of the author will be searched for in both the XMP metadata stream and the info dictionary; if you select **Most recent metadata location**, only the most recently changed metadata location will be checked.

- Operator method: equals
- Compare with: Anne Banks

If you are not sure about the spelling of the name *Anne* (spelled Ann or Anne?), you could select the **Use regular expressions** checkbox and enter "Ann(e)? Banks" in the **Compare with** field.

Related Actions

- *Change document info* on page 143
- *Check document info* on page 301

4.8.4.6. Select by PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Selections

What it does

Allows you to make a selection based on the PDF's Acrobat or PDF version.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.

Note: As of PitStop 2020, you can select a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Example

To select PDFs with Acrobat version higher than 7.0, proceed as follows:

```
Select by PDF version <!-- options: Acrobat version must be more than 7.0 -->
```

Related Actions

- *Change PDF version* on page 145
- *Check PDF/Acrobat compatibility* on page 311

4.8.4.7. Select by trapped flag

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows the selection of a PDF based on the value of the trapped flag.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

The trapped flag is stored in the info dictionary and/or in the XMP metadata stream, but the data can be inconsistent; that's why you must indicate where the trapped flag must be taken from, e.g. from the most recent metadata location.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

4.8.4.8. Select document if XMP file identifiers are not present

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects document if XMP file identifiers are not present.

Related Actions

- *Set XMP file identifiers* on page 156
- *Check file identifiers in document XMP metadata* on page 272

4.8.4.9. Select external hyperlink annotations

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations with external links to other files, applications and/or web Pages embedded in a PDF document.



Tip: You can check the validity of the links with *Check external hyperlink annotations* on page 304.

4.8.4.10. Select if document metadata is inconsistent

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects if document metadata is inconsistent, i.e. if the metadata values are not identical in the different metadata locations.

How it works

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Extra checks

Optionally you can make the selection only if metadata in one location (selected from the list) is also present in the other location; if all metadata should be present in both locations, select **any metadata location**.

If multiple creators should not be considered an inconsistency, select the **Allow multiple creators** checkbox.

Related Actions

- *Check if document metadata is consistent* on page 308
- *Make document metadata consistent* on page 151

4.8.4.11. Select document if document XMP metadata contains invalid types

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects the document if metadata streams defined in the PDF do not conform to the XMP schema.

About XMP metadata streams

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

Check if document XMP metadata types are valid on page 309

4.8.4.12. Select if document XMP contains an invalid name space prefix

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects if document XMP contains an invalid namespace prefix.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the Additional Metadata button, then select Advanced).

Related Actions

Check if date is present in document XMP metadata on page 307

Check file identifiers in document XMP metadata on page 272

4.8.4.13. Use flags to select annotation

Belongs to

- **Category:** Metadata
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects annotations based on the flag they have.

You can select the flags of your choice and indicate whether or not the flags should be enabled.

Following flags can be selected:

- Invisible
- Print
- NoRotate
- ReadOnly
- ToggleNoView
- Hidden
- NoZoom
- NoView
- Locked
- LockedContents

Related Actions

- *Check annotation flags settings* on page 298

4.9. Operators

4.9.1. Selections

4.9.1.1. AND

Belongs to

- **Category:** Operators
- **Type:** Selections

What it does

AND is a logical operator. This means it is used to select a single object with more than one attribute.

Example

To select text that was Helvetica AND size 12 pt, use:

```
Select Font Helvetica
Select Text if Point Size = 12.00 pt
AND
```



Note: AND is NOT used to select two different objects!

For example, **the following is incorrect** because a font cannot be both Helvetica and Arial:

```
Select Font Helvetica
Select Font Arial
AND
```

4.9.1.2. Duplicate top of selection stack

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Duplicate top of selection stack is a logical operator. It is used to **duplicate** the top of the current Action list stack. It's typically combined with the *Remove top of selection stack* ("delete") operator.

For internal use only

Both "Duplicate top of selection stack" and *Remove top of selection stack* are only used internally by PitStop.

When running a Preflight Profile, PitStop turns this Profile into an Action List; the more checks and fixes there are in the Preflight Profile, the longer and more elaborate its Action List representation. In order to avoid having to perform complex selections multiple times, PitStop optimizes the internal Action List by duplicating these selections when they are needed multiple times.

4.9.1.3. Group Actions

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Allows you to group several Actions within an Action List.

This Action is useful to organize and document your Action List.

Note: Instead of using the Group Actions Action, you can as well right-click an Action in the Action List and select **Make Group** from the context menu.

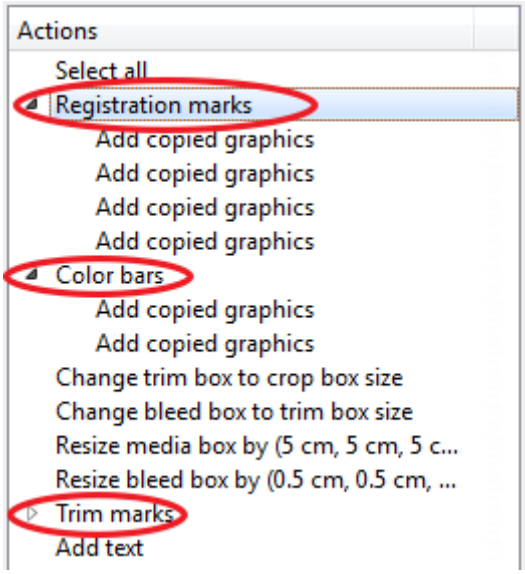
How to proceed

1. Double-click **Group Actions** to add it to the Action List.
2. Specify a meaningful name for your Action group and enter a description.
3. Move **Group Actions** to the desired position. You can drag and drop it, or use the options in the context menu (**Move Up**, **Move Down**).
4. Add the required Actions to your Action List and drag them to your group.

Example

The screenshot below shows the **Add my Printer Marks and Enlarge** Action List (by default provided with PitStop). This Action List contains 3 Action groups (preceded by an icon: ◢ if the group is expanded; ▷ if the group is collapsed):

- The **Registration marks** group contains the different Actions required to add registration marks to the top, bottom, left and right of the page.
- The **Color bars** group contains the Actions to create two color bars.
- The **Trim marks** group contains the Actions to set the trim marks (using *Add object* on page 65).



4.9.1.4. NOT

Belongs to

- **Category:** Operators
- **Type:** Selections

What it does

NOT is a logical operator. It is used to exclude objects according to their attributes.

Example
To select all the text in a document that was not Arial, you need to exclude Arial from your selection.

```
Select Text
Select Font Arial
NOT <!-- NOT only applies to the immediately preceding item in the list of selections
 -->
AND
```

4.9.1.5. OR

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

OR is a logical operator. It is used to select objects that share attributes.

Example

To select all text that is either Helvetica or Arial, use the following:

```
Select Font Helvetica
Select Font Arial
OR
```



Note: Do not use OR to exclude objects!

For example, the following will select all 12pt AND 14pt fonts:

```
Select Text if point size = 12.00 pt
Select Text if point size = 14.00 pt
OR
```

4.9.1.6. ROLL

Belongs to

- **Category:** Operators
- **Type:** Selections
- **Since version:** 13 update 2

What it does
Allows you to change the order of the selections in the stack.

You must set:

- The *number of selections* to be taken into account, for example "3" if you want to change the order of the 3 last selections preceding the ROLL operator.
- The *distance*, i.e. the number of positions to move the items in the stack. If distance is set to "1", all selections in the stack move up one position. The selection on top moves down to the bottom of the stack.

Just like the other operators, ROLL must be placed after the selections in the Action List. The affected selections will be highlighted with a green indicator. Refer to *Using operators in Action Lists* on page 33.

For advanced use only

This Action may be used in advanced and complex Action Lists by users who are familiar with the ROLL operator in PostScript (which has the same functionality).

Example

Suppose you have a document with text, line art and images.

The following Action List results in a stack with the text segments at the bottom and images at the top.

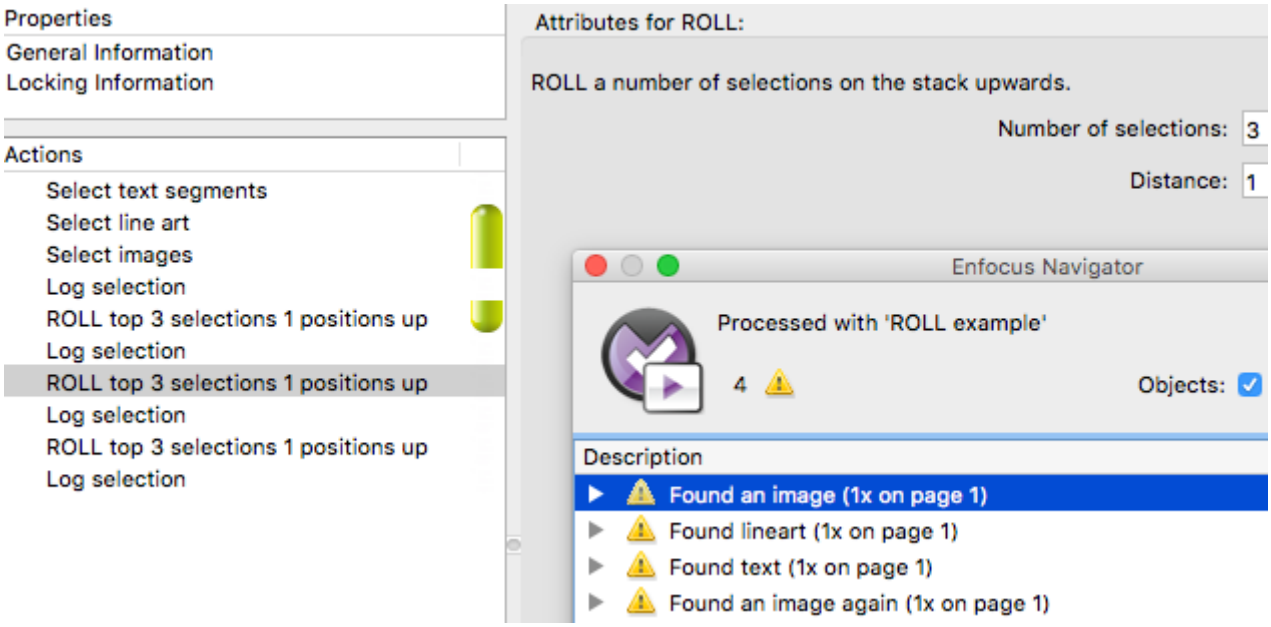
```
Select text segments
Select line art
Select images
```

With Roll added (number of selection set to 3 and distance to 1), images will move to the bottom of the stack, line art to the top and images will be inbetween.

```
Select text segments
Select line art
Select images
Roll                <!--  Selection set to 3, distance is 1 -->
```



Tip: You can test this by adding Log selections to your Action List and checking the result in the Enfocus Navigator as shown in the screenshot below.



4.9.1.7. Remove top of selection stack

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Deletes the top of the current Action list stack. It's typically combined with the *Duplicate top of selection stack* operator.

For internal use only

Both "Remove top of selection stack" and *Duplicate top of selection stack* are only used internally by PitStop.

When running a Preflight Profile, PitStop turns this Profile into an Action List; the more checks and fixes there are in the Preflight Profile, the longer and more elaborate its Action List representation. In order to avoid having to perform complex selections multiple times, PitStop optimizes the internal Action List by duplicating these selections when they are needed multiple times.

4.9.1.8. Select all

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Allows you to select every object in a PDF document.

Example

To delete every object in a PDF:

```
Select all
Remove selection
```

Remark

Note that objects that are clipped away (hence are invisible) are selected as well. If you don't want this, we recommend removing them first. You can use *Select objects that are completely clipped away* on page 428 and *Remove selection* on page 233 to do so.

4.9.1.9. Select last added objects

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Selects the objects that were added recently (in the same Action List).

This Action must be preceded by an Action of the type "Add".

Example

The following Action List will first add graphics to the PDF. The added graphics will then be selected and used by the third Action.

```
Add copied graphics <!-- Add copied graphics on page 63 -->
Select last added objects
Check XY scaling difference  <!-- Check XY scaling difference on page 341 -->
```

4.9.2. Changes

4.9.2.1. Copy or cut objects to clipboard

Belongs to

- **Category:** General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does
Allows you to cut or copy the selected objects to a clipboard. You should give the clipboard a name (by default: Untitled 1), to avoid confusion when copy-and-pasting different selections in one Action List. You can use up to 1,000 clipboards if you wish, however it is important to realize that these clipboards are not saved; they are only used while the Action List in which they are used is run.

This Action should be preceded by a selection (i.e. to select the object you want to cut or copy) and followed by *Paste objects from clipboard* on page 74 in the same Action List. You cannot cut or copy something to a clipboard in one Action List and then paste it within another Action List.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut or copy.
3. Add a *Cut or copy objects to clipboard* Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 1, e.g. if you added "Select all" in step 1).
5. Add a *Paste objects from clipboard* on page 74 Action and set the attributes on the different tabs (e.g. to define the position of the pasted objects).

Note:

- Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.
- If there is nothing to select to cut or copy (i.e. the select Action of step 2 in the above procedure result in an empty selection), the content of the clipboard is not overwritten with an "empty" set of objects! The previous content (if any) is preserved and will be pasted once more. If you do not want this, you can select the **Clear clipboard after paste** checkbox in the attributes of *Paste objects from clipboard* on page 74 Action.

Related Action

- *Paste objects from clipboard* on page 74

4.9.2.2. Paste objects from clipboard

Belongs to

- **Category:** Add, General, Operators
- **Type:** Changes
- **Since Version:** 13 update 1

What it does
Allows you to paste objects from the clipboard to one or more selected pages. You can paste them multiple times (with fixed distances or distributed across a distance) as required and indicate where they should be placed.

This Action must be preceded by a "copy/cut "Action (that moves the objects to the clipboard) and a "select" Action (that indicates where the objects should be pasted) in the same Action List.

If there are several "copy/cut" Actions in the Action List, you may want to give each of the clipboards an appropriate name, to make sure the different objects are pasted on the correct pages.

How to proceed?

1. Create a new Action List.
2. Add a select Action that select the objects you want to cut/copy-and-paste.
3. Add a *Copy or cut objects to clipboard* on page 105 Action to your Action List and set the attributes (select Cut or Copy and type an appropriate name).
4. Add a *Select pages* on page 416 Action to indicate the pages on which the selection should be pasted (if not yet selected in step 2 -if you added "Select all" in step 2, step 4 is redundant).
5. Add a *Paste objects from clipboard* Action and select the name of the clipboard (as entered in step 2). Switch to the different tabs to define the region and the position of the copied objects (see table below).

Note: Action Lists are executed page after page. As a consequence, you can only paste objects to the following pages. For example, if you copy an object that is present on page 3, you can paste it on page 3, 4, 5, ... but not on page 1 or 2.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the clipboard that contains the objects to be pasted. Determine whether or not the clipboard should be cleared after the object was pasted. This option determines what happens if there are no objects to be copied (= if the select Action in step 2 of the above procedure results in an empty selection). • If checked, the clipboard will be empty, so nothing will be pasted. • If cleared, the clipboard will still contain content from the previous page and that content will be pasted.
Attributes	Determine if the objects should be pasted in the foreground or in the background of the document.
Region	Determine the region where the objects should be moved to. The region is defined based on the page box of your choice and you can define margins within that page box, by grabbing the offsets from a selected area (using the **Grab position** button ). You can also specify a specific area the objects should not be placed in, also based on a page box and with the option to set margins. **Note:** The settings on this tab are only used if **Move graphic elements** is selected on the Position tab. If this is not the case, the original location of the graphic elements is preserved.
Repeat	If the objects should be pasted more than once on a page, change **No repeat** to:

Tabs	On this tab, do the following:
	• **Distribute/Repeat fixed number of graphic elements** if you want to determine how often the copied objects should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the pasted objects evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the pasted objects. If you choose "repeat", you should define the exact distance between the pasted objects yourself. The distance can be between the bounding boxes of the pasted objects (choose: **Between edges**) or from center to center (choose: **Between centers**). **Note:** Remember that you can use Smart Preflight variables to define the distances.
Position	If the selected objects should be moved, select **Move graphic elements**. Indicate how the objects should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

Related Action

- *Copy or cut objects to clipboard* on page 105
- *Add copied graphics* on page 63

4.10. Packaging

4.10.1. Changes

4.10.1.1. Change layer processing steps - ISO 19593-1

Belongs to

- **Application:** PitStop Pro
- **Category:** Packaging
- **Type:** Changes
- **Since Version:** 13 update 2

What it does
Allows you to change processing steps metadata of the layers of a PDF. You can either choose a different group or a different type. Processing steps metadata is defined by ISO standard 19593-1. For more information, refer to *the website of ISO (International Organization for Standardization)*.

Supported groups:

- Structural
- Dimensions
- Braille
- Legend
- Positions
- White
- Varnish

You can as well define a custom group and custom step types. To do so, enter the appropriate name in the text box.

Related Actions

- *Select layers by processing steps - ISO 19593-1*
- *Check processing steps - ISO 19593-1* on page 318
- *Remove processing steps - ISO 19593-1* on page 232

4.10.1.2. Close gaps in contours

Belongs to

- **Category:** Packaging
- **Type:** Changes
- **Since Version:** 13 update 2

What it does
Allows you to close gaps in contours. You can set the threshold, e.g. only close gaps that are smaller than 0,10 cm.

If gaps should only be closed if the result is a closed contour, select the corresponding checkbox.

Remark

We recommend using this Action in combination with *Override rounding rules* on page 447 because of precision issues.

Related Action

- *Select inside or outside contour* on page 425

4.10.2. Checks

4.10.2.1. Check barcode

Belongs to

- **Category:** Packaging
- **Type:** Checks
- **Since Version:** 2019

What it does

Checks the presence of barcodes in your document. You can either log a message for each barcode found, or a message in case no barcodes were found in the document.

The Action also works on user selections.

Properties Overview

Fields	Meaning
Barcode tab	Select the barcode(s) you want to check for.
Select all	Select this checkbox to check for all barcode types in the list. Clear this checkbox to deselect all types and manually click the ones you want to check for.
Value	Select this checkbox to check for a particular value.
Options tab	Select one or more options. You can use variables as required. **Note:** Extra options (checkboxes) will slow down processing.
Scan resolution (ppi)	Enter the scan resolution. The default is set to 300 dpi. Note that a higher resolution will slow down processing.
Scan for multiple barcodes	When selected, the document is checked until all barcodes are found. Note that this slows down processing! If you know that there's only one barcode in the document, we recommend clearing this checkbox.
Scan for rotated barcodes	When selected, PitStop also searches for rotated barcodes.
Enhanced scan	When selected, PitStop searches for very small barcodes too.

Note:

- If the option **Scan for multiple barcodes** (on the Options tab) is enabled, EAN and UPC barcodes may be reported twice per barcode. This is a known issue.

- MaxiCode barcodes cannot be detected when they are rotated.

Related Actions

- *Check Esko barcode value* on page 317
- *Check Esko barcode type* on page 317
- *Select Esko barcode type* on page 411
- *Add barcode* on page 59

4.10.2.2. Check Esko barcode type

Belongs to

- **Category:** Packaging
- **Type:** Checks
- **Since Version:** 13 update 2

What it does

Checks if the Esko barcode matches a particular type (chosen from a list).

Both the new ArtPro Plus barcodes as well as the old XMP ones are supported.

Related Actions

- *Check Esko barcode value* on page 317
- *Select Esko barcode* on page 411
- *Select Esko barcode type* on page 411
- *Add barcode* on page 59

4.10.2.3. Check Esko barcode value

Belongs to

- **Category:** Packaging
- **Type:** Checks
- **Since Version:** 13 update 2

What it does

Checks if the Esko barcode contains or equals a particular string. You can take into account the case of the string or use regular expressions or Smart Preflight variables as required. The actual value of the Esko barcode is mentioned in the log, in the Navigator and in the Preflight Report, for example: Esko barcode value "1234567890128" does not contain "222".

Both the new ArtPro Plus barcodes as well as the old XMP ones are supported.

Note: The metadata attached to the barcode is checked. If the metadata is absent, the Action won't be able to check the barcode.

Related Actions

- *Check Esko barcode type* on page 317
- *Select Esko barcode* on page 411
- *Select Esko barcode type* on page 411
- *Add barcode* on page 59

4.10.2.4. Check processing steps - ISO 19593-1

Belongs to

- **Application:** PitStop Pro
- **Category:** Packaging
- **Type:** Checks
- **Since Version:** 13 update 2

What it does
Allows you to check if particular processing steps metadata is present in a file. Processing steps metadata is defined by ISO standard 19593-1.

Note that you must select a processing steps group; a processing steps type is optional.

Supported groups:

- Structural
- Dimensions
- Braille
- Legend
- Positions
- White
- Varnish

You can as well define a custom group and/or custom step types.

Related Actions

- *Select layers by processing steps - ISO 19593-1*
- *Change layer processing steps - ISO 19593-1* on page 159
- *Remove processing steps - ISO 19593-1* on page 232

4.10.3. Selections

4.10.3.1. Select Esko barcode

Belongs to

- **Category:** Packaging
- **Type:** Selections

- **Since Version:** 13 update 2

What it does

Allows you to select Esko barcodes (both the new ArtPro Plus barcodes as well as the old XMP ones).



Note: The selection is made based on the metadata attached to the barcode. If the metadata is absent, the Action won't be able to select the barcode.

Related Actions

- *Select Esko barcode type* on page 411
- *Check Esko barcode value* on page 317
- *Check Esko barcode type* on page 317
- *Add barcode* on page 59

4.10.3.2. Select Esko barcode type

Belongs to

- **Category:** Packaging
- **Type:** Selections
- **Since Version:** 13 update 2

What it does

Allows you to select Esko barcodes by type (chosen from a list).

Related Actions

- *Select Esko barcode* on page 411
- *Check Esko barcode type* on page 317
- *Check Esko barcode value* on page 317
- *Add barcode* on page 59

4.10.3.3. Select spot colors from Esko Normalized PDF XMP

Belongs to

- **Category:** Packaging
- **Type:** Selections
- **Since Version:** 13 update 2

What it does

Allows you to select spot colors based on the metadata attached to ESKO Normalized PDF files.

There are three categories of metadata to choose from: **Ink book**, **Printing method** and **Ink attribute**. If properties from different categories are selected, they are combined in the selection.

4.11. Page

4.11.1. Changes

4.11.1.1. Add hems or pockets

Belongs to

- **Category:** Page
- **Type:** Changes

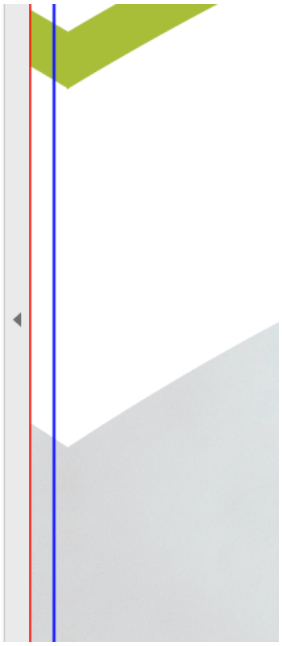
What it does

Generates mirrored content for banners, i.e. hems or pockets between the trim and bleed box. You can choose to add them to particular sides and/or to the corners.

You can also add a margin inside the trim box. This value determines where the bleed starts from the inside of the trim box. This can be useful to avoid hairlines if the artwork is positioned close to the trim box.

Example

Bleed is added between the trim box (in blue) and the bleed box (in red). The line art is mirrored, not extended.



4.11.1.2. Add pages

Belongs to

- **Category:** Add; Page
- **Type:** Changes

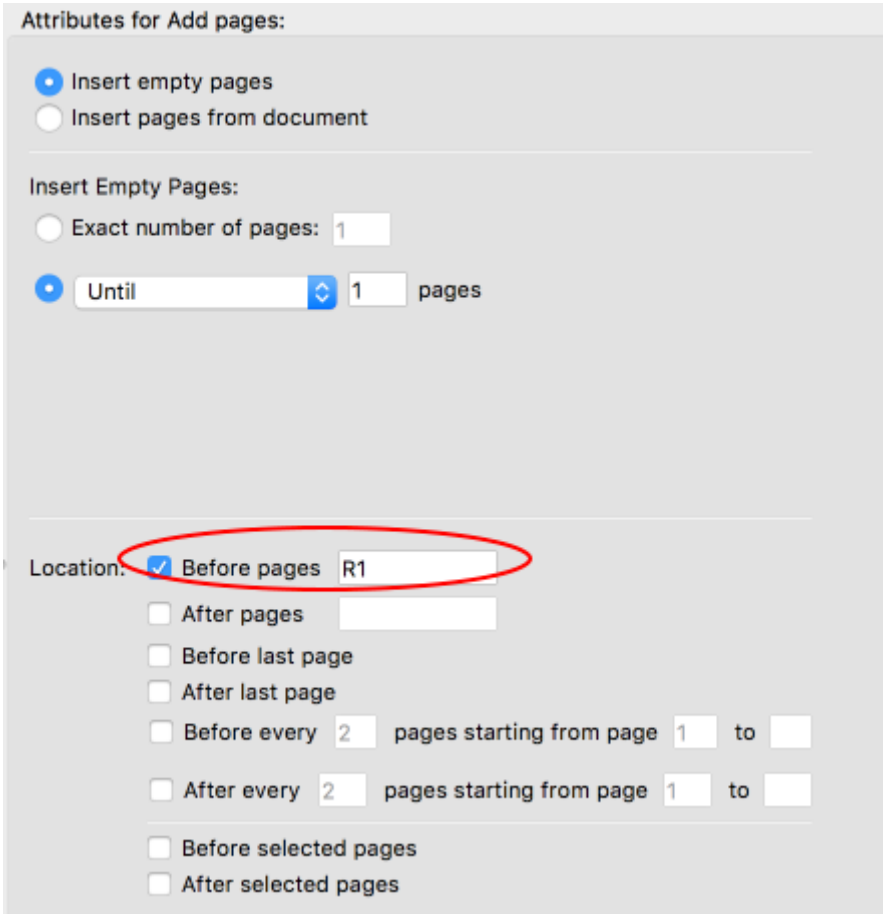
What it does

Allows you to insert either empty pages or pages from a particular PDF file (by embedding the file or by using the file path (optionally specified by a variable)).

You can choose the number of pages to add, the location of the new pages in the PDF ...

As of PitStop 2019, you can insert pages before or after a selection you made earlier in your Action List. You could for example select all pages with a certain string and insert empty pages based on this selection. See also the example Action List below.

"R[number]" notation
If you want to add pages starting from the end of the PDF, you can use the "R[number]" notation in the **Before pages/After pages** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ... This allows you for example to add a backup interleave page to every page in the PDF.



Example Action List

Suppose you have a mixed landscape/portrait document and you want to insert an empty page after every landscape page. That's possible with the following Action List.

```
Select all
Select by page orientation <!- select if page orientation = landscape ->
Add pages <!- select "insert empty pages" and "after selected pages" ->
```

4.11.1.3. Apply page rotation

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Sets the page rotate key defined in the PDF to 0 °. This may have a visual effect.

4.11.1.4. Apply page scaling factor

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Apply page scaling factor removes the page scaling factor and scales the page to compensate.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By applying the page scaling factor, the actual page size will become 20 by 20 inches.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.



Note: When the result of applying the scaling factor exceeds the size of 200x200 inches, the page may not be displayed well. This is a limitation of Adobe Acrobat.

Related Actions

- *Check if page scaling factor is used* on page 323

- *Remove page scaling factor* on page 175

4.11.1.5. Center page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Places all objects in the center of the page.

You can:

- Center the objects horizontally, vertically or both.
- Center the content relative to a page box and set margins (left, right, top and bottom).
- Use page rotation and scaling factor as required.
- Only center the visible part of the content.

4.11.1.6. Change art box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize an art box.

You must choose one of the following options:

- To create a new art box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize the art box relative to the axes of the existing art box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of the art box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

4.11.1.7. Change bleed box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a bleed box.

You must choose one of the following options:

- To create a new bleed box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a bleed box relative to the axes of the existing bleed box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a bleed box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

4.11.1.8. Change blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Changes

What it does

Allows to change the blending color space and/or the luminosity softmask blending color space (if defined in the PDF document).

You can:

- Change the color to CMYK, gray or RGB, or
- Remove the blending color space, by selecting "none" from the first list, or
- Leave one of the color spaces unchanged, by selecting **Do not change**.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Check if blending color space is defined* on page 261
- *Select by blending color space* on page 364

4.11.1.9. Change crop box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a crop box.

You must choose one of the following options:

- To create a new crop box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a crop box relative to the axes of the existing crop box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a crop box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

4.11.1.10. Change media box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a media box.

Choose one of the following options:

- To create a new media box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a media box relative to the axes of the existing media box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a media box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Position the page content**

The last option allows you to determine the position of the content on the page. Note that the dropdown only controls *the distance between the new page box and the content*. Options are:

- **No move**: The content stays where it was (the coordinates do not change), regardless of the new size or position of the media box. It is possible that the content does no longer fit in the media box!
- **Center**: The content will keep its position relative to the center of the mediabox. For example, if the content is placed in the bottom left corner of the media box, that will also be the case after resizing, but again: it is possible that the content does no longer fall inside the media box (e.g. if the new box is too narrow).
- **Lower left/lower right**: The content will keep its position relative to the lower left or lower right of the media box; the distance to the lower left or lower right of the media box will be kept the same. For example, if the content is placed in the rightmost corner of the media box, that will also be the case after resizing.
- **Upper left/upper right**: The content will keep its position relative to the upper left or upper right of the media box; the distance to the upper left or upper right of the media box will be kept the same. For example, if the content is placed in the rightmost corner of the media box, that will also be the case after resizing.
- **Shrink to fit**: This option makes sure that the content fits the new page box; the content may be resized as well if needed.

Remark

Be aware that this Action does not change the crop box; only the media box and the content (if moved along with the media box) are affected. As Acrobat uses the crop box definition for display, when opening the file in Acrobat, the content may not be visible/no longer centered due to the media box being resized and content being moved along. You can fix this by removing the crop box or by changing the crop box in the same way as the media box (see *Remove crop box* on page 174 or *Change crop box* on page 165).

If no crop box was defined, Acrobat uses the media box for display.

4.11.1.11. Change objects that are close to the page edge

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes objects that are close to the page edge, but do not bleed enough.

You must specify the required distance to the trim box and the distance into the bleed.

Optionally, you can choose to treat subpaths of compound paths individually. In that case, each of the subpaths will be changed separately.

See also:

- *Check if object is close to the page edge* on page 321
- *Select objects close to the page edge* on page 415

4.11.1.12. Change page box layout

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the page box layout in a PDF to Press, Screen viewing or PDF/X Layout.

The attributes depend on the chosen layout:

- **Press layout** (typically used for print)

  If you select this layout, the trim box will be derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, and *art box* is the second, the trim box will be derived from the bleed box, if found; if there is no bleed box found, the trim box will be derived from the art box; if there is no art box, the Action will search for the third page box in the list, and so on.

  You must also define the minimum distance between the media and bleed boxes and between the bleed and trim boxes.

  To get the PDF to display at the size of the media it will be printed on, select the appropriate option:

  - **Crop box must equal trim box**, or
  - **No crop box must be defined or the crop box equals the media box**. This means that, if the crop box is not defined yet, it will not be added by this Action; if the crop box is defined, it will get the same size and position as the media box.

- **Screen viewing**

  If you select this layout, the page is defined solely by the crop box, which should have the same size as the media box. No other page boxes are allowed. The crop box/media box is derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, the crop box/media box will be derived from the bleed box if found in the PDF; if the bleed box is not found, the second page box in the list will be searched for, ...

- **PDF/X layout**

  If you select this layout, the exact page box layout depends on the chosen PDF/X version.

  - If you have chosen PDF/X-1a:2003 or PDF/X-3:2003, the art box or trim box shall not extend beyond the boundaries of the bleed box and the crop box.
  - PDF/X-4 allows either a trim or an art box but forbids having both.
  - PDF/X-6 allows an art box, next to the mandatory trim box.

  To define the trim box relative to the media box, define the desired margins.

Related Actions

Check page box layout on page 326

4.11.1.13. Change page format

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Snaps the page box of your choice to a multiple of either columns or rows.

This Action is useful for newspapers or magazines with content displayed in columns and rows.

How to proceed

To configure the Change page format Action

1. Select the page box you wish to define.
2. Select **A multiple of columns** and/or **A multiple of rows** as required.
3. Set the preferred column or row width.
4. Add column/row spacing as required.

See also *Check page format* on page 327

4.11.1.14. Change page labels

Belongs to

- **Category:** Page
- **Type:** Changes

- **Since Version:** 2019

What it does

Changes the label of a page. You can select a different number style, a different prefix and/or change the number to start with.

If you leave any of the options unselected, then the corresponding label property remains untouched (or receives the default property value, if the document did not have page labels).

Example

Suppose you have a document with 10 pages and inconsistent page labels (e.g. inconsistent numbering, some with and some without prefix, etc.). You could use the following Action List to make the labels consistent (mydoc_1, mydoc_2, mydoc_3 etc).

```
Select pages with page label   <!- choose "range: 1-10" and select both odd and even
 -->
Change page labels             <!- choose "number style: decimal", "prefix: mydoc_",
 start: 1" -->
```

Related Actions

- *Select pages with page label* on page 417
- *Remove page labels* on page 176

4.11.1.15. Change page orientation

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the page layout to either portrait, landscape or the orientation that is used most in the PDF.

The page orientation is based on the selected page box. If you don't want to change the page orientation in case all pages have already the same orientation, enable the **Only apply if not all pages have the same orientation** checkbox.

Related Actions

- *Select by page orientation* on page 413
- *Check page orientation* on page 327

4.11.1.16. Change trim box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a trim box.

You must choose one of the following options:

- To create a new trim box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a trim box relative to the axes of the existing trim box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a trim box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

4.11.1.17. Flip content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Flips the contents of a selected object horizontally or vertically.

You can flip the content relative to the center of one of the page boxes. Note that you can take page rotation into account as required.

Related Actions

- *Check for flipped objects* on page 338
- *Flip selection* on page 199

4.11.1.18. Move media box to 0.0

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the coordinates of the media box, so that the lower left corner of the media box is located at coordinates 0,0. This won't change the way the file looks.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

4.11.1.19. Move objects into the page box

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Moves the selected objects into a particular page box.

You can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects out of the page box* on page 171

4.11.1.20. Move objects out of the page box

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the selected objects out of a particular page box.

You can can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects into the page box* on page 171

4.11.1.21. Move page box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to move one of the page boxes to the desired position.

You can choose which page you want to move, and define the target position in one of the following ways:

- By specifying the position relative to one of the other page boxes, based on the anchor point.
- By specifying the target X and Y coordinates.
- By specifying the values by which the X and Y axis should be moved.

You can take into account page rotation and scaling factor as required.

4.11.1.22. Move page content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page in the preferred direction (horizontally or vertically) by the specified distance:

- A positive value, e.g. "1 cm" will move the content to the right (horizontally) or to the top of the page (vertically).
- A negative value, e.g. "-1 cm" will move the content to the left (horizontally) or to the bottom of the page (vertically).



Note: Remember that the unit used in Actions (in this example "cm") is defined in the Preferences (Units & Guides Category).

You can choose whether or not to take into account page rotation and scaling factor (if applicable).

4.11.1.23. Move page content to corner

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page to a chosen corner.

This Action does not center the object on the corner but moves the closest objects to that corner and moves the other objects by the same distance towards the corner (horizontally or vertically).

Example

To move the page content to the lower left

1. Select Move page content horizontally to **Left Side**.
2. Select Move page content vertically to **Bottom Side**.
3. Select the page box to be used as a reference, for example the **media box**.

4. Optionally, set **margins** to be added to the media box.
5. Select the **Use page rotation and scaling factor** checkbox, if page rotation and scaling factor should be taken into account.

4.11.1.24. Normalize page boxes

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Normalizes page boxes, i.e. makes sure they are all positioned correctly and are placed in the right order, e.g. the media box should be the largest box, the bleed box should be inside the bleed marks, ...

4.11.1.25. Normalize Page Rotate Key

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to manipulate page rotate keys in a PDF.

You can do one of the following:

- Flatten a rotate key into the page content (no visual effect)
- Introduce a rotate key for landscape pages and flatten it for portrait pages.

  You can indicate which page box determines the page orientation. For example, if you select "trim box" and the trim box is 4 units wide and 3 units tall, the page is considered to have a landscape orientation.
- Remove a rotate key without flattening it into the page content. This may have a visual effect.

Related Actions

- *Check page rotation angle* on page 328
- *Select by page rotation angle* on page 413
- *Apply page rotation* on page 162

4.11.1.26. Remove art box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the art box from a PDF.

The art box delimits the size a PDF will display in a page layout application like QuarkXPress. An art box is not essential to a PDF's structure and may be removed.

4.11.1.27. Remove bleed box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the bleed box from a PDF.

The bleed box delimits the size the area beyond the final cut size of a document onto which ink may be printed in order to provide a bleed effect (which is where ink goes right to the edge of the page). A bleed box is not essential to a PDF's structure and may be removed.

4.11.1.28. Remove crop box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the crop box from a PDF.

The crop box is the PDF page box that defines the frame of a PDF as it is displayed on screen. If you remove this box, the PDF will display at Media Box size.

4.11.1.29. Remove empty page

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Deletes any pages in a PDF document that contain no objects.

You can specify that elements outside of a specific page box should be ignored. This way you can make sure that pages containing only registration marks (which are graphic elements outside the visible or printable page area, i.e. the trim box) are considered empty.

You can also ignore visually empty pages (i.e. paper-white and invisible (fully transparent) objects).

Tip: When you've removed the empty pages, check whether the page numbering is still consistent. If necessary, you can correct the page numbering using *Add page number* on page 66. Also check other references to page numbers such as the table of contents, the index or cross-references. If these page numbers are incorrect, you will need to update your source files and create a new PDF document.

Related Actions

- *Check for empty pages* on page 319
- *Select empty pages* on page 415

4.11.1.30. Remove page labels

Belongs to

- **Category:** Page
- **Type:** Changes
- **Since Version:** 2019

What it does

Removes the selected page labels. This Action has no attributes. It's typically used with *Select pages with page label* on page 417.

Related Actions

- *Change page labels* on page 169
- *Select pages with page label* on page 417

4.11.1.31. Remove page scaling factor

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Removes the page scaling factor an reverts the page to its original size.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By removing the page scaling factor, the page size will be at 10 by 10 inches again.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.

Related Actions

- *Check if page scaling factor is used* on page 323

- *Apply page scaling factor* on page 163

4.11.1.32. Remove sub-page navigation support

Belongs to

- **Category:** Page
- **Type:** Changes
- **Since Version:** 2022

What it does

Removes the PresSteps entry from a selected page's dictionary.

This is a fix for PDF/X-6, as PDF/X-6 does not support sub-page navigation.

4.11.1.33. Remove trim box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the trim box from a PDF document. The trim box defines the final cut size of a printed PDF document.

4.11.1.34. Reorder pages

Belongs to

- **Category:** Page; Document
- **Type:** Changes
- **Since Version:** 2017

What it does

Allows you to change the order of the pages in a document.

There are three preconfigured options:

- Reverse pages (first page becomes last etc)
- Swap first and last page
- Swap even and odd pages

When you select one of these options, you can immediately see the new page order in the Preview section at the bottom of the pane.

Apart from that, you can configure for each individual page what the new page number should be. To do so, you should select 'Custom' from the list of options and enter the page numbers in the preferred order (one by one, or using the notation explained in the GUI).

Note:

- Any 'forgotten' pages (not listed in the custom order), will be added at the end.
- If a page is by accident listed twice, the first occurrence counts.

By default, page labels are re-ordered together with the pages, unless you clear the **Move page labels** checkbox.

Examples

In the table below you can find some examples. Remember that you can enter any combination you want; you're warned about syntax errors and you can preview the page order for a document of up to 1000 pages.

Notation	Meaning
One single page number 5	Put this page first, then add the other pages without changing the order. *5*, **1, 2, 3, 4, 6, 7, 8, 9, 10**
R followed by one page number R5	Put this page counting from the back first, then add the other pages without changing the page order. *6*, **1, 2, 3, 4, 5, 7, 8, 9, 10**
One single page number followed by three dots 5...	Put this page first, add the following pages till the end of the document, finally add the missing pages (all without changing the page order). *5*, 6, 7, 8, 9, 10, **1, 2, 3, 4**
R number followed by three dots R5... R1...	Put this page counting from the back first, then put the following pages counting from the back of the document, finally add the other pages (7-10) *6*, 5, 4, 3, 2, 1, **7, 8, 9, 10** *10*, 9, 8, 7, 6, 5, 4, 3, 2, 1
(number, number) ... (2,1)... (6,5)...	Swap the pages in between the brackets and do the same for the rest of the document. Other pages are added at the end. *2, 1*, 4, 3, 6, 5, 8, 7, 10, 9 *6, 5*, 8, 7, 10, 9, **1, 2, 3, 4**
R number (number-number) number (number, number) R1 (3-6) 2 (8,7)	Put the last page first (10), then a page range (pages 3 to 6), then a particular page (2), then swap even and odd pages (swap 8 and 7), add leftover pages (1, 9). *10*, 3, 4, 5, 6, *2*, 8, 7, **1, 9**

Use case

When receiving PDFs in spreads, after having split the pages and added marks and bleeds, page 1 (which is actually the back cover) should be moved to the last page. Using this Action, that's very easy.

Remark

Due to a refresh issue in Adobe Acrobat, sometimes the page order seems not to be changed after successfully running the Action. Saving and reopening the document may solve the issue.

4.11.1.35. Rotate content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Rotates the page content at a particular angle around a particular point.

You could for example rotate the page content at an angle of 90° relative to the center of the media box.

You can choose whether or not to take into account page rotation.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate object* on page 204
- *Rotate objects as group* on page 204

4.11.1.36. Rotate page

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to set page rotation to -90, 0, 90 or 180 degrees (clockwise).

Related Actions

Rotate content on page 178

4.11.1.37. Scale page boxes

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to scale all page boxes simultaneously.

Specify X and Y scaling percentages. You can anchor the page boxes at a certain corner in the PDF, for instance at the lower left corner of the media box. You can also choose whether or not to use the page rotation.

Note: If you want to scale the page boxes proportionally, you need to specify the same values for X and Y.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

4.11.1.38. Scale page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

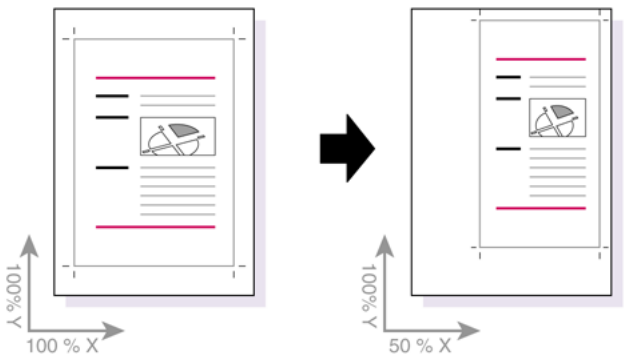
What it does

Scales page content along the X and/or Y axis by a certain percentage.

Note: If you want to scale the page content proportionally, you need to specify the same values for X and Y.

Example

Suppose you have an A4-size PDF document (210 x 297 mm). You want to keep the page size “as is”, but need to make the page content narrower. You also wish to move the page content to the upper right corner of the crop box.



How to proceed

1. Enter the preferred scaling percentage for the X and Y axis.
2. Do one of the following:

- To define an anchor point, select **Anchored at**.
- To define the target position of the page contents, select **Moving page content to**.

3. Define the anchor point or target position, for example (anchored at/moving to) the upper right of the crop box.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

4.11.1.39. Scale page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Scales the page content to fit the size of a particular page box. You can add extra margins, if necessary.

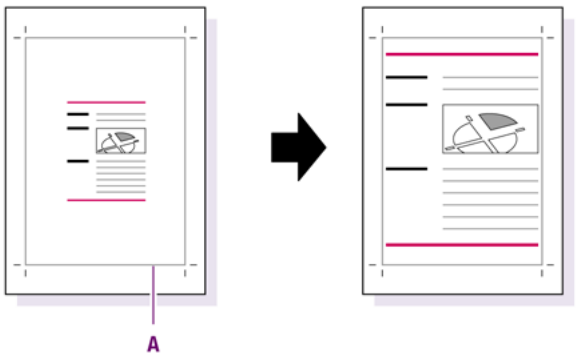
You should also define the target position of the page content inside the page box, e.g. "page content should move to the upper right".

You can choose whether or not to take into account the page rotation and scaling factor.

Scaling is by default restricted to the visible elements of the page (unless you clear the **Use only visible part of content** checkbox), to avoid that hidden content leads to incorrect results.

Example

In the example below, the page content is scaled to fit the size of the trim box (A).



Related Actions

- *Scale page content* on page 179

- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

4.11.1.40. Scale to fit page size

Belongs to

- **Category:** Position/Size; Page
- **Type:** Changes

What it does

Scales all page boxes (and optionally all page content as well) until the specified page box fits the target size.

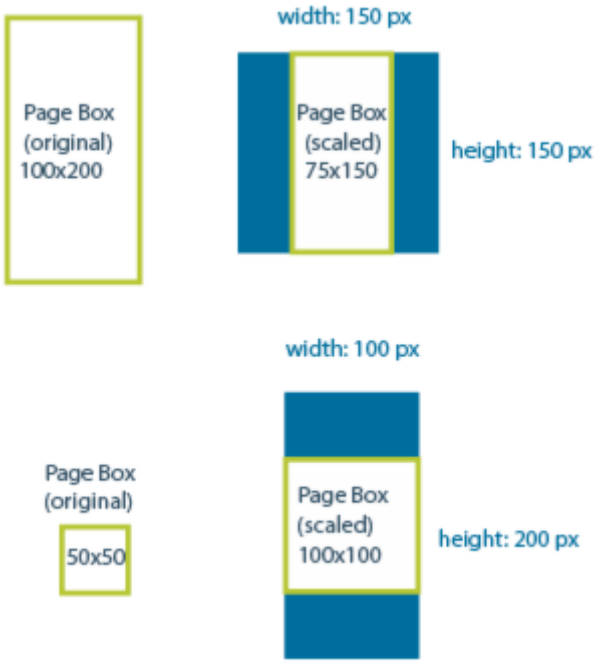
The target size should be specified by defining the target width and height either as a value, a percentage of the original value or proportionally relative to the other dimension.

Note that for both the page content and the page boxes you can separately decide whether or not to scale proportionally to match the target page size.

Remark

In case of proportional scaling (=default, **Allow non-proportional scaling** checkbox NOT selected), it may happen that the requested target width and height cannot be achieved without changing the aspect ratio; in that case, the target size serves as a frame in which the resized page box should fit.

For example, if the original page box is a rectangle and the requested width and height result in a square, the page box will be scaled to fit in the square (and vice versa). See the image below; the blue object represents the requested target dimensions.



Related Actions

- *Scale page content to fit* on page 180
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

4.11.1.41. Set page size to the largest in document

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Increases the size of smaller pages in a PDF document, so they are all equal to the size of the largest page.

If a PDF contains pages of different sizes, this may cause problems during the printing process. You can use this Action to fix this problem.

Related Actions

Set page size to the smallest in document on page 183

4.11.1.42. Set page size to the smallest in document

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Decreases the size of larger pages in a PDF document, so that they are all equal to the size of the smallest page.

If a PDF contains pages of different sizes, this may cause problems during the printing process. You can use this Action to fix this problem.

Related Actions

Set page size to the largest in document on page 182

4.11.1.43. Shrink page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Shrinks page content to fit the size of a particular page box. You can add extra margins, if necessary. You should also define the anchor point, for example "anchored at the lower left of the media box".

You can choose whether or not to take into account page rotation and scaling factor.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179

4.11.1.44. Split pages in half

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Splits pages in half in a certain direction (horizontally, vertically, or orientation dependent), based on the desired page box.

Orientation depending means that the landscape pages are split vertically and portrait pages are split horizontally.



Note: PitStop provides three Actions Lists, allowing you split A4, A5 and US Letter documents in half.

This Action can be useful if you scanned two pages of a book as a single page, but want to have them as separate pages (e.g. for better readability); or if you have an image spread over two pages which has to be split in two for printing purposes.

4.11.1.45. Use trim marks to set page box

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to set the trim box and/or the bleed box based on the trim or bleed marks found in the PDF.



Note:

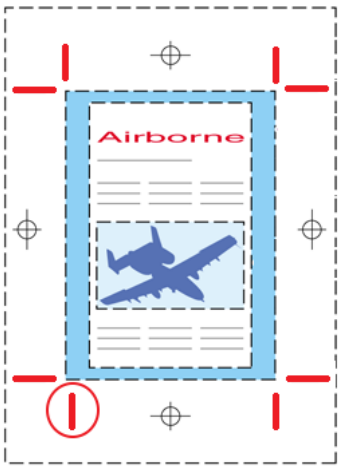
- Crop marks with a **dash pattern** cannot be used to set the page box.
- Crop marks generated with Illustrator, InDesign and QuarkXpress are supported.

How to proceed

1. Indicate which page box you want to set: the trim box, the bleed box or both.
2. Specify the color of the trim marks by choosing one or more of the following:
   - 400% CMYK
   - Separation All (registration)
   - 100% black
   - A specific color.
3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Pro Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value (if you're using a different unit).

Example

In the image below, the red marks are detected as trim marks and used to set the trim box (blue box). The position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line), but the deviation (= difference between the position of both marks) is less than the specified threshold.



Related Actions

- *Select trim marks* on page 419

- *Check if trim marks match page box* on page 323

4.11.2. Checks

4.11.2.1. Check for annotations inside art box or trim box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Searches a PDF for any annotations that appear inside the art box or trim box - an undesirable location for printing.

4.11.2.2. Check for differences in page boxes

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Allows you to compare a certain page box's size with that of another page box.

Note: As of PitStop 2021, you can use variables to specify the difference in size.

Example

Check if the media box is x inch wider and y inch higher than the trim box.

4.11.2.3. Check for empty pages

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the PDF has pages without content.

Additionally, you can specify that elements outside of a specific page box should be ignored.

It's also possible to ignore visually empty pages (with paper-white and invisible (fully transparent) objects on it).

Related Actions

- *Remove empty page* on page 175
- *Select empty pages* on page 415

4.11.2.4. Check for pre-separated pages

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the PDF document contains any pages that already have been separated.

A pre-separated PDF contains pages that have been separated into their CMYK components. In offset printing each of these colors is printed with a separate plate. This means that each page in a PDF document is separated into its four constituent colors: cyan, magenta, yellow and black. For example, a pre-separated PDF file for a two-page CMYK print job, results in a PDF file with 8 pages.

This separation process is usually carried out by the RIP, and not in the source PDF document.

4.11.2.5. Check for solids and tints

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

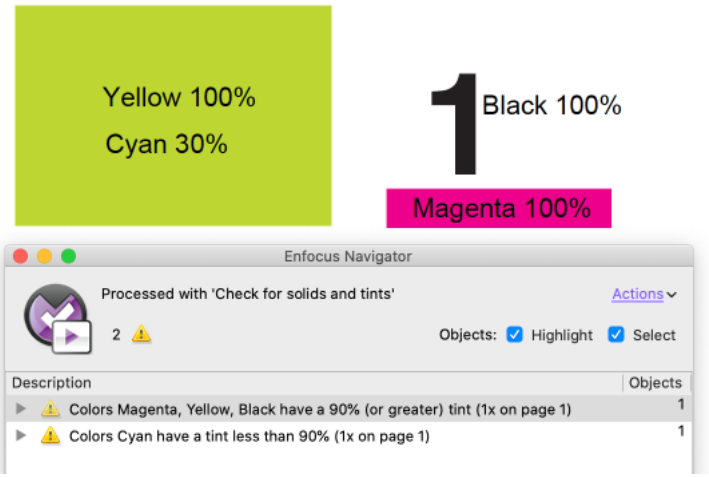
Checks if the PDF document contains any colors that have a tint below or above a set threshold.

The threshold is set in the **Effective solidness threshold** field. The default is 100%.

It's also possible to define a threshold for considering a colorant as a tint, by selecting the **Ignore tints that cover a surface area below** checkbox and entering a value of your choice (in ppm). You can take into account the printable surface area, the surface area of the own channel, or the surface area of all channels. This option is useful to avoid that colorants on pages with for example only 1 non-solid pixel in the rendered page would be marked as a tint.

Example

In this example, the threshold was set to 90%.



4.11.2.6. Check for sub-page navigation support

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the PDF supports sub-page navigation, i.e. the possibility to navigate from one layer to another layer on the same page.

Sub-page navigation support is not desired in documents for print.

About page and sub-page navigation

Page navigation allows you to navigate from one **page** to another, whereas sub-page navigation allows you to navigate from **one layer to another layer** on the same page.

Example

Suppose you have a single page PDF showing the slides of a presentation. Each slide is on a different layer. When the user presses the forward arrow, the next slide (on the same page, but on another layer) is shown and the previous one (on another layer) is hidden.

4.11.2.7. Check if blending color space is defined

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the page blending color space has been defined in the PDF document.

You must set the required blending color space and the required luminosity softmask blending color.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The **page blending color space** is the blending color space assigned to a page; it is used when individual artwork does not have a blending color space.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85
- *Select by blending color space* on page 364

4.11.2.8. Check if object is close to the page edge

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks whether the selected object is situated close to the page edge and might need to be enlarged.

You must specify the required distance to the trim box and the distance into the bleed. Optionally, you can choose to treat subpaths of compound paths individually. In that case, each of the subpaths will be checked separately.

See also:

- *Select objects close to the page edge* on page 415
- *Change objects that are close to the page edge* on page 167

4.11.2.9. Check if object is completely outside page box

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Searches for (and optionally selects) objects that lie completely outside the selected page box.

Depending on your workflow, you may want to remove these objects before printing.

4.11.2.10. Check if page box is defined

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the selected page box (trim, crop, art or bleed box) has been defined in the PDF.

4.11.2.11. Check if page box is too large

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the selected page box (art, bleed, crop, or trim box) lies inside the media box.

4.11.2.12. Check if page scaling factor is used

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the PDF uses a page scaling factor. If so, you can optionally check if a certain page scaling factor applies.

A page with scaling factor 2 will be displayed and printed twice the original size (= scaling factor 1). Page scaling has been introduced in PDF 1.6 and allows you to extend the maximum page size beyond 200 by 200 inch.

Related Actions

- *Apply page scaling factor* on page 163
- *Remove page scaling factor* on page 175

4.11.2.13. Check if trim marks match page box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if trim marks found in the PDF match the trim box and/or the bleed marks match the bleed box.

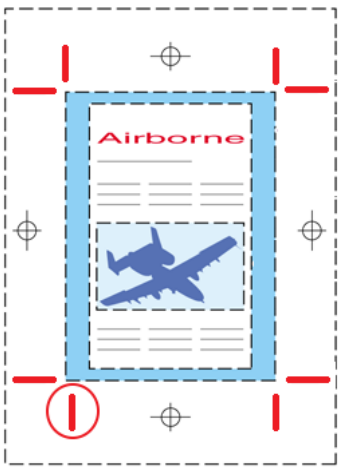
How to proceed

1. Indicate which marks you want to check: trim marks, bleed marks or both.
2. To help PitStop detect the trim marks, specify the potential color of the marks, by choosing one or more of the following:
   - 400% CMYK
   - Separation All (registration)
   - 100% black
   - A specific color

     In case of a specific color, do one of the following:
     - Select a color space from the list and use the sliders to select the appropriate color.
     - Click  and select the appropriate color.
     - Select an object with the Enfocus Selection tool and click  to grab the fill or stroke color from the selection.
3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value, if you're using a different unit.

Example

In the image below, the red marks are detected as trim marks, although the position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line). In this case, the deviation (= difference between the position of both marks) is less than the specified threshold.



Remark

A filled path with 3 lines is accepted as a trim mark if:

- The color is as specified in the attributes of this Action.
- It has no dash pattern.
- The 4 points of the 3 lines are a rectangle.
- The path is closed.
- The width is between 0.1 and 2 pt.
- The length is between 8 and 40 pt.

Related Actions

- *Use trim marks to set page box* on page 184
- *Select trim marks* on page 419

4.11.2.14. Check media box origin

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the media box is set to coordinates 0,0.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

Related Actions

- *Select by media box origin* on page 413
- *Move media box to 0.0* on page 171

4.11.2.15. Check number of pages

Belongs to

- **Category:** Page;Doc
- **Type:** Checks

What it does

Checks the number of pages in a PDF.

You can for example check if there are less/more than x page(s), or if the PDF contains an odd/even number of pages ...

4.11.2.16. Check page bleed box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks and compares the size of the bleed box with the size of the trim or crop box.

As of PitStop 2022, you can indicate which side(s) should be checked (left, right, top or bottom). Also, you can enable **Mirror according to page binding**, a new option that, when selected, checks the inner and/or outer side instead of the left and/or the right side of the page. This is useful in case of books, where you may want to ignore the inner edge (which does not require bleed).

4.11.2.17. Change page box layout

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the page box layout in a PDF to Press, Screen viewing or PDF/X Layout.

The attributes depend on the chosen layout:

- **Press layout** (typically used for print)

  If you select this layout, the trim box will be derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, and *art box* is the second, the trim box will be derived from the bleed box, if found; if there is no bleed box found, the trim box will be derived from the art box; if there is no art box, the Action will search for the third page box in the list, and so on.

  You must also define the minimum distance between the media and bleed boxes and between the bleed and trim boxes.

  To get the PDF to display at the size of the media it will be printed on, select the appropriate option:

  - **Crop box must equal trim box**, or
  - **No crop box must be defined or the crop box equals the media box**. This means that, if the crop box is not defined yet, it will not be added by this Action; if the crop box is defined, it will get the same size and position as the media box.

- **Screen viewing**

If you select this layout, the page is defined solely by the crop box, which should have the same size as the media box. No other page boxes are allowed. The crop box/media box is derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, the crop box/media box will be derived from the bleed box if found in the PDF; if the bleed box is not found, the second page box in the list will be searched for, ...

- **PDF/X layout**

  If you select this layout, the exact page box layout depends on the chosen PDF/X version.

  - If you have chosen PDF/X-1a:2003 or PDF/X-3:2003, the art box or trim box shall not extend beyond the boundaries of the bleed box and the crop box.
  - PDF/X-4 allows either a trim or an art box but forbids having both.
  - PDF/X-6 allows an art box, next to the mandatory trim box.

  To define the trim box relative to the media box, define the desired margins.

Related Actions

Check page box layout on page 326

4.11.2.18. Check page boxes consistency

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if two different page boxes (if defined) have the same size and position.

You can either compare the trim and art box, or the trim and crop box.

4.11.2.19. Check page format

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Ensures that the media box is defined as being the width or height of a multiple of a particular measurement. This allows you to check whether the page size of your document fits your column and/or row layout.

Example

To set all your page boxes to a multiple of 22cm wide

1. Select **A multiple of columns**.

2. To have pages that are always multiples of 22 cm:
   a. Enter 22 cm as column width.
   b. Enter 0 as column spacing.

Related Actions

Change page format on page 168

4.11.2.20. Check page orientation

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if all the pages in a PDF have a given orientation (portrait, landscape, all the same orientation or the most used orientation).

The orientation is based on the selected page box.

Related Actions

- *Change page orientation* on page 169
- *Select by page orientation* on page 413

4.11.2.21. Check page rotation angle

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the page rotation angle is equal to a specific value.

You can check for a rotation angle of -90°, 0°, 90°, or180° (clockwise).

Related Actions

- *Select by page rotation angle* on page 413
- *Apply page rotation* on page 162

4.11.2.22. Check page safe type zone

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks for text or objects that overlap or come close to an edge limit in a PDF.

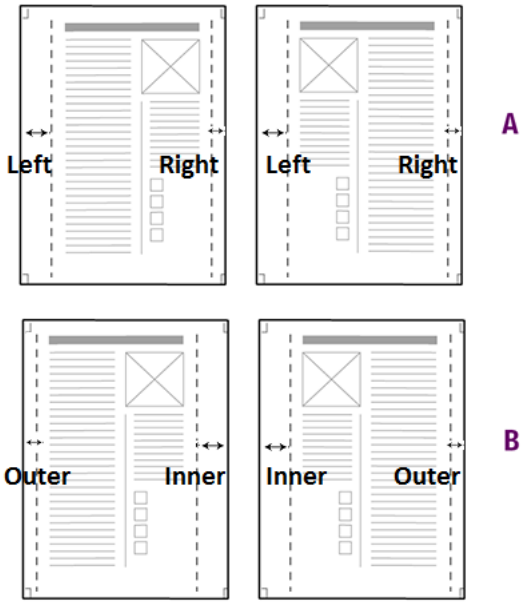
The safe type zone is the area where you must not place any text or objects, unless these objects are intended as bleed.

How to proceed

1. Define the safe type zone as one of the page boxes.
2. Optionally define values for the left, right, top and/or bottom margin.
3. To make sure that even and odd pages are mirrored, select **Mirror horizontal margins**. This is recommended if the left and right margin have a different size.

Figure 2: Mirror horizontal margins illustrated

A = ***Mirror horizontal margins*** *is not selected. Margins of odd and even pages are the same; the left margin is larger than the right margin.*
B = ***Mirror horizontal margins*** *is selected. Odd and even pages are mirrored; the outer margin is smaller than the inner margin.*



4. To only check for text in the page safe type zone, select the **Restrict this check to text** checkbox.

4.11.2.23. Check pages have same size

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks whether all pages in a PDF have the same size. The page size is based on the selected page box.

4.11.2.24. Check page size

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Allows you to check if the size or position of a specific page box matches the desired size or position.

How to proceed

1. Do one of the following:
   - To check the coordinates of the selected page box, select **Rectangle**.
   - To check the height and width of the selected page box, select **Size**.
2. Select the page box of which you want to check the size or position.
3. Enter the required values (coordinates or width and height).
4. In the **Precision** field, indicate how much the actual size or position is allowed to deviate from the entered values.

   A precision of 0 means that no deviation is allowed: the size or position needs to match exactly the entered values. For example, if you are checking for a height of 10 inch, even a very small difference (e.g. a page box height of 10.001 inch) will result in an error or warning.
5. Disable **Ignore page orientation** as required.

   When enabled (default setting), the smallest value is considered the width and the largest value is considered the height. When disabled, the page orientation is taken into account, meaning that the first value is considered the width and the second the height.



Note: Action Lists upgraded from older versions (before this option was introduced) will have **Ignore page orientation** disabled. There's one exception: in Action Lists upgraded from version 17.1 to 2018, the checkbox will be *enabled*, and this may yield unexpected results. We advise reviewing such Action Lists before using them.

Related Actions

Select by page size on page 414

4.11.3. Informs

4.11.3.1. Gather page box information

Belongs to

- **Category:** Page
- **Type:** Informs

What it does

Collects information about the page boxes used in a PDF document and presents it in the log.

In the report file (under Page boxes), each page box layout is represented by 2 drawings:

- One to show the page boxes that were defined in the document ("defined" page boxes)
- One to show the actual position of the page ("effective" page boxes).

Below these drawings, an overview of all page boxes and their sizes is listed:

- The pages this page box layout applies to
- The start position of the media box
- The page rotation
- The page scaling factor

4.11.3.2. Gather pages information

Belongs to

- **Category:** Metadata; Page
- **Type:** Informs

What it does

Collects information about the pages (number of pages and range) in a PDF and presents it in the log.

4.11.4. Selections

4.11.4.1. Select by blending color space

Belongs to

- **Category:** Color; Page

- **Type:** Selections

What it does

Makes a selection based on the blending color space.

You must set the required blending color space and the required luminosity softmask blending color (or select the option **Undefined**).

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85
- *Check if blending color space is defined* on page 261

4.11.4.2. Select by media box origin

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages of which the lower left corner is not located at coordinates 0,0.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

Related Actions

- *Check media box origin* on page 324
- *Move media box to 0.0* on page 171

4.11.4.3. Select by page orientation

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages by orientation.

Choose either Portrait, Landscape, Same orientation or Most used orientation to select all pages with this orientation, and select the page box the orientation must be based on.

Related Actions

- *Change page orientation* on page 169
- *Check page orientation* on page 327

4.11.4.4. Select by page rotation angle

Belongs to

- **Category:** Page; Position and Size
- **Type:** Selections

What it does

Selects pages with a certain rotation angle.

You can choose a rotation angle of -90°, 0°, 90°, or 180° (clockwise).

Related Actions

- *Check page rotation angle* on page 328
- *Apply page rotation* on page 162

4.11.4.5. Select by page size

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages based on the size of one of the page boxes.

You can for example select pages with a trim box of 21x29 cm.

The precision indicates how much the actual size is allowed to differ from the specified size. A precision of 0 means that no deviation is allowed: the size needs to match exactly the entered values.

Related Actions

Check page size on page 329

4.11.4.6. Select color bars

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select color bars with a certain color patch border and patch size.

Color bars (also called color control bars or color control strips) are small squares of color representing CMYK inks and tints of gray, that are used by press operators to control ink density, dot gain, print contrast, ...



Note: PitStop provides an Action List to add color bars.

Example

You could combine this Action with another Action to, for example, delete all color bars at once:

```
Select color bars
Remove selection <!-- Remove selection on page 233 -->
```

4.11.4.7. Select empty pages

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects pages in a PDF document that contain no objects.

You can specify that elements outside of a specific page box should be ignored and/or visually empty pages (paper-white and invisible (fully transparent) objects).

Related Actions

- *Check for empty pages* on page 319
- *Remove empty page* on page 175

4.11.4.8. Select objects close to the page edge

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects objects close to the page edge.

You must specify the distance to the trim box and the distance into the bleed.

Optionally, you can choose to treat subpaths of compound paths individually. In that case, each of the subpaths will be selected separately.

See also:

- *Check if object is close to the page edge* on page 321
- *Change objects that are close to the page edge* on page 167

4.11.4.9. Select objects if page is selected

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select all objects on the selected page(s).

4.11.4.10. Select page by its page box properties

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select a number of pages based on one of the following criteria:

- Whether or not a certain page box is defined.
- The fact that the crop or art box differs from the trim box.
- The fact that a certain page box lies (partially) outside of the media box.
- The fact that the size of the bleed box is not sufficient compared to the trim or crop box.

  This allows you to detect pages of which the page boxes are not well defined.

4.11.4.11. Select page if content is selected

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select a page if the content is selected.

You can select or both the page object and the entire page content.

How to proceed

1. Specify **what** you want to select:

- The page object only, or
- Both the page object and the entire page content.

2. Specify on what **condition** you want to select it, for example if more than one objects are selected.

4.11.4.12. Select pages

Belongs to

- **Category:** Page
- **Type:** Selections

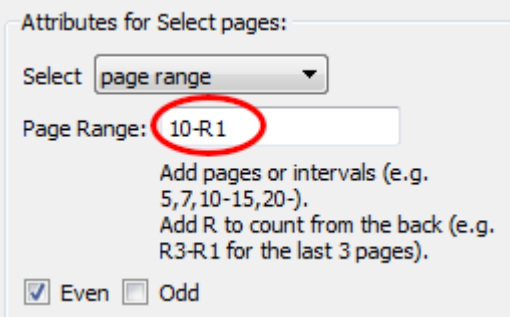
What it does

Allows you to select a particular page, a set of pages, or a page range, for example the first or last page of a PDF, all odd pages, pages from 1 to 5, ...

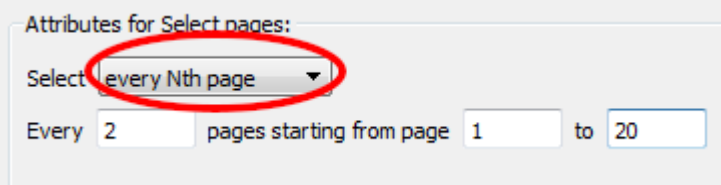
You can also make a selection based on the *number of pages* in the PDF, for example: Select if number of pages is not a multiple of 10.

New options added in 13 update 1

- **Rn notation** allowed in page range selection. If you want to add pages starting from the end of the PDF, you can use this notation in the **Page range** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ...



- **Extra option to select every Nth page**, e.g. every second page in the PDF in the first 20 pages of the PDF.



Example

To select every page but the first page of a PDF, and then add a copied graphic to that page, proceed as follows:

```
Select all pages <!-- Choose: Select all pages, Even and Odd -->
Select first page <!-- Choose: Select first page, Even and Odd -->
NOT
AND
Add copied graphics <!-- See Add copied graphics on page 63 -->
```

4.11.4.13. Select pages with page label

Belongs to

- **Category:** Page
- **Type:** Selections
- **Since Version:** 2019

What it does

Selects pages based on their label. You can enter the label or (a combination of) properties, such as the label prefix, the number style or the page range (odd, even, page numbers).

Related Actions

- *Change page labels* on page 169
- *Remove page labels* on page 176

4.11.4.14. Select pages with PieceInfo

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Searches for pages containing PieceInfo.

This can for example apply to pages coming from Illustrator, containing Illustrator PieceInfo. If a PDF contains PieceInfo, it was saved with editing capabilities from applications such as Illustrator, which may be lost if you edit the PDF with another application.

Removing PieceInfo will make the file smaller, but it won't be possible anymore to import the document in Illustrator.

4.11.4.15. Select pages with transparent objects

Belongs to

- **Category:** Page

- **Type:** Selections

What it does

Selects pages containing transparency.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Remove transparency* on page 228
- *Select transparent objects* on page 435
- *Change transparency* on page 221

4.11.4.16. Select registration marks

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select potential registration marks with a certain color.

How to proceed

Specify the potential color of the registration marks, by choosing one or more of the following:

- 400% CMYK
- Separation All (registration)
- 100% black
- A specific color

  In case of a specific color, do one of the following:

  - Select a color space from the list and use the sliders to select the appropriate color.

- Click  and select the appropriate color.
- Select an object with the Enfocus Selection tool and click  to grab the fill or stroke color from the selection.

Related Actions

Add registration marks on page 69

4.11.4.17. Select trim marks

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select potential trim or bleed marks with a certain color.

How to proceed

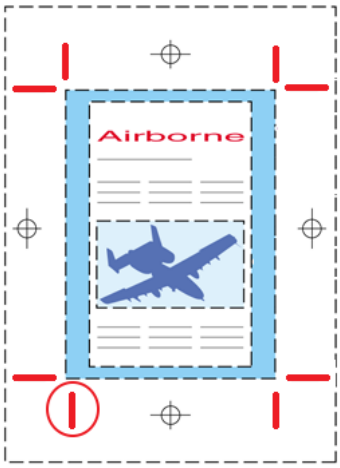
1. Indicate which marks you want to select: trim marks, bleed marks or both.
2. To help PitStop detect the trim marks, specify the potential color of the marks, by choosing one or more of the following:
   - 400% CMYK
   - Separation All (registration)
   - 100% black
   - A specific color

     In case of a specific color, do one of the following:

     - Select a color space from the list and use the sliders to select the appropriate color.
     - Click  and select the appropriate color.
     - Select an object with the Enfocus Selection tool and click  to grab the fill or stroke color from the selection.
3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value, if you're using a different unit.

Example

In the image below, the red marks are detected as trim marks, although the position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line). In this case, the deviation (= difference between the position of both marks) is less than the specified threshold.



Remark

A filled path with 3 lines is accepted as a trim mark if:

- The color is as specified in the attributes of this Action.
- It has no dash pattern.
- The 4 points of the 3 lines are a rectangle.
- The path is closed.
- The width is between 0.1 and 2 pt.
- The length is between 8 and 40 pt.

Related Actions

- *Use trim marks to set page box* on page 184
- *Check if trim marks match page box* on page 323

4.11.4.18. Select pages with transparent objects

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects pages containing transparency.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in

your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Remove transparency* on page 228
- *Select transparent objects* on page 435
- *Change transparency* on page 221

4.11.5. Settings

4.11.5.1. Override page box defaults

Belongs to

- **Category:** General; Page
- **Type:** Settings

What it does

Replaces the default order (Media > Crop > Art - Bleed - Trim) of the page boxes in a PDF document with the order defined in this Action.

4.12. PDF 2.0

4.12.1. Selections

4.12.1.1. Select black point compensation

Belongs to

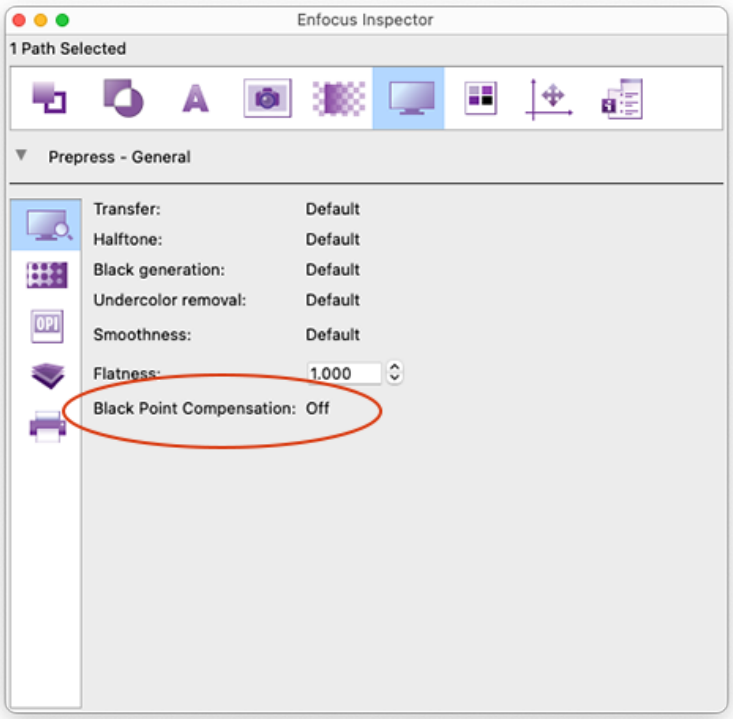
- **Category:** PDF 2.0
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects objects based on the presence of black point compensation (regardless of its value) or based on a particular value (On, Off, or Default).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Note that the black point compensation attribute of a selected object can be found in the Enfocus Inspector, on the **Prepress - General** tab. Possible values are On, Off or Default. When no blackpoint compensation is set (or when multiple objects with different black point compensation values are selected), you'll see a dash.



Related Actions

- *Check black point compensation* on page 330
- *Remove black point compensation* on page 192
- *Set black point compensation* on page 195

4.12.1.2. Select by halftone origin

Belongs to

- **Category:** PDF 2.0
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects objects either with or without default HTO (halftone origin) values, or with particular HTO values.

PDF 2.0 allows specifying the halftone origin, whereas in earlier versions, the HTO value had to be 'Default' (= not specified).

Related Actions

- *Check halftone origin* on page 334
- *Change halftone origin* on page 186
- *Set default halftone origin* on page 196

4.12.1.3. Select by PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Selections

What it does

Allows you to make a selection based on the PDF's Acrobat or PDF version.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.



Note: As of PitStop 2020, you can select a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Example

To select PDFs with Acrobat version higher than 7.0, proceed as follows:

```
Select by PDF version <!-- options: Acrobat version must be more than 7.0 -->
```

Related Actions

- *Change PDF version* on page 145
- *Check PDF/Acrobat compatibility* on page 311

4.12.1.4. Select inline image syntax

Belongs to

- **Category:** Image; PDF 2.0
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects images based on the presence of an L key.

The L key specifies the length of the image data and allows users to skip inline images if required.

You can select images...

- Without an L key
- With an L key
- With an invalid L key

Note that PDF 2.0 allows (but does not impose) the presence of an L key, but if it's present, it must match the actual inline image data length.

Related Actions

- *Check inline image syntax*
- *Change inline image syntax* on page 114Change inline image syntax

4.12.2. Changes

4.12.2.1. Change document information dictionary compliance

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Makes the information dictionary compliant with the chosen PDF version.

About the info dictionary

The info dictionary contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document Properties.

The specifications for the info dictionary depend on the PDF version:

- PDF 1.7: The info dictionary is optional. If it's present, it may contain the following entries: Title, Author, Subject, Keywords, Creator, Producer, CreationDate, ModDate and Trapped.
- PDF 2.0: The info dictionary is optional. If it's present, it may be empty, or contain CreationDate and/or ModDate. The other entries are deprecated.
- PDF/X-6: There should be no info dictionary, or if there is one, it should be empty.



Note: There is one exception to the above: if there is a PieceInfo dictionary in the document catalog dictionary, the info dictionary is required and must contain the ModDate entry.

Note that as of PDF 2.0, the *info* dictionary is officially called *information* dictionary.

Options

- **PDF 1.7**: PitStop only adds an info dictionary (including ModDate) if document level PieceInfo is present.
- **PDF 2.0**: PitStop removes deprecated entries from the info dictionary (if necessary). If document level PieceInfo is present, it makes sure there is an info dictionary that contains ModDate.

- **PDF/X-6**: PitStop removes the info dictionary if there is one, except if document level PieceInfo is present; then it makes sure there is an info dictionary that contains ModDate.
- **Current document version**: PitStop detects the current PDF version and makes sure the info dictionary is compliant with the current PDF version.
- **None (leave it unchanged)**: This option prevents PitStop from interfering with the info dictionary at the time of saving the file.

4.12.2.2. Change halftone origin

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

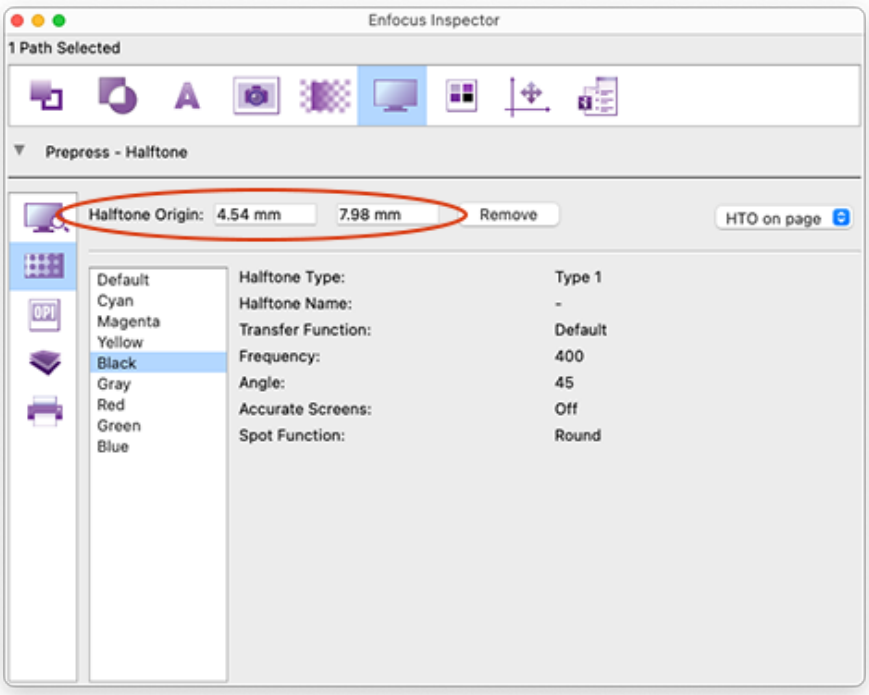
Changes the halftone origin by the entered values.

You can change the halftone origin on page or form level as required:

- The X and Y values relative to the lower-left corner of the Media Box.
- The X and Y values in the form space of the outer selected Form XObject.

This Action is typically used for packaging and labels (step and repeat), to make sure that all images have the same halftone origin, hence look identical when printed.

Note that you can view (and also manually change) the halftone origin of a selected object in the Inspector, on the Prepress - Halftone tab.



Related Actions

- *Check halftone origin* on page 334
- *Select by halftone origin* on page 422
- *Set default halftone origin* on page 196

4.12.2.3. Change inline image syntax

Belongs to

- **Category:** Image, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does
Allows you to change the L key (or Length key) of a PDF to comply with a particular PDF version.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Compatibility with the current document version
- Compatibility with PDF 1.7 (no Length key)
- Compatibility with PDF 2.0 (write Length key)
- Keep presence of the Length key
- Fix the Length key (so it matches the actual inline image data length)



Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change PDF text string encoding* on page 101
- *Check inline image syntax*
- *Select inline image syntax* on page 387

4.12.2.4. Change PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Changes
- **Since version:** 2020

What it does
Allows you to change the text encoding of a PDF to comply with a particular PDF version.

Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Note: The changes you make using this Action will only affect newly saved content: earlier saved content is not touched.

Related Actions

- *Change inline image syntax* on page 114

4.12.2.5. Change PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes

What it does

Changes the Acrobat and PDF version of a PDF.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.

Note: Changing the PDF version will not change the attributes of a higher version PDF to those of a lower one - it only changes the version **number**. As higher versions of Acrobat always save the PDF version number up to their version, even if nothing has changed, this Action can be useful to reset the PDF version to the one used to create the PDF.

Example

If you configure this Action to change the PDF version to PDF 1.5, both the PDF version and the Acrobat version will be changed. The new PDF version will be PDF 1.5; the new Acrobat version will be 6.0.

If you change the PDF version to PDF 2.0, the Acrobat version will remain unchanged.

Related Actions

- *Select by PDF version* on page 400
- *Check PDF/Acrobat compatibility* on page 311

4.12.2.6. Change ProcSet resources

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Adds, removes or does not change the ProcSet entry as specified in the attributes of this Action.

You can as well have PitStop make the appropriate change based on the document's PDF version (see Options).

This Action is useful to make a PDF compliant with a particular PDF version.

About ProcSet resources

Procedure sets are categories of related PDF operators used in content streams. The ProcSet entry in a content stream's resource dictionary holds an array that consists of the procedure sets used in that content stream, for example: /ProcSet [/PDF /Text] . Procedure sets are used only when the content stream is printed to a PostScript output device.

ProcSet resources were used in older PDF versions, but as of PDF 1.4 this feature is considered obsolete. As of PDF 2.0, this feature is deprecated.

For more details, refer to *the PDF Reference* (See 14.2 Procedure Sets).

Options

- **Add ProcSet (default)**
- **Remove ProcSet**
- **Do not change the ProcSet presence** (so if the ProcSet entry is defined, just keep it; if it's not, do not add it)
- **Add, remove or don't change ProcSet, dependent on the document's PDF version**, PitStop behaves as follows:
  - PDF 1.3 and earlier: Add ProcSet resources
  - PDF 1.4 - PDF 1.7: Do not change the ProcSet presence
  - PDF 2.0: Remove the ProcSet resources

4.12.2.7. Change Requirements

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes or adds either all document Requirements or one or more specific Requirement types (in that case you can specify which types to add or to remove).

The Requirements dictionary specifies the requirements the PDF file has. Until PDF 2.0, the only possible requirement was 'EnableJavaScripts'. As of PDF 2.0, a number of new types are allowed, such as 3D Markup, Attachment, Encryption etc.

Related Actions

- *Check if Requirements are used* on page 334

4.12.2.8. Remove alternative blend modes

Belongs to

- **Category:** PDF 2.0, Prepress, Remove
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes alternative blend modes in case of multiple blend modes, because using multiple blend modes is deprecated in PDF 2.0. Only the first blend mode is kept.

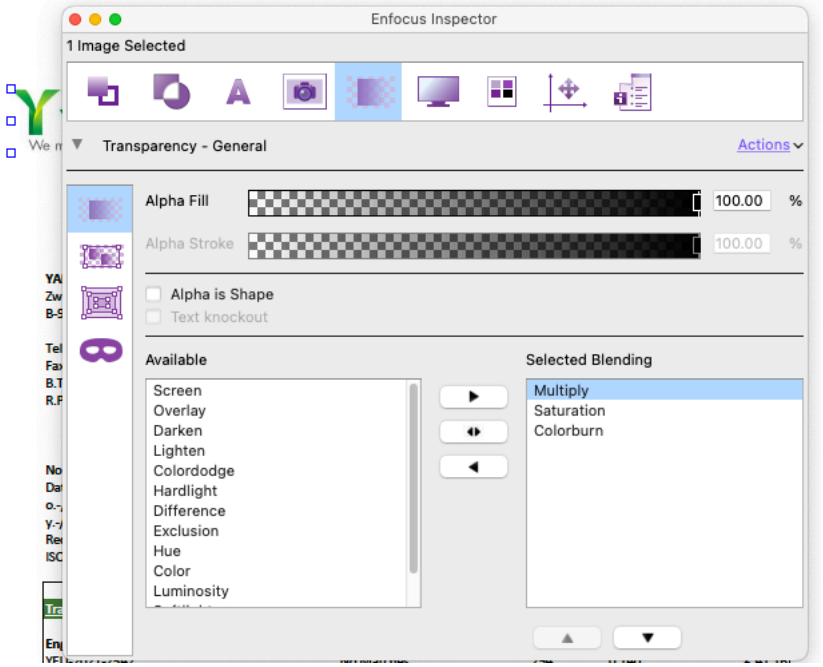
Note that you can check the blend modes using the PitStop Inspector (Transparency - General).

Blend modes determine how colors on different layers blend with each other. For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Example

In this example, three blend modes are selected: Multiply, Saturation and Colorburn.

Running this Action will remove Saturation and Colorburn and only keep the first blend mode in the list: Multiply.



Note: As of PitStop 2022, it will no longer be possible to add multiple blend modes to a selected object using the Enfocus Inpector. However, if an object already has multiple blend modes, they will still be shown.

Related Actions

- *Select by blend modes* on page 431
- *Check for non-standard blend modes* on page 345

4.12.2.9. Remove associated files

Belongs to

- **Category:** General, PDF 2.0
- **Type:** Changes

- **New since:** PitStop 2022

What it does

Removes associated files.

This fix can be used to make PDF files compliant with PDF 2.0.

Related Actions

- *Check for associated files* on page 278

4.12.2.10. Remove black point compensation

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes objects that have a black point compensation attribute (regardless of its value).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Related Actions

- *Check black point compensation* on page 330
- *Select black point compensation* on page 421
- *Set black point compensation* on page 195

4.12.2.11. Remove CharSet or CIDSet

Belongs to

- **Category:** PDF 2.0, Text
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the CharSet or CIDSet if present in the PDF.

If a font is subset, only the characters of the font that are actually used are embedded in the document. They are held in a CharSet (simple fonts) or a CIDSet (composite fonts).

CharSets and CIDSets are deprecated in PDF 2.0. That means that they are allowed, but not needed, so they can as well be removed.

Related Actions

Check if a subset font contains a complete CharSet or CIDSet on page 354

4.12.2.12. Remove DPart metadata

Belongs to

- **Category:** PDF 2.0, Text
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes DPart metadata from a PDF if present.

DPart (Document Part) metadata provides information about pages or parts of a PDF, allowing PDF processors to easily identify pages or page ranges that have particular properties.

This is a PDF 2.0 feature, hence this Action is typically used to check for PDF 2.0 features.

Related Actions

Check DPart metadata on page 332

4.12.2.13. Remove enforcements on viewer preferences

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the Enforced key if it is used in the Viewer preferences.

Enforcing the viewer preferences is a PDF 2.0 feature, hence this Action is typically used to remove PDF 2.0 features.

Related Actions

- *Check enforced viewer preferences* on page 332

4.12.2.14. Remove file specification keys

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes PDF 2.0 specific file specification keys.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will remove the PDF 2.0 specific file specification keys, such as Thumb, AFRelationship and EP.

Related Actions

Check file specification keys on page 278

4.12.2.15. Remove name from XObjects

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes Name from form XObject and image XObject stream dictionaries. This is typically done to fix deprecated PDF 1.x features.

4.12.2.16. Remove Output Intents

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the Output Intents from the document and/or the individual pages.

An Output Intent describes the color characteristics of the output devices on which the PDF document might be rendered. The Output Intent may be defined on document and/or page level.

Related Actions

- *Check if Output Intents are used* on page 334

4.12.2.17. Remove specific Output Intent keys

Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes either the Mixing Hints or Spectral Data key, or both if they are available in the Output Intents (on page or document level) of the PDF.

These keys are PDF 2.0 specific, hence this Action is typically used to removed PDF 2.0 features.

Related Actions

- *Check Missing Hints in Output Intent*
- *Check Spectral Data in Output Intent*

4.12.2.18. Set black point compensation

Belongs to

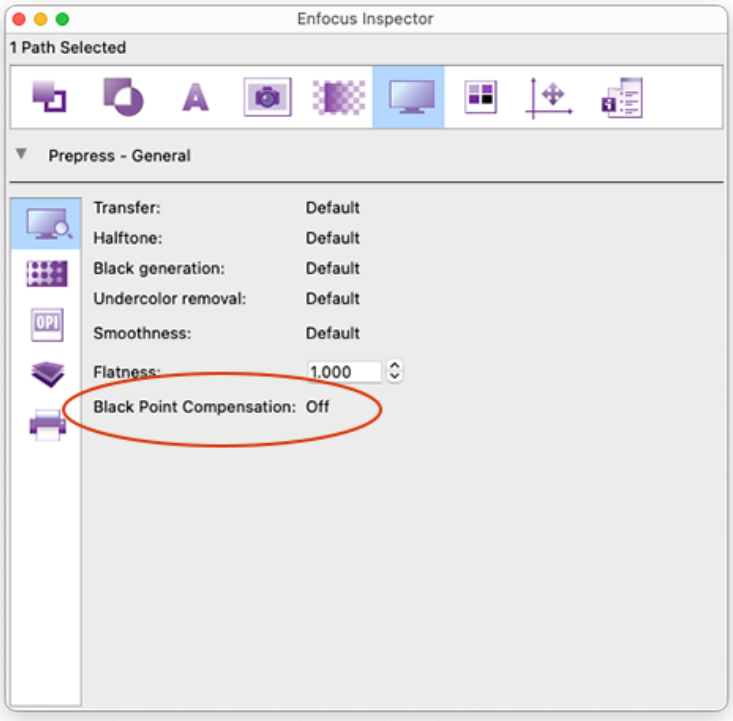
- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Allows you to set the black point compensation to a particular value (On, Off, or Default).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Note that the black point compensation attribute of a selected object can be found and changed in the Enfocus Inspector, on the **Prepress - General** tab.



Related Actions

- *Check black point compensation* on page 330
- *Select black point compensation* on page 421
- *Remove black point compensation* on page 192

4.12.2.19. Set default halftone origin

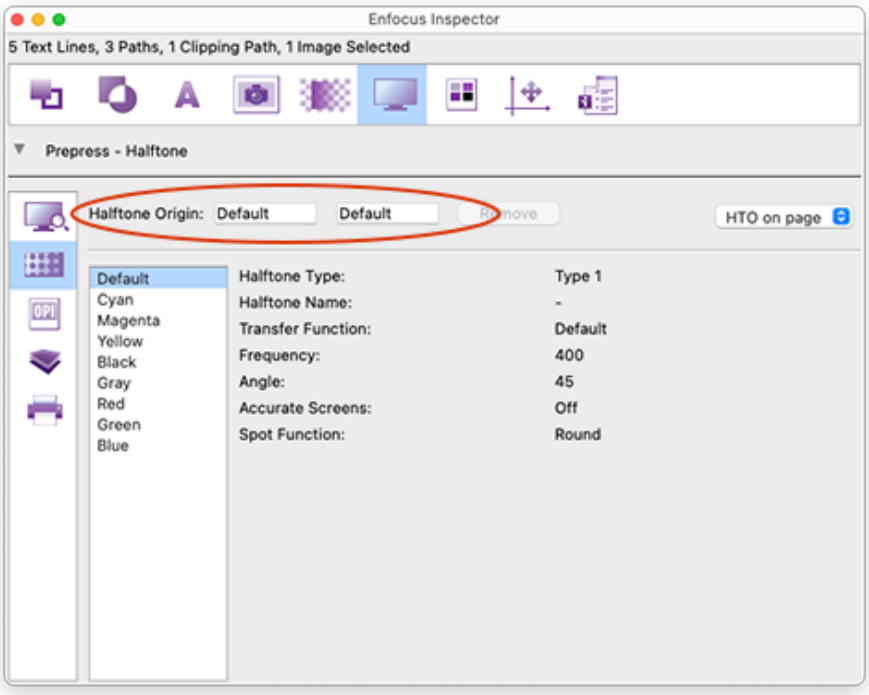
Belongs to

- **Category:** PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2022

What it does
Changes the halftone origin to 'Default'.

'Default' means that the halftone origin (HTO) is not specified, so setting the HTO to 'Default' removes the HTO from any object it uses. This is useful if you want to remove PDF 2.0 features from your document.

Note that you can view (and also manually change) the halftone origin of a selected object in the Inspector, on the Prepress - Halftone tab.



Related Actions

- *Check halftone origin* on page 334

- *Select by halftone origin* on page 422
- *Change halftone origin* on page 186

4.12.3. Checks

4.12.3.1. Check black point compensation

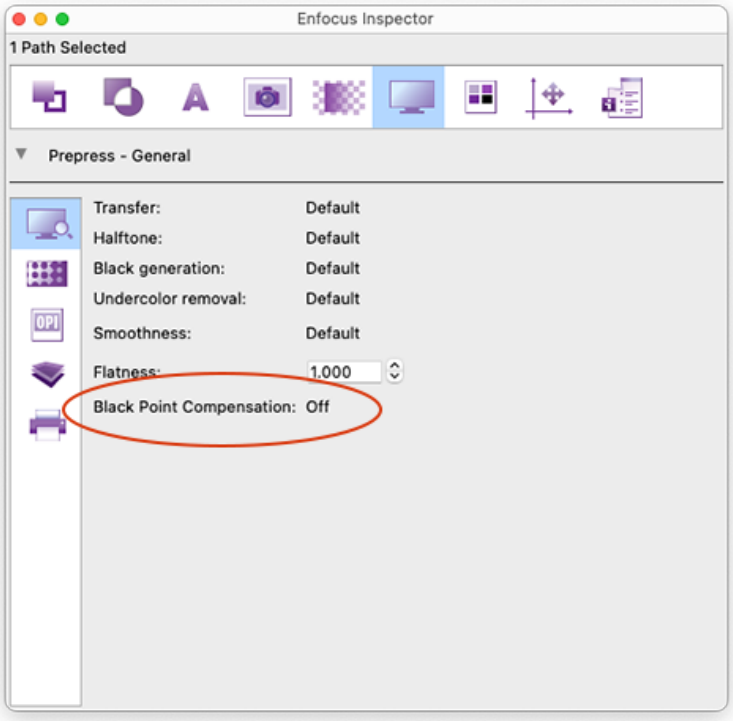
Belongs to

- **Category:** PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does
Checks if either black point compensation is not present or has a particular value (On, Off, or Default).

The black point compensation option is a feature of Adobe Photoshop to address color conversion problems caused by differences between the darkest level of black achievable on one device and the darkest level of black achievable on another.

Note that the black point compensation attribute of a selected object can be found in the Enfocus Inspector, on the **Prepress - General** tab. Possible values are On, Off or Default. When no blackpoint compensation is set (or when multiple objects with different black point compensation values are selected), you'll see a dash.



Related Actions

- *Remove black point compensation* on page 192
- *Select black point compensation* on page 421
- *Set black point compensation* on page 195

4.12.3.2. Check document information dictionary compliance

Belongs to

- **Category:** Metadata; PDF 2.0
- **Type:** Checks
- **Since:** 2022

What it does

Checks if the information dictionary is compliant with the chosen PDF version (PDF/X-6 or PDF 2.0).

For more information about the information dictionary, refer to *Change document information dictionary compliance* on page 144.

Related Actions

- *Change document information dictionary compliance* on page 144

4.12.3.3. Check document security

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Checks if a particular encryption was used to secure the PDF file.

Options:

- A PDF version (1.3 - 2.0)
- A combination of "none" and a PDF version (1.3 - 2.0)
- None
- None or Standard (= no custom security)
- Custom (enter a custom name in the text field)

4.12.3.4. Check DPart metadata

Belongs to

- **Category:** PDF 2.0
- **Type:** Checks

- **New since:** PitStop 2022

What it does

Checks if the document contains DPart metadata.

DPart (Document Part) metadata provides information about pages or parts of a PDF, allowing PDF processors to easily identify pages or page ranges that have particular properties.

This is a PDF 2.0 feature, hence this Action is typically used to check for PDF 2.0 features.

Related Actions

- *Remove DPart metadata* on page 192

4.12.3.5. Check enforced viewer preferences

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the Enforced key is used in the Viewer preferences.

Enforcing the viewer preferences is a PDF 2.0 feature, hence this Action is typically used to find (and remove) PDF 2.0 features.

Related Actions

- *Remove enforcements on viewer preferences* on page 193

4.12.3.6. Check file specification keys

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches the PDF for file specification keys.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will search for this type of links and check if they contain either the required file specification keys or the PDF 2.0 specific keys.

Related Actions

- *Check for file specifications* on page 279
- *Remove file specification from streams* on page 111

- *Remove file specification keys* on page 193

4.12.3.7. Check for associated files

Belongs to

- **Category:** General, PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if a PDF file contains associated files.

This is a PDF 2.0 feature. If you don't want PDF 2.0 features in your file, you can remove the associated files using a dedicated *Action*.

For more information about associated files, refer to *PDF 2.0 Application Note 002: Associated Files*.

Related Actions

- *Remove associated files* on page 111

4.12.3.8. Check halftone origin

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Logs either objects with or without default HTO (halftone) values, or with particular HTO values.

PDF 2.0 allows specifying the halftone origin, whereas in earlier versions, the halftone origin value had to be 'Default' (= not specified). If you want to remove the halftone origin from your document, you can use the *Set default halftone origin* Action.

Related Actions

- *Select by halftone origin* on page 422
- *Change halftone origin* on page 186
- *Set default halftone origin* on page 196

4.12.3.9. Check if Output Intents are used

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks for the presence of Output Intents, either on page or document level.

An Output Intent describes the color characteristics of the output devices on which the PDF document might be rendered. The Output Intent may be defined on document and/or page level.

This Action can be useful if you don't want PDF2.0 features in your PDFs. You can remove Output Intents using a dedicated *Action*.

Related Actions

- *Remove Output Intents* on page 194

4.12.3.10. Check if Requirements are used

Belongs to

- **Category:** PDF2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the PDF contains a Requirements dictionary in the Catalog, or one or more specific Requirement types (in that case you can specify which types to check for).

The Requirements dictionary specifies the requirements the PDF file has. Until PDF 2.0, the only *possible* requirement was 'EnableJavaScripts'. As of PDF 2.0, a number of new types are allowed, such as 3D Markup, Attachment, Encryption etc.

Related Actions

- *Change Requirements*

4.12.3.11. Check inline image syntax

Belongs to

- **Category:** Image; PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks the presence and/or validity of the L key (or Length key) of a PDF.

The L key specifies the length of the image data and allows users to skip inline images if required.

Choices are:

- Inline images must not have the Length key
- Inline images must have the Length key
- Inline images must have a valid Length key.

Note that PDF 2.0 allows (but does not impose) the presence of an L key, but if it's present, it must match the actual inline image data length.

Related Actions

- *Select inline image syntax*
- *Change inline image syntax*

4.12.3.12. Check Mixing Hints in Output Intent

Belongs to

- **Category:** PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the document contains an Output Intent on document or page level that contains the Mixing Hints dictionary. Note that only the presence of the dictionary, not the contents is checked.

A Mixing Hints dictionary provides information about how spot colors interact with each other. That information may be used in blending calculations when the actual spot colors are not available on the target device. As of PDF 2.0, a Mixing Hints dictionary is allowed in an Output intent dictionary for the complete PDF.

4.12.3.13. Check PDF text string encoding

Belongs to

- **Category:** Document, PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Allows you to check if the text encoding of a PDF complies with a particular PDF version. Choices are compatibility with the current document version, with PDF 1.7 (PDFDocEncoding or UTF-16BE) or with PDF 2.0 (ASCII or UTF-8).

Related Actions

- *Change PDF text string encoding* on page 101

4.12.3.14. Check PDF/Acrobat compatibility

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Allows you to checks if a particular Acrobat or PDF version is used in a PDF document.

You can for example check if the Acrobat version is equal to or higher/lower than a particular version.



Note: As of PitStop 2020, you can check a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). If the versions are different, PitStop uses the version from the Adobe extension. If there is no version specified in the Adobe extension, the header version or catalog version are considered, and the highest version number is taken.

4.12.3.15. Check Spectral Data in Output Intent

Belongs to

- **Category:** PDF 2.0
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the document contains an Output Intent on document or page level that contains the Spectral Data dictionary. Note that only the presence of the dictionary, not the contents is checked.

The Spectral Data dictionary provides information about the spectral characteristics and the opacity properties of spot colors.

4.12.3.16. Check version compatibility with PDF/X-6

Belongs to

- **Category:** PDF 2.0, Metadata
- **Type:** Checks
- **New since:** PitStop 2022

What it does

Checks if the version of the PDF complies with PDF/X-6 or PDF/X-6p.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). PDF/X-6 and PDF/X-6p require that both the version specified in the header and the version specified in the document catalog are 2.0 (or higher).

Related Actions

- *Fix version compatibility with PDF/X*

4.13. Position and Size

4.13.1. Changes

4.13.1.1. Align or distribute objects

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Aligns or distributes the selected objects and/or distributes spacing between them.

You can align objects relative to your selection ("Selection bounding box") or to one of the page boxes.

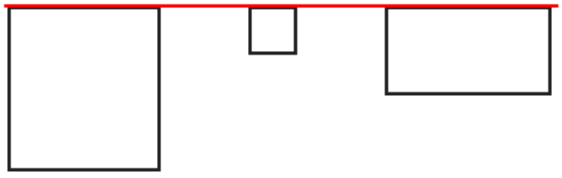
Note: This functionality is also available in the Enfocus Inspector (on the Position tab).

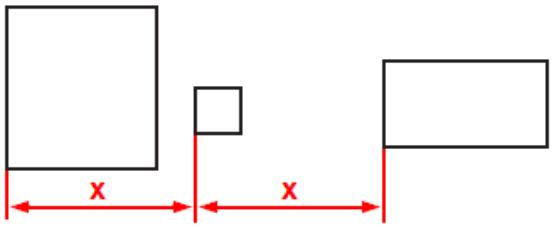
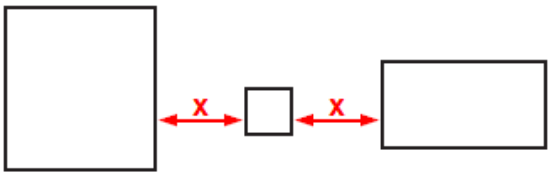
Remarks

The 'Select all' Action, which is added automatically to a new Action List, should be removed in most cases. You can either add your own 'select' Actions or run the Action List on a user selection.

Note that you could also create your Action List by recording your actions while aligning and/or distributing objects using the Enfocus Inspector.

Examples

Example	Description
	Aligned top edges.

Example	Description
	Distributed left edges.
	Distributed horizontal spacing.

4.13.1.2. Apply page rotation

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Sets the page rotate key defined in the PDF to 0 °. This may have a visual effect.

4.13.1.3. Apply page scaling factor

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Apply page scaling factor removes the page scaling factor and scales the page to compensate.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By applying the page scaling factor, the actual page size will become 20 by 20 inches.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.

Note: When the result of applying the scaling factor exceeds the size of 200x200 inches, the page may not be displayed well. This is a limitation of Adobe Acrobat.

Related Actions

- *Check if page scaling factor is used* on page 323

- *Remove page scaling factor* on page 175

4.13.1.4. Center page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Places all objects in the center of the page.

You can:

- Center the objects horizontally, vertically or both.
- Center the content relative to a page box and set margins (left, right, top and bottom).
- Use page rotation and scaling factor as required.
- Only center the visible part of the content.

4.13.1.5. Change position

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Moves selected objects to a new position.

You can define an absolute or a relative target position:

- **Move absolute to** moves either all selected objects in one go or each of the selected objects individually to a new position relative to the page they are on.
- **Move relative by** moves an object in relation to itself.

Indicate whether page rotation and/or the page scaling factor (if applicable) should be taken into account when moving the selection.

4.13.1.6. Crop images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Allows you to crop images to match a clip mask and/or a particular page box.

New in 13 update 1: You can now remove the unwanted white borders (e.g. of scanned images), by selecting the **Crop white borders of image** checkbox. This option also works on stencil marks and is particularly useful as it enables subsequent Actions to work on the size of visible objects.

4.13.1.7. Flip content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Flips the contents of a selected object horizontally or vertically.

You can flip the content relative to the center of one of the page boxes. Note that you can take page rotation into account as required.

Related Actions

- *Check for flipped objects* on page 338
- *Flip selection* on page 199

4.13.1.8. Flip selection

Belongs to

- **Category:** Position/Size
- **Type:** Changes
- **Since version:** 2020

What it does

Flips a selected object horizontally or vertically.

You can flip the content relative to the center of the selection bounding box or to the visible area of selection. This last option is relevant if part of a selected image has been clipped away.

Note that you can take page rotation into account as required.

Example
This Action is useful to flip images while keeping text untouched.

```
select image
flip selection
```

Related Actions

- *Check for flipped objects* on page 338
- *Flip content* on page 170

4.13.1.9. Move objects into the page box

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Moves the selected objects into a particular page box.

You can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects out of the page box* on page 171

4.13.1.10. Move objects out of the page box

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the selected objects out of a particular page box.

You can can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects into the page box* on page 171

4.13.1.11. Move objects to corner

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Moves the selected graphic elements to the defined corner of the selected page box.

How to proceed

Proceed as follows:

1. Select the anchor point of the object you want to use for positioning the object, for example "upper left".
2. Select the anchor point of the specified page box you want to use for positioning, for example "center".
3. Select the page box itself, for example "crop box".
4. Select the **Use page rotation** checkbox as required.

Example

To move the images in your document to the lower right corner of the page, without cutting off the images, use:

```
Select images
Move objects to corner
     <!-- settings (example): Place the lower right corner of the graphic elements
 relative to the lower right corner of the trim box -->
```

If you have chosen to place the center of the graphic elements relative to the lower right corner of the trim box, the center point of the image will be positioned on the lower right corner point of the trim box, meaning that the right hand side and lower half of the image will lie outside of the trim box.

Related Actions

- *Move objects out of the page box* on page 171
- *Move objects into the page box* on page 171

4.13.1.12. Move page content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page in the preferred direction (horizontally or vertically) by the specified distance:

- A positive value, e.g. "1 cm" will move the content to the right (horizontally) or to the top of the page (vertically).
- A negative value, e.g. "-1 cm" will move the content to the left (horizontally) or to the bottom of the page (vertically).



Note: Remember that the unit used in Actions (in this example "cm") is defined in the Preferences (Units & Guides Category).

You can choose whether or not to take into account page rotation and scaling factor (if applicable).

4.13.1.13. Move page content to corner

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page to a chosen corner.

This Action does not center the object on the corner but moves the closest objects to that corner and moves the other objects by the same distance towards the corner (horizontally or vertically).

Example

To move the page content to the lower left

1. Select Move page content horizontally to **Left Side**.
2. Select Move page content vertically to **Bottom Side**.
3. Select the page box to be used as a reference, for example the **media box**.
4. Optionally, set **margins** to be added to the media box.
5. Select the **Use page rotation and scaling factor** checkbox, if page rotation and scaling factor should be taken into account.

4.13.1.14. Normalize line weight

Belongs to

- **Category:** General; LineArt; Position and size
- **Type:** Changes

What it does

Normalizes paths where a transformation matrix caused distortions, by removing the distortion, giving the path a uniform line weight equal to the average reported in the Inspector. The Action also works on sheared paths.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392
- *Check line weight* on page 296

4.13.1.15. Remove page scaling factor

Belongs to

- **Category:** Page; Position and size

- **Type:** Changes

What it does

Removes the page scaling factor an reverts the page to its original size.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By removing the page scaling factor, the page size will be at 10 by 10 inches again.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.

Related Actions

- *Check if page scaling factor is used* on page 323
- *Apply page scaling factor* on page 163

4.13.1.16. Rotate content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Rotates the page content at a particular angle around a particular point.

You could for example rotate the page content at an angle of 90° relative to the center of the media box.

You can choose whether or not to take into account page rotation.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate object* on page 204
- *Rotate objects as group* on page 204

4.13.1.17. Rotate object

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Rotates an object at a certain amount of degrees around a particular point.

Related Actions

- *Check for rotated objects* on page 338

- *Rotate content* on page 178
- *Rotate objects as group* on page 204

4.13.1.18. Rotate objects as group

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Rotates a selection of objects at a particular angle around a particular point.

You could for example rotate the selection around the center of the media box at an angle of 90 degrees.

Note: Rotating objects as a group means that all of the selected objects act as one large object during the rotation.

How to proceed

1. Select what specific place in the page box you want to use as the rotation point (center, lower left ...).
2. Specify the page box of your choice or choose "selection bounding box" or "visible area of selection". This last option is relevant if part of a selected image has been clipped away.
3. Define the rotation angle.
4. Select the **Use page rotation** checkbox as required.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate content* on page 178
- *Rotate object* on page 204

4.13.1.19. Rotate page

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to set page rotation to -90, 0, 90 or 180 degrees (clockwise).

Related Actions

Rotate content on page 178

4.13.1.20. Scale page boxes

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to scale all page boxes simultaneously.

Specify X and Y scaling percentages. You can anchor the page boxes at a certain corner in the PDF, for instance at the lower left corner of the media box. You can also choose whether or not to use the page rotation.

Note: If you want to scale the page boxes proportionally, you need to specify the same values for X and Y.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

4.13.1.21. Scale page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

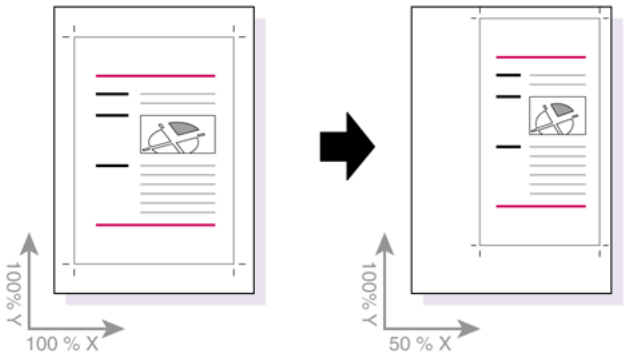
What it does

Scales page content along the X and/or Y axis by a certain percentage.

Note: If you want to scale the page content proportionally, you need to specify the same values for X and Y.

Example

Suppose you have an A4-size PDF document (210 x 297 mm). You want to keep the page size “as is”, but need to make the page content narrower. You also wish to move the page content to the upper right corner of the crop box.



How to proceed

1. Enter the preferred scaling percentage for the X and Y axis.
2. Do one of the following:
   - To define an anchor point, select **Anchored at**.
   - To define the target position of the page contents, select **Moving page content to**.
3. Define the anchor point or target position, for example (anchored at/moving to) the upper right of the crop box.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

4.13.1.22. Scale page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Scales the page content to fit the size of a particular page box. You can add extra margins, if necessary.

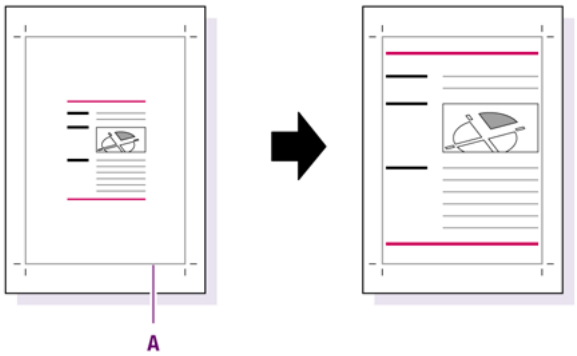
You should also define the target position of the page content inside the page box, e.g. "page content should move to the upper right".

You can choose whether or not to take into account the page rotation and scaling factor.

Scaling is by default restricted to the visible elements of the page (unless you clear the **Use only visible part of content** checkbox), to avoid that hidden content leads to incorrect results.

Example

In the example below, the page content is scaled to fit the size of the trim box (A).



Related Actions

- *Scale page content* on page 179
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

4.13.1.23. Scale selection

Belongs to

- **Category:** Position/Size
- **Type:** Changes
- **Since Version:** 2017

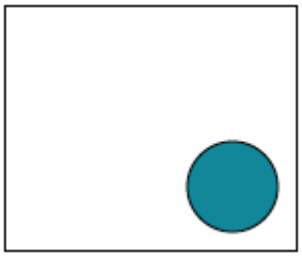
What it does
Resizes one or more selected objects.

You can set the width and height using fixed values, variables, percentages or page boxes, proportional or not. You can also determine the anchor point of the object being scaled and the direction in which the object will resize.

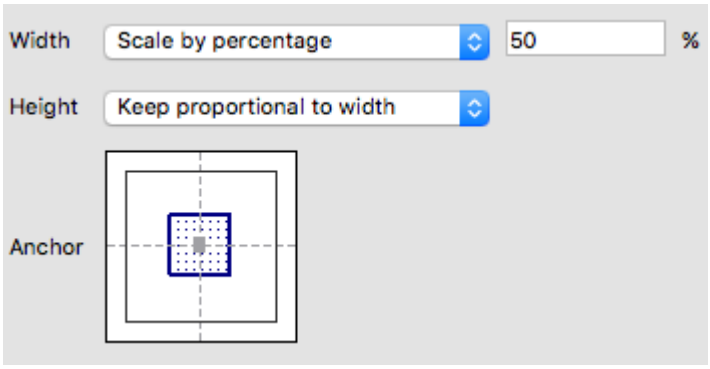
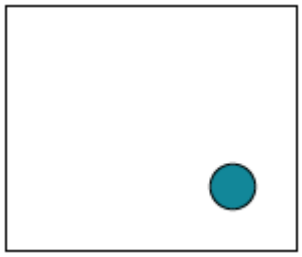
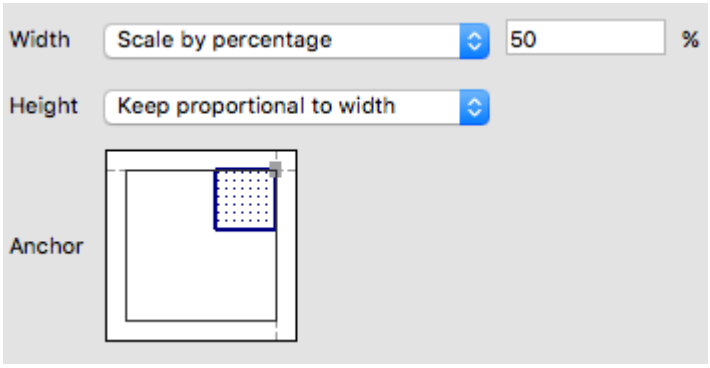
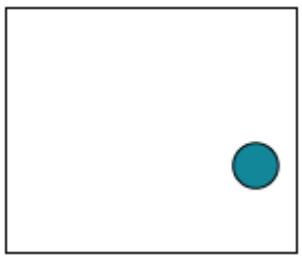
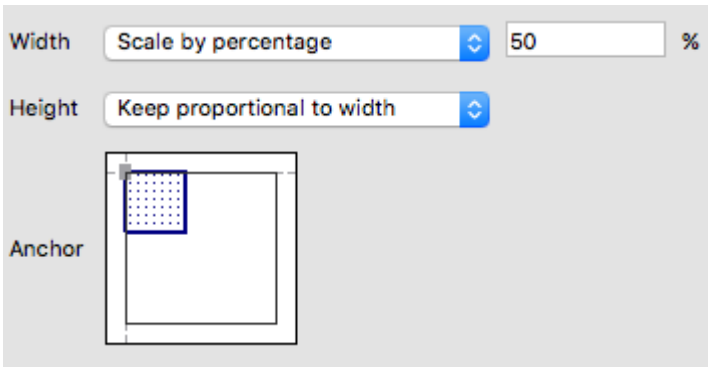
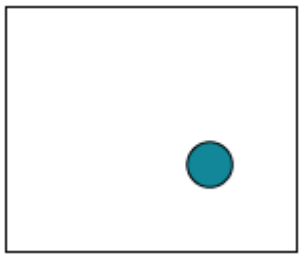
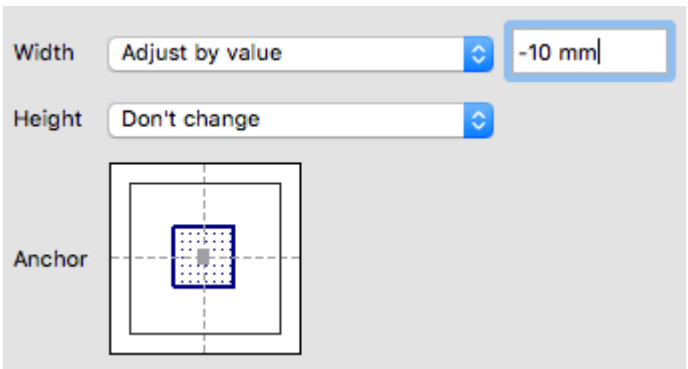
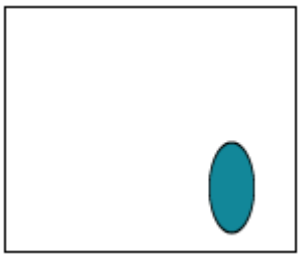
Note that the reference for the anchor point is the bounding box of the selection.

Example 1: One object selected

Object before scaling:

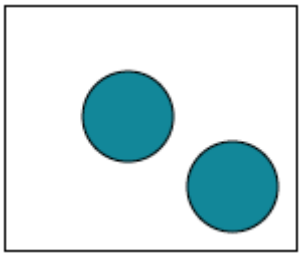


Result of the Action depending on the chosen options:

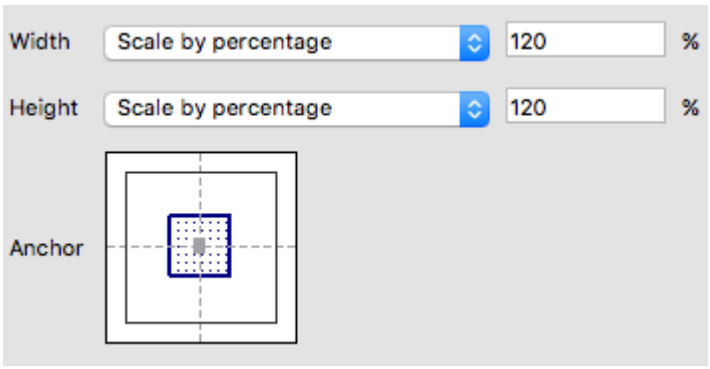
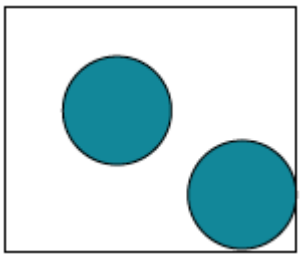
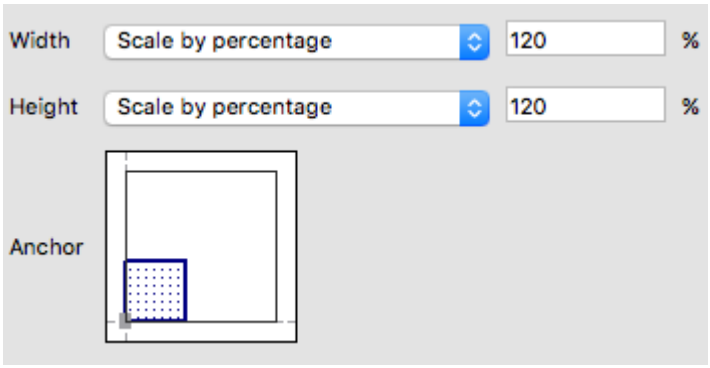
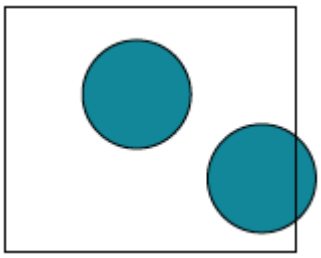
Chosen options	Result
	
	
	
	

Example 2: Two objects selected

Objects before scaling:



Result of the Action depending on the chosen options:

Chosen options	Result
	
	

4.13.1.24. Scale to fit page size

Belongs to

- **Category:** Position/Size; Page
- **Type:** Changes

What it does

Scales all page boxes (and optionally all page content as well) until the specified page box fits the target size.

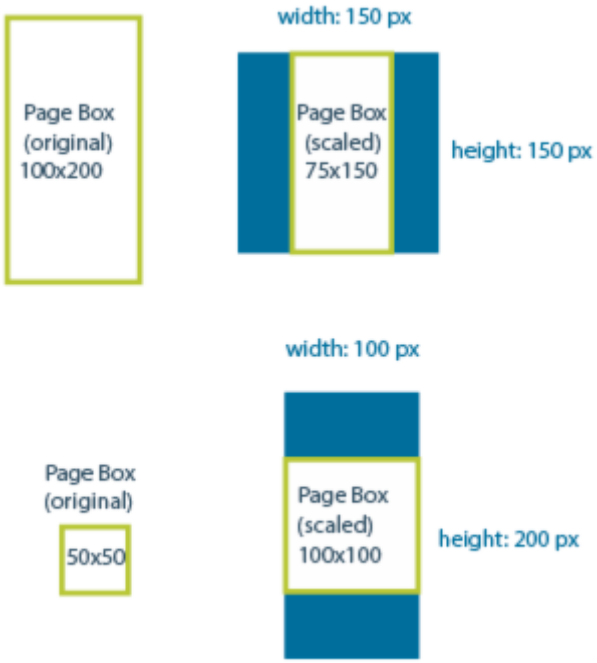
The target size should be specified by defining the target width and height either as a value, a percentage of the original value or proportionally relative to the other dimension.

Note that for both the page content and the page boxes you can separately decide whether or not to scale proportionally to match the target page size.

Remark

In case of proportional scaling (=default, **Allow non-proportional scaling** checkbox NOT selected), it may happen that the requested target width and height cannot be achieved without changing the aspect ratio; in that case, the target size serves as a frame in which the resized page box should fit.

For example, if the original page box is a rectangle and the requested width and height result in a square, the page box will be scaled to fit in the square (and vice versa). See the image below; the blue object represents the requested target dimensions.



Related Actions

- *Scale page content to fit* on page 180
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

4.13.1.25. Shrink page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Shrinks page content to fit the size of a particular page box. You can add extra margins, if necessary. You should also define the anchor point, for example "anchored at the lower left of the media box".

You can choose whether or not to take into account page rotation and scaling factor.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179

4.13.1.26. Use trim marks to set page box

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Allows you to set the trim box and/or the bleed box based on the trim or bleed marks found in the PDF.

Note:

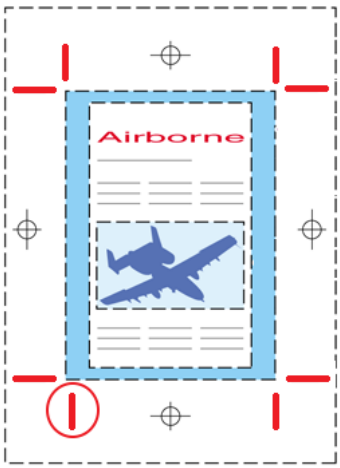
- Crop marks with a **dash pattern** cannot be used to set the page box.
- Crop marks generated with Illustrator, InDesign and QuarkXpress are supported.

How to proceed

1. Indicate which page box you want to set: the trim box, the bleed box or both.
2. Specify the color of the trim marks by choosing one or more of the following:
   - 400% CMYK
   - Separation All (registration)
   - 100% black
   - A specific color.
3. If desired, specify how much the marks are allowed to deviate from the expected position:
   - The unit is the unit set in the PitStop Pro Preferences (Units & Guides category), for example: cm or pt
   - The maximum value is 2.7 pt; if you enter a higher value, it is automatically reset to 2.7 pt or an equivalent value (if you're using a different unit).

Example

In the image below, the red marks are detected as trim marks and used to set the trim box (blue box). The position of the vertical marks in the top and bottom left corner is not as expected (they are not exactly on one vertical line), but the deviation (= difference between the position of both marks) is less than the specified threshold.



Related Actions

- *Select trim marks* on page 419
- *Check if trim marks match page box* on page 323

4.13.2. Checks

4.13.2.1. Check for flipped objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Searches a PDF for objects that have been flipped, normally using QuarkXpress. These can slow down the RIP.

Related Actions

- *Flip content* on page 170
- *Flip selection* on page 199

4.13.2.2. Check for rotated objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Checks if a PDF contains rotated objects. Objects can have been rotated by page layout applications such as QuarkXPress, and this may cause problems for (older) RIPs.

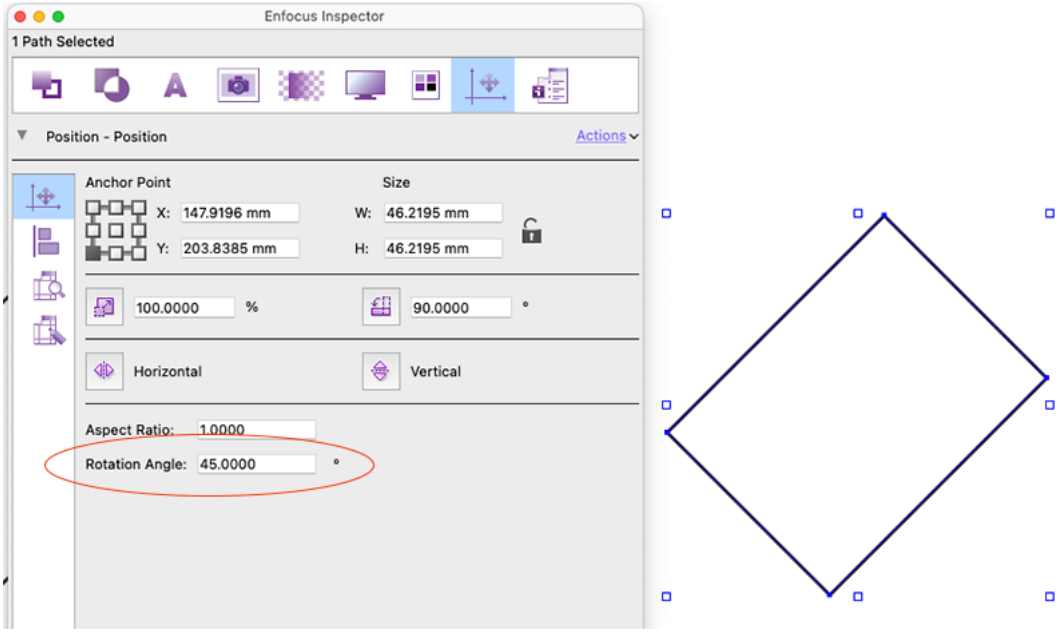
You can specify the non-permitted level of rotation, for example 'objects must not be rotated more than 2 degrees', optionally combined with two extra options:

- **Interpret all angles as rotations between 0 and 45 degrees from vertical or horizontal**: This option allows you to find small rotations in either direction. To decide whether or not an object is rotated, the measured angle is converted to an interval [0,45] degrees compared to the nearest horizontal or vertical page edge. As a consequence, a rotation of 88 degrees is converted to 2 (90-88) and a rotation of 271 degrees is converted to 1 (271-270). When checking for rotations smaller than 4 degrees, both rotations will be logged, whereas for example a rotation of 290 degrees (converted to 20 => 290-270) won't be logged. See example 1 below.

- **Ignore objects that are aligned horizontally or vertically**: This option allows you to exclude objects that are aligned exactly 0, 90, 180 or 270 degrees to the page edges. Such objects (rotated a multiple of 90 degrees) do not look rotated, so in most cases they should not be logged. See example 2 below.

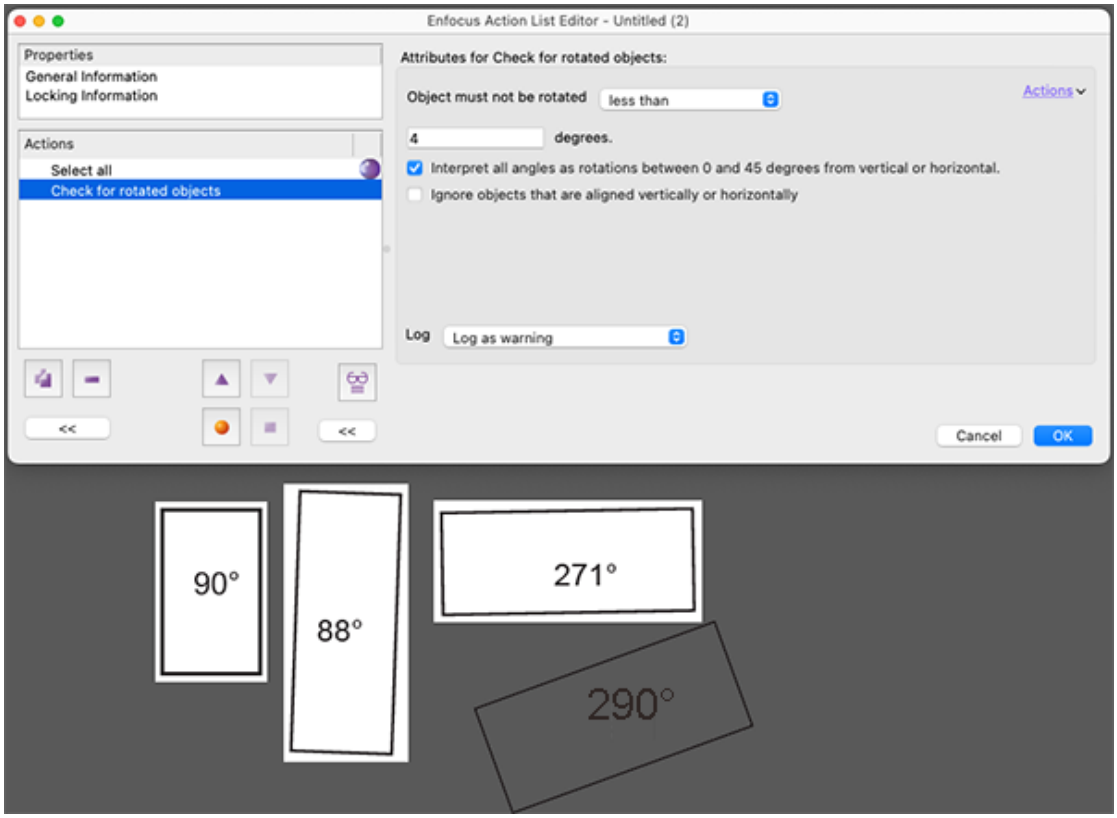
Remark

Note that you can check the rotation angle of an object using the PitStop Inspector.



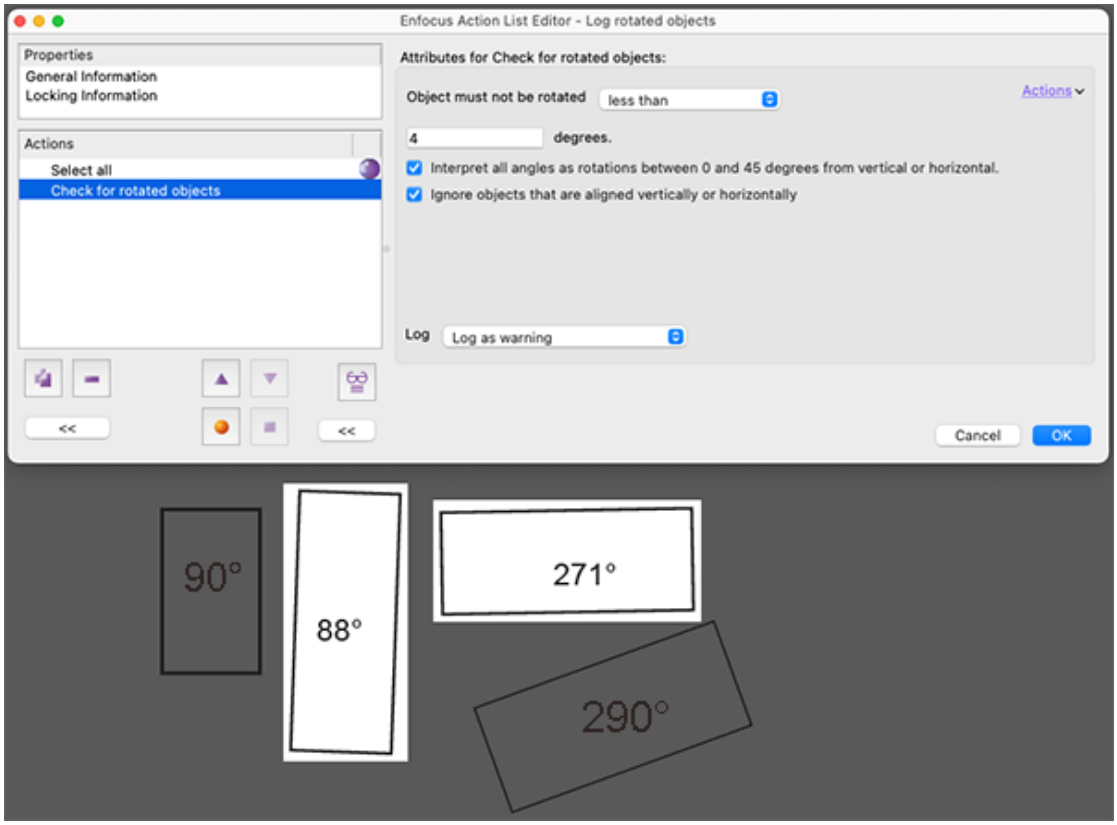
Example 1

In the example below, all angles are interpreted as rotations between 0 and 45 degrees from vertical to horizontal (first option). The first three objects are logged because they have a rotation angle of less than 4 degrees from the nearest vertical or horizontal page edge (as explained higher).



Example 2

When the **Ignore objects that are aligned horizontally or vertically** checkbox is selected, the object that has a rotation angle of 90° is no longer logged.



Related Actions

- *Rotate object* on page 204
- *Rotate content* on page 178
- *Rotate objects as group* on page 204
- *Select rotated objects* on page 429

4.13.2.3. Check for sheared objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Checks if the PDF contains objects that have been disproportionally skewed or twisted in a page layout application such as QuarkXpress.

4.13.2.4. Check if object is completely outside page box

Belongs to

- **Category:** Page; Position and size

- **Type:** Checks

What it does

Searches for (and optionally selects) objects that lie completely outside the selected page box.

Depending on your workflow, you may want to remove these objects before printing.

4.13.2.5. Check if page scaling factor is used

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the PDF uses a page scaling factor. If so, you can optionally check if a certain page scaling factor applies.

A page with scaling factor 2 will be displayed and printed twice the original size (= scaling factor 1). Page scaling has been introduced in PDF 1.6 and allows you to extend the maximum page size beyond 200 by 200 inch.

Related Actions

- *Apply page scaling factor* on page 163
- *Remove page scaling factor* on page 175

4.13.2.6. Check media box origin

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the media box is set to coordinates 0,0.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

Related Actions

- *Select by media box origin* on page 413

- *Move media box to 0.0* on page 171

4.13.2.7. Check page rotation angle

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the page rotation angle is equal to a specific value.

You can check for a rotation angle of -90°, 0°, 90°, or180° (clockwise).

Related Actions

- *Select by page rotation angle* on page 413
- *Apply page rotation* on page 162

4.13.2.8. Check XY scaling difference

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Checks the proportional scaling of a selected object.

If the XY scaling difference is 0%, the object is scaled proportionally, i.e. the height-to-width ratio is maintained. The object is enlarged or reduced both horizontally (X) and vertically (Y) with the same percentage.

In some cases, a small XY scaling difference is allowed, for example in line art (e.g. a rectangle in one color); in images this may cause distortions.

4.13.3. Selections

4.13.3.1. Select by intersecting bounding boxes

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Selects the objects defined by a first selection, that overlap the objects defined by a second selection (within the same Action List).

In order to define the first and second selection, this Action needs to be preceded by 2 other selection Actions.

Example

Suppose you have two magenta filled line art objects and two yellow filled line art objects. One of the two magenta objects physically overlaps 1 of the 2 yellow objects; that's the object you want to select and log.

To do so, proceed as follows:

```
Select color <!-- settings: Fill - CMYK - 100% M -->
Select color <!-- settings: Fill - CMYK - 100% Y -->
Select by intersecting bounding boxes
Log selection <!-- Choose user-defined text, for example: Magenta objects overlapping
 yellow objects have been found -->
```

4.13.3.2. Select by page rotation angle

Belongs to

- **Category:** Page; Position and Size
- **Type:** Selections

What it does

Selects pages with a certain rotation angle.

You can choose a rotation angle of -90°, 0°, 90°, or 180° (clockwise).

Related Actions

- *Check page rotation angle* on page 328
- *Apply page rotation* on page 162

4.13.3.3. Select concealed objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** 2017

What it does

Selects completely hidden objects that do not affect the visual appearance of the PDF, such as redundant objects that were left behind on a hidden layer or original cropped content that is of no use.

Hidden objects can increase the file size, add to the file complexity and they may produce false hits during preflight. Therefore, you may want to use this Action to select these unneeded objects and ignore or remove them before preflighting the document.

Note that there are different options to determine whether or not an object is visible; you have the choice whether or not to take into account the objects on other layers, or you can limit the scope by adding another select Action.

Example

The following Action List can be used to remove all objects that are not needed to render or print a PDF.

```
Select concealed objects
Remove selection
```

4.13.3.4. Select inside or outside contour

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since version:** 13 update 1

What it does

Selects objects using the area defined by the current selection. This Action is useful to select objects only within a defined shape, such as a Dieline or a Cutter Guide.

There are several options. You can select:

- The objects inside or outside the contour.
- The objects inside or outside the contour or overlapping contour.
- The objects completely covering the area inside the contour.

Note that this Action must be preceded by a Select Action in the same Action List (for example a Select spot color or a Select objects on layer Action). You can use any "select" Action you want, e.g. select by layer, by color, by line weight and you can use even operators (AND, OR) as required, but remember that only the **basic shape of the selected line art objects** will contribute to the contour!

Remarks

- *Clipping* is taken into account when determining whether an object lies inside or outside the contour. For example, if an image is partly outside the contour, but this part is clipped, it's considered to be completely inside the contour. The clipping paths are not logged.
- As of PitStop 2022 update 1, in case of complex shapes, the non-zero winding rule (in the Inspector: Fill) is used to determine what lies inside the contour. For more information, refer to the *PDF Reference (figure 7.9)*. This change is done to apply with the latest PDF specifications. In older versions of PitStop (2022 and earlier), the even-odd rule was applied. In the example below, the image on the left shows how PitStop 2022 interpreted the contour (the part in the middle will be cut out), the image on the right shows how PitStop 2022 update 1 will draw it.



- The line art that is used to determine the contour area (through the preceding "select" Action) is not selected by "Select inside contour"; only the objects (images, shadings - which may have exactly the same shape as selected the line art) in that area will be part of the selection. This is illustrated in example 2 and 3.
- You can even select objects inside or outside a non-closed contour or one with gaps using the **Ignore gaps in contour if smaller than ...** checkbox.
- Annotation objects are logged too.
- It's also possible to use text as a contour.

Example 1

This Action List logs all images inside the contour formed by all line art on the Cutting layer:

```
Select by layer "Cutting"
Select inside contour
Select images
Select AND
Log selection
```

Example 2

This Action List moves all elements belonging to the barcode to a separate layer. Note that the technical contour around the barcode is not moved!

```
Select spot color "Barcode area"
Select inside contour
Move to layer "Barcode"
```

Example 3

This Action List converts the color of all objects with spot color "Content area" to CMYK. The "content area" spot color itself is (obviously) not touched.

```
Select spot color "Content area"
Select inside contour
```

```
Convert selection to CMYK
```

4.13.3.5. Select objects inside or outside region

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Makes a selection across pages defined by a user-defined area or by PDF page boxes.

This is useful to select (and afterwards remove or move) objects that lay outside the trim box, hence will not be printed.

How to proceed

1. Define the area inside or outside which the objects should be selected. Choose on of the following options:
   - **Define the region relative to the lower left of the media box**: You can manually enter the values of the X and Y axis (the anchor point) and the height and with (the size) of the area, or grab them by clicking the icon . Note that you can grab them from a selection or from a page box.
   - **Use** (one of the page boxes): You can choose one of the page boxes, the printing area or either the art or trim box, depending on what's defined (option **the art box (if defined) or trim box**).
   - **Use region relative to page box**: You can specify the exact location of the area to check, for example "place the center left of the region relative to the center right of the bleed box with a particular offset, height and width".
2. Indicate which objects relative to the defined area should be selected, for example the objects inside or overlapping the region.
3. Indicate whether or not annotations and clipping paths should be included in the selection.
4. If applicable, choose whether or not to take into account page rotation and scaling factor.

Example

To select any objects that lay outside of the trim box and delete them, you could use the following:

```
Select objects inside or outside region <!-- Select "Use trim box" and "Select objects
 outside region"  -->
Remove selection
```

4.13.3.6. Select objects that are completely clipped away

Belongs to

- **Category:** Position and Size

- **Type:** Selections

What it does
Allows you to select objects that are hidden ("clipped away") by other objects of which the shape masks the artwork.

Optionally, you can include invisible objects that belong to this form.

4.13.3.7. Select overlapping objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** 2017

What it does

Selects objects based on their relationship with other objects they interact with, i.e. objects that (at least partly) lay on top of, or below other objects.

There are four options:

- The first option allows you to select objects that (at least partly) *overlap* any object on the page.
- The second option allows you to select object that (at least partly) *are overlapped* by any other object on the page
- The third option allows you to select objects that (at least partly) are *on top of other objects selected earlier* in the same Action List.
- The third option allows you to select objects that (at least partly) are *below other objects selected earlier* in the same Action List.

This Action is included in a number of default Action Lists:

- Find Images without an overlapping Varnish
- Check for Black Text sitting on Dark Color (does not include images)
- Check for White Text sitting on Light Color (does not include images)

Example

The following Action List will remove all objects that are on top of the text in your PDF:

```
Select text
Select overlapping objects (third option selected)
Remove selection
```

4.13.3.8. Select rotated objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** PitStop 2022

What it does

Selects objects that are rotated.

Objects can have been rotated by page layout applications such as QuarkXPress, and this may cause problems for (older) RIPs.

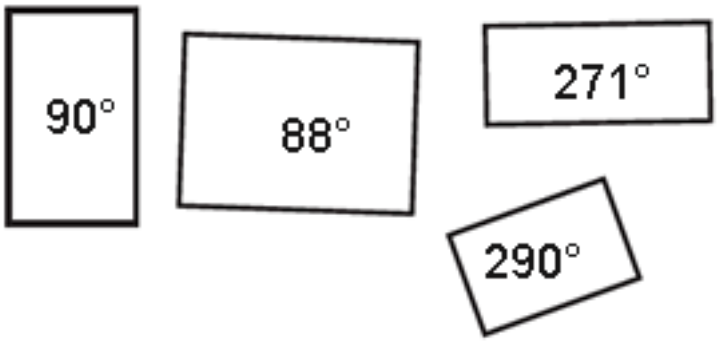
You can specify the required level of rotation, for example 'objects that are rotated more than 2 degrees', optionally combined with two extra options:

- **Interpret all angles as rotations between 0 and 45 degrees from vertical or horizontal**: This option allows you to find small rotations in either direction. To decide whether or not an object is rotated, the measured angle is converted to an interval [0,45] degrees compared to the nearest horizontal or vertical page edge. As a consequence, a rotation of 88 degrees is converted to 2 (90-88) and a rotation of 271 degrees is converted to 1 (271-270). When checking for rotations smaller than 4 degrees, both rotations will be selected, whereas for example a rotation of 290 degrees (converted to 20 => 290-270) won't be selected. See example 1 below.

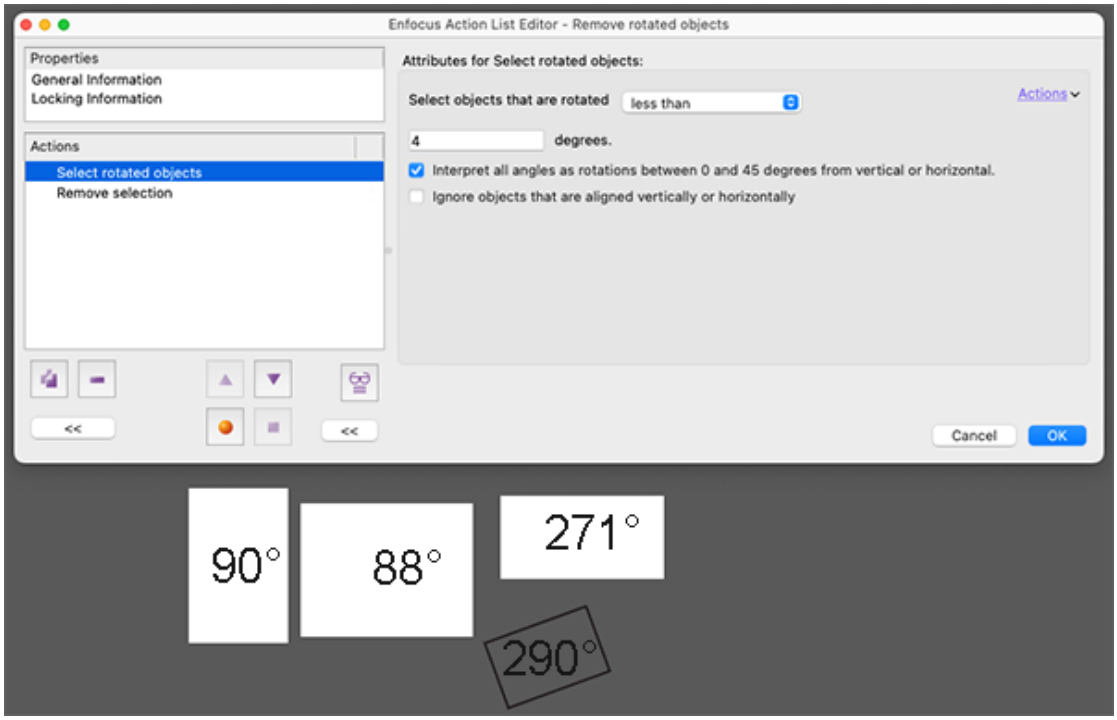
- **Ignore objects that are aligned vertically or horizontally**: This option allows you to exclude objects that are aligned exactly 0, 90, 180 or 270 degrees to the page edges. Such objects (rotated a multiple of 90 degrees) do not look rotated, so in most cases they should not be selected. See example 2 below.

Example 1

Suppose you have a PDF file with the following 4 rotated objects. You want to select and remove the objects that have a rotation angle of less than 4 degrees.

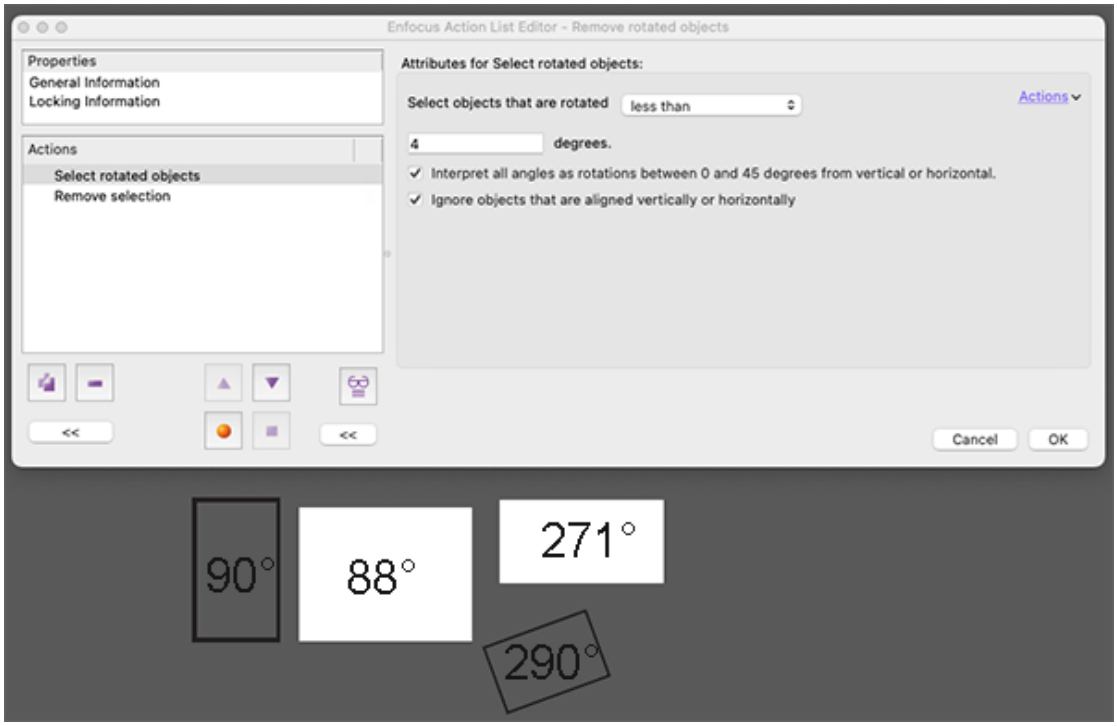


In the example below, all angles are interpreted as rotations between 0 and 45 degrees from vertical to horizontal (first option). The first three objects are selected and removed because they all have a rotation angle of less than 4 degrees from the nearest vertical or horizontal page edge (as explained higher).



Example 2

When the **Ignore objects that are aligned vertically or horizontally** checkbox is selected, the object that has a rotation angle of 90° is no longer selected nor removed.



Related Actions

- *Check for rotated objects* on page 338

4.13.3.9. Select size

Belongs to

- **Category:** Position/Size
- **Type:** Selections

What it does

Allows you to select any object in a PDF of which the height or width is less than, equal to, or greater than a certain size.

You can choose whether or not to take into account page rotation and scaling factor.

4.13.3.10. Select visible objects

Belongs to

- **Category:** Position and Size
- **Type:** Selections
- **Since Version:** 2017

What it does

Selects all objects that are needed to render and print a PDF and that affect the visual appearance of the PDF.

This Action can be useful to separate visible from invisible content, or to make sure that preflight checks are only applied to visible content, as it doesn't make sense to check and fix objects that are invisible. Note that PitStop comes with a default Restricting Action List created using this Action; you can use it in conjunction with a Preflight Profile to check only the elements needed to render the file, and ignore the rest.

To determine whether or not an object is visible, you can take into account the objects on other layers, or you can limit the scope by adding another select Action.

4.14. Prepress

4.14.1. Changes

4.14.1.1. Add bleed

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since version:** 13

What it does

Allows you to add bleed all around the page, e.g. on all 4 edges if needed.

Note: This Action applies bleed based on the bleed box; if you don't have a bleed box yet, you can use the 'Change bleed box' Action to create one.

You may use this Action to make your file PDF/X-4 compliant.

How to proceed

1. Select the edge(s) you want to add bleed to. Bleed is added from the trim box edges to the bleed box.
2. Select **Add bleed in corners** as required.
3. Indicate where the bleed should start (inside the bleed box).

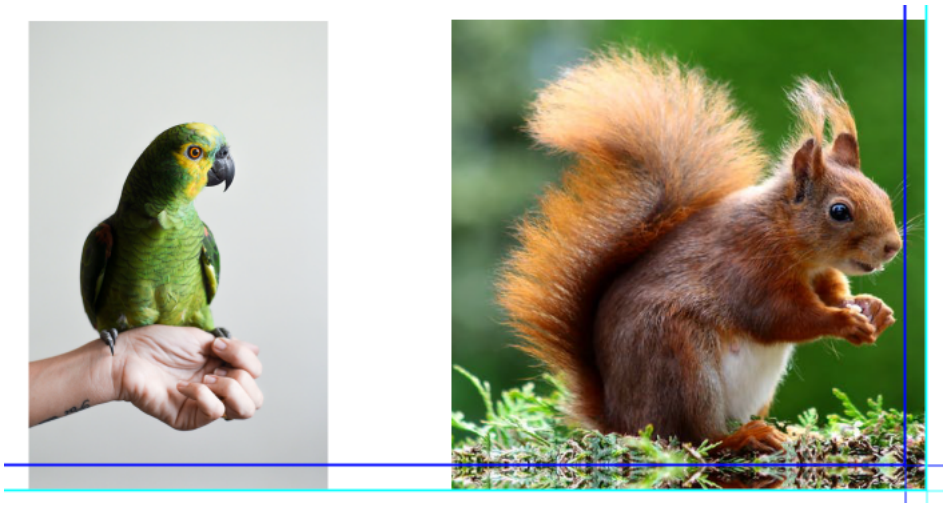
   Note: By default, the same values are used on all edges; if you change one value, all other values are automatically changed as well. If you don't want this, click the Lock icon , so it changes to . You can now use different values as required.
4. Select **Mirror margins according to page binding** as required. When selected, the inner and outer instead of the left and right margins have to be set, so the amount of bleed may be different for even and odd pages.
5. By default, to add bleed, PitStop uses several techniques, such as extending clips and mirroring existing content. In some cases, it may be preferable to only use the mirroring technique. If that is the case, select **Only add bleed by mirroring content**. Note that this also helps to keep the file size down.
6. Select one of the following options as required:

Option	Description
Only add bleed by mirroring content	By default, to add bleed, PitStop uses several techniques, such as extending clips and mirroring existing content. In some cases, it may be preferable to only use the mirroring technique. If that is the case,

Option	Description
	select this option. Note that this also helps to keep the file size down. **Note:** We advise clearing this checkbox if line art needs to be extended. See example 3 below.
Allow mirroring of text	Mirroring of text can be useful to generate fold-over flaps for banners with text near the trim edge.
Use all objects to fill bleed area when mirroring	By default, objects that do not touch the trim box are not used to create bleed, unless you select this option. In that case, objects near the trim box are also mirrored.
Retain objects in bleed area	By default, existing objects in the bleed area are removed, unless you select this option.

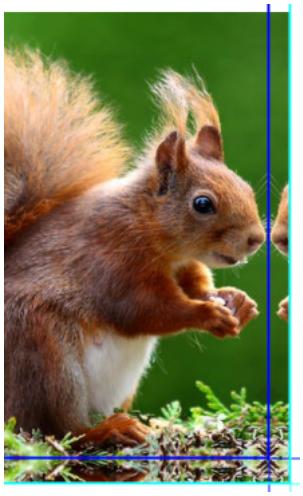
Example 1

Bleed is added in the bleed area.



Example 2

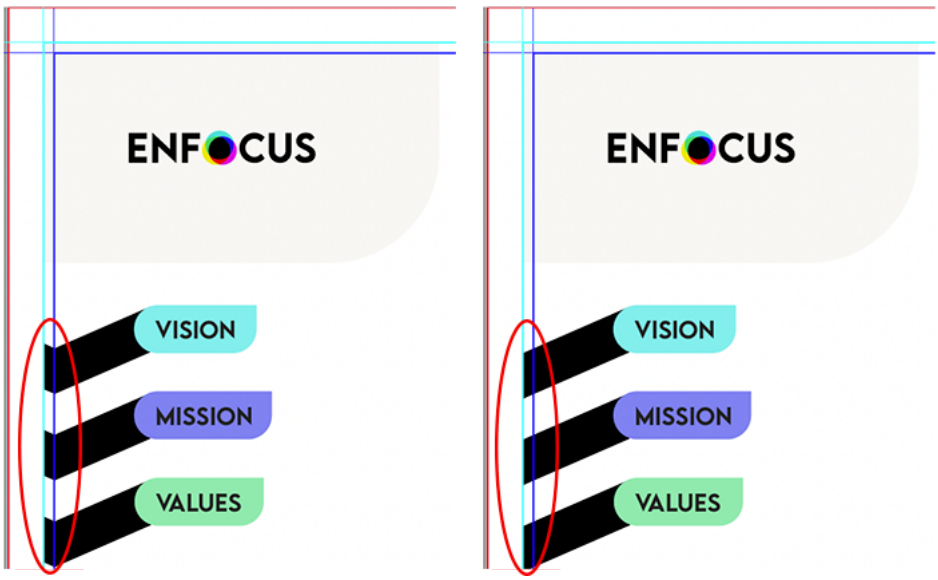
With this kind of image, enabling **Only add bleed by mirroring content** is not recommended.



Example 3

Line art should be extended instead of mirrored.

Running the Action with **Only add bleed by mirroring content** checkbox selected, resulted in line art not extended correctly (= the image on the left). When the **Only add bleed by mirroring content** checkbox was cleared, the result was OK (= the image on the right).



Related Actions

- *Check bleed* on page 247
- *Change bleed box* on page 164

4.14.1.2. Add bleed around contour

Belongs to

- **Category:** Prepress

- **Type:** Changes
- **Since version:** 2021

What it does

Allows you to add missing bleed around the contour (typically the dieline or cut line) of an object.

Note that this Action only works on selected line art that is not filled. The contour must be closed and it must be a compound path of at least 3 nodes.

Note: You can *detect* missing bleed around contours through the *Check bleed around contour* Action.

Attributes

Attribute	Description
Use trim box as contour	If selected, bleed is added based on the trim box. The amount of bleed is based on the value set in the **Bleed offset** option, so not on the bleed box.
Use inner/outer according to page binding	If the trim box is used as contour, you can add bleed to the inner and/or outer contour based on the page binding. If selected, left and right are replaced with inner and outer in the **Add bleed for edges** option. Example: In case of magazines, typically "inner" will be cleared.
Add bleed for edges	If the trim box is used as contour, this option determines the edges where bleed is added.
Add bleed in corners	If the trim box is used as contour, you can add bleed in the corners.
Bleed offset	The desired amount of bleed (starting from the contour).
Trim area margin	Indicates how close/far from the trim area the bleed should start. This is useful for objects near but not crossing the trim box.
Extend line art	Extends line art. See example 2 below. **Note:** This only works for line art that is not in a form. The line art must also not have both a stroke and a fill. If so, first *separate the stroke and the fill*. This option is also useful for *clipped images* (*clip masks*). See example 3 below. If this option is selected, the clip path is extended. The parts for which there is not enough image data can be filled using pixel cloning, if the **Repeat last pixel** option is enabled.

Attribute	Description
Repeat last pixel	Repeats the last pixel of images if any.
White threshold	The threshold for white makes sure that a color that is "almost white" (and looks white when printed) is considered white. The default value is 10%.
Image output: • Resolution (ppi) • Color space • Compression • Quality • Convert to indexed color space	Desired output properties

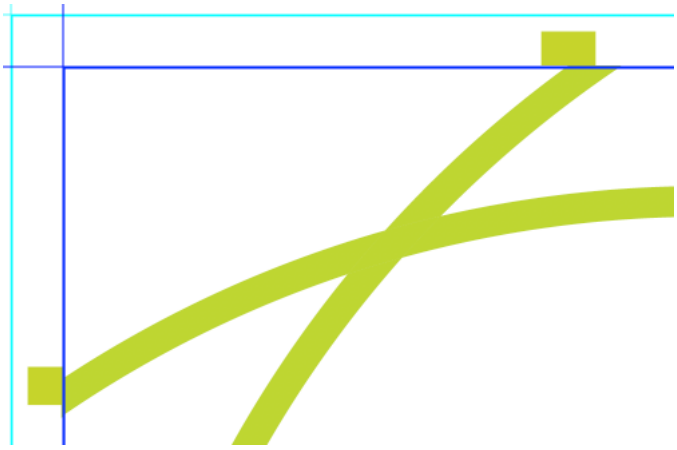
Example 1

Missing bleed is added based on the cutter guide (in orange), both to the inner contour (the white space between the leaves that has to be cut out) and the outer contour.

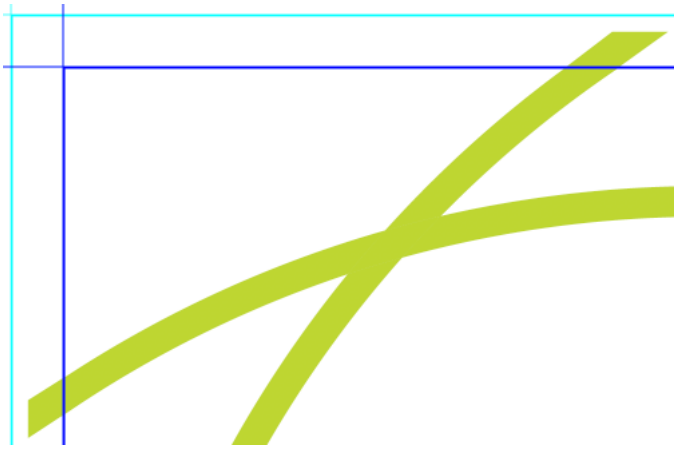


Example 2

Example where the trim box is used as contour, with the **Extend line art** checkbox cleared:



Example where the trim box is used as contour, with the **Extend line art** checkbox selected:



Example 3

Clip mask example. The bleed area is filled with clipped away image data. This is obtained by selecting the **Extend line art** checkbox.



Related Actions

- *Check bleed* on page 247
- *Check bleed around contour* on page 251

4.14.1.3. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.

Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

4.14.1.4. Change overprint

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the overprint for a selected object's fill and/or stroke.

How to proceed

Proceed as follows:

1. To change the Fill/Stroke overprint, select the Fill/Stroke overprint checkbox.

   Note: The checkbox only indicates **what** you want to change, **not how** you want it to change. If none of the checkboxes has been selected, the name of the Action will change into "Do not change overprint".

2. To enable or disable Fill/Stroke overprint, click the buttons:
   - Overprint is off.
   - Overprint is on.

   Tip: Check the Actions field, to see if the Action is configured appropriately. For example, if you selected the Fill overprint checkbox and clicked the button next to it, the name of the Action should change into "Set fill overprint to off."

Related Actions

- *Check if object is set to overprint* on page 343
- *Select by overprint* on page 433

4.14.1.5. Change overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to change the overprint mode of a selection to Standard overprint (OPM 0) or Illustrator overprint mode (OPM 1).

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

Related Actions

- *Select by overprint mode* on page 433

4.14.1.6. Change rendering intent

Belongs to

- **Category:** Prepress;Color
- **Type:** Changes

What it does

Modifies the rendering intent of an object to one of the following:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96

4.14.1.7. Change rendering parameter

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the rendering parameter of your choice to the corresponding rendering parameter of the grabbed object.

Example

To apply a transfer curve from an object to the objects of your selection in the Action List

1. Select an object in your PDF document, by using the PitStop Select Objects tool .
2. In the attributes of the Change rendering parameter Action, select Change **transfer**.
3. Click **Grab Transfer From Selection**.

4.14.1.8. Change smoothness

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the value of smoothness of a selected PostScript curve.

A value of 1 is a good default.

4.14.1.9. Change transparency

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to modify the transparency of the objects in a PDF file.

You can:

- Modify the alpha channel of a fill and/or stroke, by moving the sliders to the desired percentage. Note that, to gain full opacity, you should move the slider to 100%.
- Change the blending modes.

  This will change the way in which the colors of a transparent object on top blend with the colors of underlying objects.

  To select the blending modes you want to apply, proceed as follows:

  1. Select a blending mode under **Available**.
  2. Click **Add** to move it to the **Selected** list.
  3. Repeat steps 1-2 as required.

     The blending modes will be applied in the order as they appear in the Selected list.
- Turn on or off **Alpha is Shape** as required. This may affect anti-aliasing. (Do not turn it on, unless you really need it.)
- Turn on or off **Text Knockout**.

  If Text Knockout is enabled, the inks of underlying objects, if any, will be cut out on the other separations. This option may be useful in case of overlapping characters.

Note: As of PitStop 2022, this Action also works on transparent annotations.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Remove transparency* on page 228

4.14.1.10. Change transparency group settings

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since:** 2020

What it does

Allows you to to modify the transparency group settings, on form or page level.

Remember that you can also change (and view) the transparency group settings in PitStop Pro using the Enfocus Inspector.

About transparency groups

A transparency group is a group of objects that belong together; the group can be defined on form level (a so-called XObject form) or on page level. Checking the transparency group properties may be useful to know whether an object's visual appearance has changed because it's part of a group.

About the transparency group settings that can be changed using this Action

Setting	Meaning
Change forms or pages to transparency groups	• **On**: The page or form is converted to a transparency group. If it is already a transparency group, nothing changes. The other transparency settings (knockout flag, isolated flag, blending color space) are used to render the transparency group. • **Off**: The page or form will not/no longer be a transparency group. The objects will be rendered as if they were placed directly on the page. The other settings in this Action are grayed out (as they are not relevant if there is no transparency group).
Change the knockout flag to	• **On**: If the knockout flag is on, the objects in the transparency group are rendered as one

Setting	Meaning
	object. Overlapping parts cannot interact with each other: the objects on top fully overwrite the objects underneath. • **Off**: The objects are not rendered as one object.
Change the isolated flag to	• **On**: If the isolated flag is on, the objects in the transparency group are not affected by the objects underneath. • **Off**: If the isolated flag is off, the objects in the transparency group can be affected by other objects.
Change the blending color space to <select from a list>	This is the blending color space that will be used to render the transparency group. Note that this option is only active in case of an isolated group (isolated flag set to On).
ICC Profile	If the blending color space is Gray, RGB or CMYK, you should select the appropriate ICC Profile.

4.14.1.11. Clean up unused resources

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes resources that are not used, for example embedded images or fonts, to reduce the file size.

4.14.1.12. Clip bleed around contour

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since version:** 2021

What it does

Allows you to clip away existing bleed around the contour (typically the dieline or cut line) of an object. This can be necessary if the bleed contour is not as desired. Once you have clipped away the bleed, you can add new bleed using the *Check bleed around contour* on page 251 Action.

Note that this Action only works on selected line art that is not filled. The contour must be closed and it must be a compound path of at least 3 nodes.



Tip: If the line art you want to check is not a closed or compound path, you can use *Close path* on page 132 and/or *Combine subpaths* on page 132 to create one.

You can also clip away bleed from the page edges by selecting the **Use trim box as contour** checkbox.

Related Actions

- *Check bleed* on page 247
- *Check bleed contours* on page 253
- *Check bleed around contour* on page 251
- *Add bleed around contour* on page 215

4.14.1.13. Convert PDF/X-4p Output Intent to PDF/X-4

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Converts PDF/X-4p Output Intent to PDF/X-4.

PDF/X-4p is used when the ICC profile in the Output Intent is supplied externally.

In PDF/X-4, the ICC profile in the Output Intent must be supplied internally, so this Action embedds the external ICC profile.

4.14.1.14. Convert shading to images

Belongs to

- **Category:** Prepress
- **Type:** Changes
- **Since Version:** 13 update 2

What it does

Converts shadings and shading color spaces to images, in order to improve the performance of RIPs that have difficulties handling shadings.

This Action is able to handle *objects, text and masks* with shadings, as well as *shaded color spaces in the fill and stroke* of paths, text, and image masks. In case of image masks, the *combined visible area* of all selected objects that use shading is converted to an image which is used as a coloured tiling pattern.

If the shading is tagged with an ICC profile, the resulting image will be tagged with the same ICC profile; if the shading does not have an ICC profile attached, the resulting image won't have one either.



Tip: As only the *visible content* of the shading is replaced, we recommend performing all conversions that change the bounding box (e.g. changes to the font size or the width of the stroke) BEFORE running this Action.

Note that due to this conversion, the file size will increase.

Options

In the attributes of this Action, you can determine:

- The preferred **resolution** of the resulting images (by default: 300 ppi)
- The **compresssion type** (JPEG, JPEG2000, ZIP or none)
- The **quality** of the images.

4.14.1.15. Make mask

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Creates a mask from at least two selected objects (line art or text).

Related Actions

Release mask on page 225

4.14.1.16. Overprint on all separations

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Ensures that if an object is set to overprint, it overprints on all separations. You can apply the overprint to the fill color and/or the stroke color.

The overprint rules in PDF are clearly defined but sometimes very surprising. For example, a gray object that is set to overprint will overprint on underlying Pantone colors, but it will not overprint on Cyan, Magenta and Yellow. This Action will ensure that the document will still print as Black, but with overprint on CMY.

4.14.1.17. Release mask

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes a selected mask.

In PitStop masks refer to clipping paths, i.e. objects (line art or text) of which the shape (partly) masks other artwork. Only areas inside the clipping objects are visible. This Action allows you to remove the mask, so that the different objects become visible again.

Related Actions

Make mask on page 225

4.14.1.18. Remove alternative blend modes

Belongs to

- **Category:** PDF 2.0, Prepress, Remove
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes alternative blend modes in case of multiple blend modes, because using multiple blend modes is deprecated in PDF 2.0. Only the first blend mode is kept.

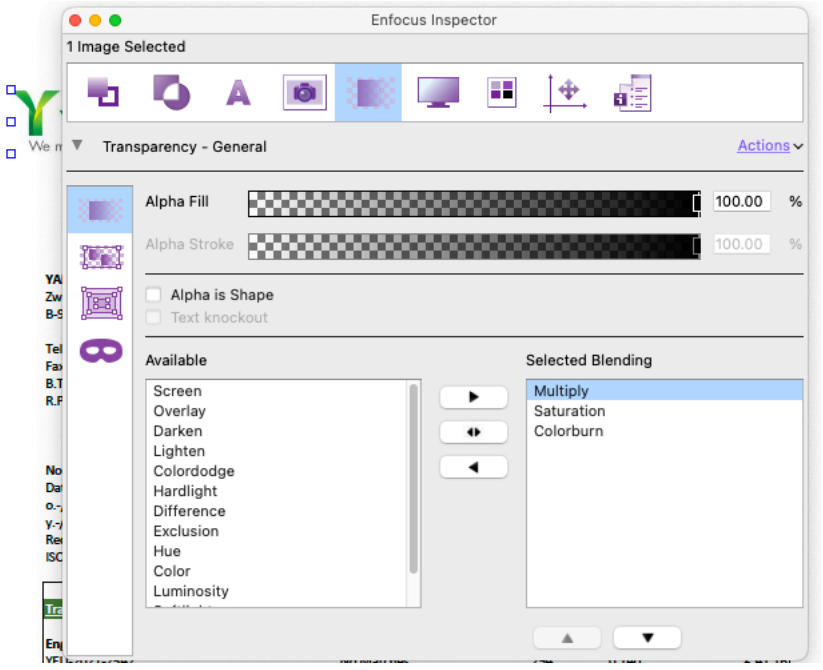
Note that you can check the blend modes using the PitStop Inspector (Transparency - General).

Blend modes determine how colors on different layers blend with each other. For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Example

In this example, three blend modes are selected: Multiply, Saturation and Colorburn.

Running this Action will remove Saturation and Colorburn and only keep the first blend mode in the list: Multiply.



Note: As of PitStop 2022, it will no longer be possible to add multiple blend modes to a selected object using the Enfocus Inpector. However, if an object already has multiple blend modes, they will still be shown.

Related Actions

- *Select by blend modes* on page 431
- *Check for non-standard blend modes* on page 345

4.14.1.19. Remove black generation

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to remove black generation settings.

Black generation is a custom setting that tries to replace CMYK-mixed blacks and grays with a greater percentage of black to save on colored ink and give a clearer black. As many printers prefer to set these settings themselves, they can use this Action to remove them from a PDF.

Related Actions

Check for custom black generation on page 343

4.14.1.20. Remove custom transfer function

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Remove a custom transfer function applied to an object in a PDF.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.

Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Apply transfer function* on page 83
- *Remove custom transfer function* on page 226

4.14.1.21. Remove halftone

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any custom halftone information from a document.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Custom halftones are mostly used for screening frequency and angles.

Associated with every output device is a default halftone definition that is appropriate for that device. Only relatively sophisticated documents need to define their own halftones to achieve special effects. In general, when a PDF document provides its own halftone specifications, it sacrifices portability: they may lead to unpredictable printed output when the same document is sent to different printers. This is why they are generally undesirable.

Related Actions

Check for custom halftone on page 344

4.14.1.22. Remove halftone phase

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes all halftone phases from a PDF document.

A halftone phase is a shift in the alignment of halftone and pattern cells in device space, to compensate for window system operations that involve scrolling. It is no longer used, but may still be found in documents containing artwork from older source applications.



Note: It may be interesting to remove halftone phases, because halftone curves, when defined, overrule general transfer curves.

Related Actions

Check halftone phase on page 342

4.14.1.23. Remove non-PDF/X compliant halftone

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any instances of halftones that are not compliant with the PDF/X specification.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Some of these halftones are not allowed according to the PDF/X specification, which is why you might want to remove them.

Related Actions

Check for non-PDF/X compliant halftone on page 345

4.14.1.24. Remove rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Changes

What it does

Strips rendering intents from color managed objects in a PDF.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Change rendering intent* on page 86

4.14.1.25. Remove transparency

Belongs to

- **Category:** Remove; Prepress

- **Type:** Changes

What it does

Removes transparency from the objects in a PDF file.

You can remove transparency from **all** objects in the PDF, or from objects for which:

- Fill is set to overprint, and/or
- Stroke is set to overprint, and/or
- Spot colors are used.



Note: As of PitStop 2022, this Action also removes transparent annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Change transparency* on page 221

4.14.1.26. Remove undercolor removal

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any custom undercolor removal information from a PDF.

Undercolor removal is the process of removing large percentages of cyan (C), magenta (M), and yellow (Y) ink prior to printing, and replacing them with black (K) ink, in order to achieve a clearer black color in print, and to save on color inks.

Related Actions

Check for custom undercolor removal on page 345

4.14.2. Checks

4.14.2.1. Check flatness

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Allows you to check the minimum or maximum flatness of a line art curve.

The default setting to produce a smooth curve is 1. A value higher than 1 can produce a jaggy edge; lower than 1 can slow down the RIP.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

4.14.2.2. Check for custom black generation

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if custom black generation curves (BG) have been included in the PDF document.

Black generation (BG) is the process of adding black ink to CMY-generated black and gray, in order to achieve a clear black color and to save valuable color ink.

Related Actions

Remove black generation on page 226

4.14.2.3. Check for custom halftone

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches a PDF for objects to which custom halftones are applied.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Custom halftones are mostly used for screening frequency and angles.

Associated with every output device is a default halftone definition that is appropriate for that device. Only relatively sophisticated documents need to define their own halftones to achieve special effects. In general, when a PDF document provides its own halftone specifications, it sacrifices portability: they may lead to unpredictable printed output when the same document is sent to different printers. This is why they are generally undesirable.

Related Actions

Remove halftone on page 226

4.14.2.4. Check for custom transfer function

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if a PDF contains objects to which transfer functions are applied.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Apply transfer function* on page 83
- *Remove custom transfer function* on page 226

4.14.2.5. Check for custom undercolor removal

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if custom undercolor removal definitions (UCR) have been included in the PDF document.

Undercolor removal is the process of removing large percentages of cyan (C), magenta (M), and yellow (Y) ink prior to printing, and replacing them with black (K) ink, in order to achieve a clearer black color in print, and to save on color inks.

Related Actions

Remove undercolor removal on page 229

4.14.2.6. Check for non-PDF/X compliant halftone

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches a PDF for objects with halftones that are not compliant with the PDF/X specification.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Some of these halftones are not allowed according to the PDF/X specification.

Related Actions

Remove non-PDF/X compliant halftone on page 227

4.14.2.7. Check for non-standard blend modes

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks whether the PDF contains objects with a blend mode other than one of the standard blend modes.

Blend modes determine how colors on different layers blend with each other.

There are 16 standard blend modes described in the PDF Specifications. They can be detected using the PitStop Inspector or the *Select by blend modes* Action. If new blend modes would be introduced (which is theoretically possible), this Action could be used to detect them.

For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Related Actions

Select by blend modes on page 431

4.14.2.8. Check for transparent objects

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches the PDF document for any objects with transparency. You can restrict your search to transparent objects with fill overprint, strike overprint or spot color.



Note: As of PitStop 2022, this check is also applied to annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Select transparent objects* on page 435
- *Select pages with transparent objects* on page 418
- *Remove transparency* on page 228
- *Change transparency* on page 221

4.14.2.9. Check halftone phase

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks the PDF documents for the presence of halftone phases.

A halftone phase is a shift in the alignment of halftone and pattern cells in device space, to compensate for window system operations that involve scrolling. It is no longer used, but may still be found in documents containing artwork from older source applications.

Related Actions

Remove halftone phase on page 227

4.14.2.10. Check if object is set to knockout

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if a selected object is set to knockout or not. You can distinguish between the fill and stroke being 'knocked out'.

If an object is set to knockout, the colors of this object cut out the area underneath. The background color is erased.

4.14.2.11. Check if object is set to overprint

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if the fill and/or stroke of a selected object is set to overprint.

Black objects and particularly smaller text objects should be set to overprint, to compensate for misregistration and to preserve the legibility of the text.

Related Actions

Change overprint on page 219

4.14.2.12. Check ink coverage (basic object check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Checks the total CMYK ink coverage of the color of the **objects** in the PDF.

You can for example check if the ink coverage is at least 300%.

When including images in the ink coverage check, the threshold will determine the minimum area in which the ink coverage has to be exceeded before reporting an error or warning. For example, when entering '0', even 1 dot exceeding the maximum ink coverage will be reported.

Related Actions

Select by ink coverage (basic object check) on page 366

4.14.2.13. Check ink coverage (total page check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Allows you to check the CMYK ink coverage either of all colors combined or per separation on a page (inside a particular page box).

You can for example check if the ink coverage in the media box is at least 300%.

In case of a separation-based check, you may exclude separations with 0% ink coverage (i.e. empty areas without content).

It's also possible to ignore small areas, for example areas smaller than 1 inch.

4.14.2.14. Check line weight

Belongs to

- **Category:** LineArt; Prepress
- **Type:** Checks

What it does

Checks if the line weight of the selected objects is higher or lower than a particular value.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392

4.14.2.15. Check Output Intents for DotGain

Belongs to

- **Category:** Prepress
- **Type:** Checks

- **New since:** PitStop 2022

What it does

Checks if the Output Intents contain a DotGain dictionary.

A DotGain dictionary is a PDF 2.0 feature.

4.14.2.16. Check overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if fill and/or stroke overprint is set to Standard overprint mode (OPM 0), or Illustrator overprint mode (OPM 1).

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

For more information and examples, refer to *the PitStop Pro Reference Guide on the Enfocus website*.

Related Actions

- *Change overprint mode* on page 220
- *Select by overprint mode* on page 433

4.14.2.17. Check rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Checks

What it does

Allows you to check the rendering intent of particular objects (Paths, Text, Paths or Text, Images, or all Rendering objects) in a PDF.

You can check whether or not they use rendering, and if they do, which type:

- Absolute Colorimetric
- Relative Colorimetric

- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Change rendering intent* on page 86
- *Remove rendering intent* on page 96

4.14.3. Selections

4.14.3.1. Select by blend modes

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects with or without one or more specific blend modes.

Blend modes determine how colors on different layers blend with each other. For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Related Actions

- *Check for non-standard blend modes* on page 345
- *Remove alternative blend modes* on page 190

4.14.3.2. Select by graphic state attributes

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects based on their graphic state attributes.

You can select one of the following object types:

- Objects with non-PDF/X-1 compliant halftone info

- Objects with transfer function info
- Objects with halftone info
- None

Viewing the graphic state attributes of an object

Proceed as follows:

1. Select the object, using the PitStop Select Objects tool .
2. Click to display the Enfocus Inspector.
3. Select (**Prepress**) > (General) or (**Halftone**).

Related Actions

- *Check for non-PDF/X compliant halftone* on page 345
- *Check for custom transfer function* on page 344

4.14.3.3. Select by ink coverage (basic object check)

Belongs to

- **Category:** Color; Prepress
- **Type:** Selections

What it does

Makes a selection of all objects that meet your ink coverage criteria.

You can for example select objects only if the ink coverage is at least 300%.

When including images in this selection, the threshold will determine the minimum area in which the ink coverage criteria have to be met in order to be selected. E.g. when entering '0', even an image of which only 1 dot meets the ink coverage requirement will be selected.

Related Actions

Check ink coverage (basic object check) on page 262

4.14.3.4. Select by overprint

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Selects objects based on the overprint mode of their fill and/or stroke.

How to proceed

Proceed as follows:

1. To select objects based on their fill/stroke overprint, select the corresponding checkbox. For example, to select object based on the overprint mode of their stroke, select **Stroke overprint**.
2. Indicate whether overprint must be enabled or disabled for the options selected in step 1, by clicking the buttons.
   -  Overprint is off.
   -  Overprint is on.



Tip: Check the Actions field, to see if the Action is configured appropriately. For example, if you selected the Stroke overprint checkbox and clicked the button next to it, the name of the Action should change into "Select if stroke overprint is off."

Related Actions

- *Check if object is set to overprint* on page 343
- *Change overprint* on page 219

4.14.3.5. Select by overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects based on the overprint mode of their fill and/or stroke color.

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

Related Actions

- *Change overprint mode* on page 220

4.14.3.6. Select by rendering intent

Belongs to

- **Category:** Color;Prepress

- **Type:** Selections

What it does

Selects color managed objects based on a particular rendering intent.

You can select paths, text, images, or all rendering objects, with one of the the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select rendering objects* on page 388

4.14.3.7. Select flatness

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects with a flatness setting equal to or higher/lower than a certain value.

The default setting to produce a smooth curve is 1. A value higher than 1 can produce a jaggy edge; lower than 1 can slow down the RIP.

Example
If the curves in a PDF are showing visible line segments, try the following to solve the problem:

```
Select flatness <!-- Option: Select objects with a flatness higher than 1.0 -->
Change flatness <!-- Option: Change flatness to 1.00 -->
```

Related Actions

- *Check flatness* on page 341
- *Change flatness* on page 130

4.14.3.8. Select objects in areas with dense graphics

Belongs to

- **Category:** Prepress
- **Type:** Selections
- **Since version:** 2020

What it does
Detects and selects areas that have dense vector graphics (i.e. many line art or clip mask nodes).

Typically, the selection will then be rasterized to make the file less complex (and easier for the RIP to handle).

You should define the area to be detected (by entering the length of 1 side), and the minimum number of nodes in that area. Alternatively, PitStop can calculate the minimum number of nodes per area based on a selection in a document: to do so, select an area with many nodes and click **Grab settings**).



Note:

- The unit in which the length is expressed, depends on your user preferences (PitStop Preferences - Units & Guides category).
- Remember that the number of nodes (in the document or in a selected area) can also be found in the PitStop Inspector (on the Summary tab).

4.14.3.9. Select transparent objects

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does
Allows you to select transparent objects.

You can check the transparency of different elements, such as the fill or stroke, the blend modes, ... For the whole list of options, check the attributes of the Action in PitStop.

You can select all transparent objects or restrict your selection to objects that have *all* or *at least one* of the following properties:

- Fill is set to overprint
- Stroke is set to overprint
- Graphic element uses a spot color



Note: When checking for transparency groups, pages will be selected if they have an explicit transparency group key (i.e. when "Page is transparency group" is selected in the transparency group properties in the Enfocus Inspector. For more information, refer to the PitStop Reference Guide).

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Remove transparency* on page 228
- *Change transparency* on page 221

4.15. Remove

4.15.1. Changes

4.15.1.1. Remove alternative blend modes

Belongs to

- **Category:** PDF 2.0, Prepress, Remove
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes alternative blend modes in case of multiple blend modes, because using multiple blend modes is deprecated in PDF 2.0. Only the first blend mode is kept.

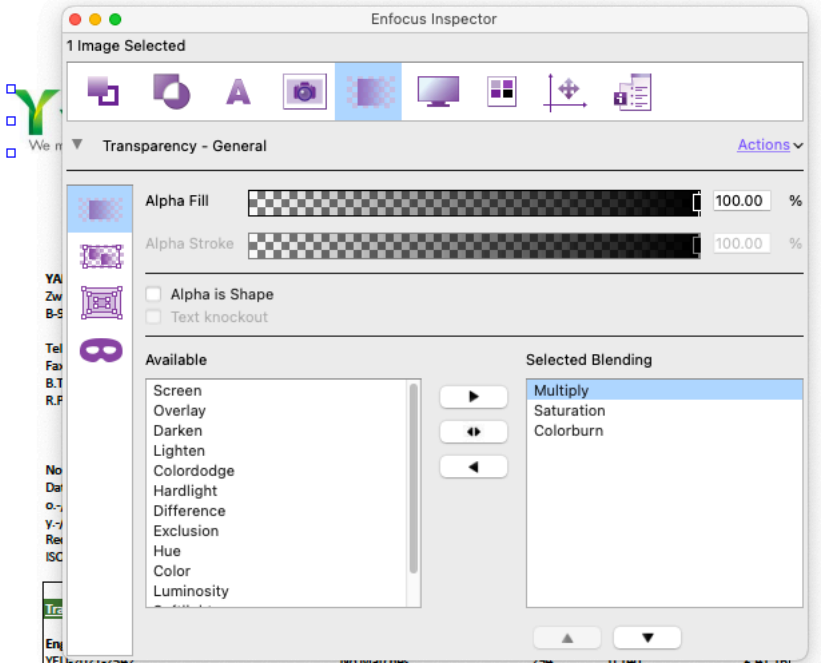
Note that you can check the blend modes using the PitStop Inspector (Transparency - General).

Blend modes determine how colors on different layers blend with each other. For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Example

In this example, three blend modes are selected: Multiply, Saturation and Colorburn.

Running this Action will remove Saturation and Colorburn and only keep the first blend mode in the list: Multiply.



Note: As of PitStop 2022, it will no longer be possible to add multiple blend modes to a selected object using the Enfocus Inpector. However, if an object already has multiple blend modes, they will still be shown.

Related Actions

- *Select by blend modes* on page 431
- *Check for non-standard blend modes* on page 345

4.15.1.2. Remove Certified PDF workflow information

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes Certified PDF workflow information from a PDF.

Certified PDF workflow information is extra information that is added to a PDF when it's processed as part of an Enfocus Certified PDF workflow. This information can include save states of previous versions, a PDF Profile and other metadata.

For more information and examples, refer to *the Reference Guide* (Chapter: Working with Certified PDF documents).

Related Actions

See also *Check Certified PDF state* on page 270

4.15.1.3. Remove empty layers

Belongs to

- **Category:** Remove; Layers
- **Type:** Changes

What it does

Removes empty layers selected by another Action in the same Action List.

Example
The following Action List will remove **all** empty layers in the PDF:

```
Select layers <!-- Select layers on page 389 -->
Remove empty layers
```

To remove Layer1 and 2, if they are empty:

```
Select layers by name <!-- Select layers by name on page 390 - Choose "equals Layer
 [12]" and "Use regular expressions" -->
Remove empty layers
```

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

Related Actions

Remove objects from layers on page 125

4.15.1.4. Remove invisible objects without fill and stroke

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes objects that have no fill or stroke color associated with them.

Designers sometimes leave such objects in a document rather than deleting them.

Related Actions

- *Check for invisible objects without fill and stroke* on page 280
- *Select invisible objects without fill and stroke* on page 382

4.15.1.5. Remove object compression

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes the object compression from a PDF.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to remove this compression.

Related Actions

- *Check object compression* on page 276
- *Check optimal compression* on page 283

4.15.1.6. Remove processing steps - ISO 19593-1

Belongs to

- **Application:** PitStop Pro
- **Category:** Packaging
- **Type:** Changes
- **Since Version:** 13 update 2

What it does
Allows you to remove processing steps metadata from the layers of a PDF. Processing steps metadata is defined by ISO standard 19593-1. For more information, refer to *the website of ISO (International Organization for Standardization)*.

Related Actions

- *Select layers by processing steps - ISO 19593-1*
- *Check processing steps - ISO 19593-1* on page 318
- *Change layer processing steps - ISO 19593-1* on page 159

4.15.1.7. Remove pages

Belongs to

- **Application:** PitStop Pro
- **Category:** Remove
- **Type:** Changes
- **Since Version:** 2017

What it does
Deletes pages.

This Action has no attributes of its own; it needs to be preceded by a *Select pages* Action to define the pages you wish to remove.

Example
The following Action List will delete all even pages from the PDF:

```
Select pages  (attributes: All pages - even)
Remove pages
```

Related Actions

- *Select pages* on page 416

4.15.1.8. Remove selection

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes any currently selected object in a PDF.

Note: If forms are selected (for example with the "Select forms" Action), they are not removed, unless they are empty.

4.15.1.9. Remove transparency

Belongs to

- **Category:** Remove; Prepress
- **Type:** Changes

What it does

Removes transparency from the objects in a PDF file.

You can remove transparency from **all** objects in the PDF, or from objects for which:

- Fill is set to overprint, and/or
- Stroke is set to overprint, and/or
- Spot colors are used.

Note: As of PitStop 2022, this Action also removes transparent annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Change transparency* on page 221

4.16. Text

4.16.1. Changes

4.16.1.1. Add font metadata

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Adds font information to the PDF's metadata (based on the font resource).

About font metadata

Font metadata is descriptive information about the fonts used in a PDF, for example the name of the font, its type and encoding. You can find the font metadata of a file in Adobe Acrobat by selecting **File** > **Document Properties** and switching to the **Fonts** tab.

Related Actions

Check font metadata on page 351

4.16.1.2. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

4.16.1.3. Change character spacing

Belongs to

- **Category:** Text

- **Type:** Changes

What it does

Changes the amount of space between two characters in a selected text string.

The amount of space is expressed in 'em' units. An 'em' refers to the width of the capital M in the current font.

4.16.1.4. Change corrupt font widths

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes corrupt font widths.

Corrupt font widths may occur in a PDF, when "artificial" bold or italic was used instead of the "bold" or "italic" version of the font concerned. For example, if "Futura" is used in your PDF, the "Futura-Bold" and "Futura-Oblique" fonts should be used instead of applying bold and italics on the regular Futura font. Artificial font may cause problems when printing the PDF.

Related Actions

- *Check corrupt font widths* on page 349
- *Select corrupt font widths* on page 437

4.16.1.5. Change fill and/or stroke

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to turn on or off the fill and/or stroke for the selected objects.

4.16.1.6. Change fill type

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to change the fill type of the selected objects to either Non-Zero Winding (Fill) or Even-odd (Eofill).

About the fill type

The fill type is an attribute of polygons and loops: compound paths with intersecting lines. To determine whether a point is part of the shape, two different rules can be applied:

- The **Non-Zero Winding** rule (or standard rule). This rule supposes that you draw a line from a point inside the shape to the outside of the shape, without passing through a vertex. You must now count the number of times edges wind around the point inside the shape, in a counter-clockwise direction:
  - For every edge that crosses the line from the point inside the shape in one direction, add 1 to the winding number.
  - For every edge that crosses the line in the opposite direction, subtract 1.

  If the winding number is not equal to zero, the shape area to which the point belongs, is filled. For more information, refer to *http://www.wikipedia.org/wiki/nonzero-rule*.

- The **Even-odd rule**: This rule also supposes that you draw a line between a point inside the shape outline and a point outside its outline.
  - If that line crosses the line of the shape an odd number of times, the shape area to which the point belongs, is filled.
  - If the number of crossings is even, the area is not filled.

Checking the fill type of line art

To see which rule is applied, check the object's fill attributes:

1. Select the object, using the Enfocus Select tool .
2. Click to display the Enfocus Inspector and select > .
3. At the bottom, check which button is selected:
   - If **Fill** is selected, the **Non-zero Winding rule** applies.
   - If **Eofill** is selected, the **Even-odd** rule applies.

4.16.1.7. Change flatness

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to set the flatness of a PostScript curve.

The flatness determines how the objects in a document are printed on a PostScript printer.

The default setting for flatness is 1. Increasing this value will speed up printing, but can reduce the print quality (resulting in visible segments in the curve). Decreasing this value will slow down printing, but will improve the print quality.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

4.16.1.8. Change font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to replace the current font with another one.

Choose the font that should replace the current font:

- To combine a font name with the preferred type and subtype, select **Search for a font by name**:
  1. Click **Select Font Name** and select the appropriate font. Click **OK**.
  2. Select the preferred type and subtype.
  3. Select the **Embed** checkbox as required.
- To use an existing font, select **Select an existing font**.
  1. Click **Create Font Resource**.
  2. Select the appropriate font.
  3. Select **Embed**, **Don't embed** or **Embed Subset**.
  4. Click **OK**.

You should also indicate how the embedded composite font should be handled.

4.16.1.9. Change line cap

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes how the end of a vector line looks like.

How to proceed

- To have the line end exactly, click  **butt**.
- To put a round end on the line, click  **round**.
- To have corners projected beyond the length of the line, click  **projecting square**.

4.16.1.10. Change line join

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes how a corner on a vector line looks like.

How to proceed

- To have a sharp corner, click  **miter**.
- To put a round corner on the line, click  **round**.
- To flatten the corners, click  **bevel**.

4.16.1.11. Change line weight

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes the thickness of a selected line to the desired line weight.

Related Actions

- *Select by line weight* on page 392
- *Check line weight* on page 296

4.16.1.12. Change miter limit

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes the length of the extension of a corner on a vector line.

The miter limit is the limit when a join switches from mitered (pointed) to beveled (squared-off). To allow “pointier” angles, you can increase the miter limit.

4.16.1.13. Change point size

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the point size of a selection by or to a given amount.

4.16.1.14. Change stroke adjustment

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Allows you to enable or disable stroke adjustment.

Stroke adjustment takes care of the rendering of paths on a raster device (printing device, computer monitor, etc.).

Example

If stroke adjustment is **turned off**, the device will draw the pixel only if it covers the path for more than 50%.

This means that a 1 pixel wide line can be drawn in different ways:

- If the line is drawn nicely on top of a pixel of the screen, the line will look fine.
- If the line is spread over 2 pixels of the screen, the width will be 2 pixels on some places and 1 pixel on other places, turning the line into an ugly, jaggy line.

If stroke adjustment is **turned on**, a correction will be made in such a way that the line looks nice and has the same width (1 pixel) everywhere.

4.16.1.15. Change word spacing

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the word spacing of a selected text string to a given value (in em).

4.16.1.16. Consolidate fonts

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2021

What it does

Removes duplicate font information that increases the size of a PDF file.

Multiple subsets of the same font can be created by the generating application, or when multiple PDF files are combined into a single file. Multiple subsets make the file overly complex and can impact the output RIP time.



Note: There's one important limitation: for this Action to work properly, all fonts must be installed on your system! Fonts that are not present, will remain untouched. This is also the case for fonts of which the license does not allow embedding.

The Action works as follows:

1. First, all fonts are unembedded (on condition they can be re-embedded afterwards, this is checked first, to avoid font issues).
2. Next, all font dictionaries are compared and duplicate dictionaries are removed, to make sure that the same fonts share one and the same font dictionary.
3. Finally, the fonts are subset or embedded again, depending on the chosen embedding type in the attributes of this Action.



Note: The option to use subsetting or embedding will only work for fonts that were originally subset or embedded. Otherwise, this Action would increase (instead of reduce) the file size.

4.16.1.17. Convert text to outlines

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to outline the text segments in your selection.

This means you turn the text characters into a set of compound paths. In other words, your text will no longer be a true font, but it will be replaced with a graphical representation of the characters. You can then for example change the fill or stroke color as required.

This can be useful to make sure that your text is printed exactly "as is" or, if you cannot embed the font, for example due to font licensing restrictions.

Note: By default, invalid characters (often represented as a small box containing an X or a question mark) are not converted, unless you select the **Outline invalid characters (.notdef glyph)** checkbox.

4.16.1.18. Embed font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Embeds a selected font if it is available on the system of the machine PitStop is running on.

You can include the entire font or only embed a subset.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

- *Unembed font* on page 247
- *Select embedded fonts* on page 438
- *Check font embedding* on page 350

4.16.1.19. Find and replace text

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2020

What it does

Enables you to find a particular string and replace it with another string, optionally using variables.

You can carry out a case sensitive search by selecting the **case sensitive** checkbox: in that case, PitStop takes into account the case (upper case/lower case) of the search string.

Note that font license restrictions may disallow font editing, hence block the text replacement. However, if you're sure that it's allowed to manipulate the font or if you have an agreement with the print vendor, you may consider selecting the **Skip font license restrictions** checkbox in the PitStop Pro user preferences (Fonts category).

Note:

- Find and replace is suitable for replacing words or small lines of text. It's not suitable for replacing text involving reflow of lines.
- Find and replace also works on text that is split in characters, as long as all characters are put on the same line.
- Find and replace does not work on subset fonts if not all characters of the matching search string are embedded.
- Non-Latin characters are also supported.

Example 1

```
Replace "MyCompany" with "MYCOMPANY"
```

- with "case sensitive" cleared, all versions of the string regardless of the case will be replaced (Mycompany, mycompany, myCompany, etc).
- with "case sensitive" selected, only the exact match ("MyCompany") will be replaced.

Example 2

```
Replace "Configurator Module" with "CONFIGURATOR MODULE"
```

When executed on the text below, only one instance (in blue) is replaced. The matching string in the left column is not replaced, because it's divided over two lines.

Configurator Module	• Allows you to use a number of third-party applications in a Switch flow, such as the Adobe Creative Suite and other applications that are often used in the graphical industry. For a list of all supported applications, refer to the *CONFIGURATOR MODULE documentation*. • For each of the supported applications, Switch offers a configurator which streamlines the connection between Switch and the application concerned, and controls the output destination of the processed files.

4.16.1.20. Fix bounding box values of Type 3 fonts

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2020

What it does

Fixes embedded Type 3 fonts that have very small bounding box values.

Such Type 3 fonts are usually wrongly converted SVG fonts, i.e. fonts that are used in Illustrator, Indesign, Photoshop, ... but that are not supported by the PDF specs and most RIPs, and

therefore converted to Type 3. PitStop recalculates the bounding box values, so the font can be handled by most RIPs.

Related Actions

Flatten Type 3 fonts on page 244

4.16.1.21. Fix inconsistent Type 3 font width information

Belongs to

- **Category:** Text
- **Type:** Changes
- **Since:** 2022

What it does

Fixes inconsistent Type 3 font widths (Type 3 glyphs d0 or d1 values that are inconsistent with the font's widths array).

Type 3 fonts are usually wrongly converted SVG fonts, i.e. fonts that are used in Illustrator, Indesign, Photoshop, ... but that are not supported by the PDF specs and most RIPs, and therefore converted to Type 3. PitStop fixes this, so the font can be handled by most RIPs.

Related Actions

- *Check for inconsistent Type 3 font width information* on page 353
- *Select by inconsistent Type 3 font width information* on page 436

4.16.1.22. Fix invalid characters (.notdef usage)

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Fixes invalid .notdef glyphs in a PDF.

.notdef glyphs are replacement characters for undefined characters in a PDF; they often look like a small box containing an X or a question mark and are not PDF/X compliant.

Related Actions

Check if invalid character (.notdef glyph) is used on page 355

4.16.1.23. Fix non well-formed XMP metadata

Belongs to

- **Category:** Text

- **Type:** Changes

What it does

Corrects badly formed XMP metadata and optionally removes it, if it cannot be fixed, ensuring that PDF files can be made PDF/X-4 compliant.

About XMP metadata

XMP metadata is descriptive information about the file embedded in the PDF, for example the name of the author, keywords, copyright information... XMP refers to labeling technology that is used, i.e. Adobe's Extensible Metadata Platform. You can view the XMP metadata in a file's Document Properties in Acrobat (Click the **Additional Metadata** button, then select **Advanced**).

Related Actions

Check if XMP metadata is well-formed on page 310

4.16.1.24. Flatten Type 3 fonts

Belongs to

- **Category:** Text
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Flattens Type 3 fonts, i.e. converts these fonts (that are often not rendered correctly in PDF) to normal page content so that they can be successfully output.

About Type 3 fonts

Type 3 fonts are actually bitmaps, typically emoji fonts or colorful fonts with graphic properties within a glyph.

Related Actions

Fix bounding box values of Type 3 fonts on page 243

4.16.1.25. Merge into text lines

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to merge text into text lines.

This Action merges all text that occurs on one line and has the same font into one text object. This is useful if you want to change text (e.g. the font) on a line by line basis.

Related Actions

- *Split in words* on page 246
- *Split in characters* on page 246

4.16.1.26. Remove CharSet or CIDSet

Belongs to

- **Category:** PDF 2.0, Text
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes the CharSet or CIDSet if present in the PDF.

If a font is subset, only the characters of the font that are actually used are embedded in the document. They are held in a CharSet (simple fonts) or a CIDSet (composite fonts).

CharSets and CIDSets are deprecated in PDF 2.0. That means that they are allowed, but not needed, so they can as well be removed.

Related Actions

Check if a subset font contains a complete CharSet or CIDSet on page 354

4.16.1.27. Split in characters

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to split text objects in a PDF in separate characters.

This allows you to change for example the font or format of single characters (e.g. increase the size of capital letters).

Related Actions

- *Split in words* on page 246

4.16.1.28. Split in words

Belongs to

- **Category:** Text
- **Type:** Changes

What it does
Allows you to split the text objects in a PDF in separate words, for example to modify the spacing.

Related Actions

- *Split in characters* on page 246

4.16.1.29. Strip OpenType embedded fonts

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to remove the font's OpenType **info** from the PDF.

An OpenType embedded font is a PDF font resource that has its font embedded in the 'FontFile3' key with as 'SubType' the value 'OpenType'. This is not supported by older software. Running this Action will convert the PDF font resource to a format that is supported by older software as well.

4.16.1.30. Unembed font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Removes embedded fonts from a document.

This can make the PDF lighter for internet distribution but risks messing up formatting if the font is not present on the end user's machine.

Optionally, you can choose not to execute this Action if the resulting font is unsafe.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

Embed font on page 241

4.16.2. Checks

4.16.2.1. Check CMap

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if a PDF contains an embedded CMap, and if so, whether its name is consistent with any matching external file. This is necessary for PDF/A compliance.

About CMaps

CMap (Character Map) is a mapping of character codes to an ID. This ID is used to map the characters to the correct glyphs.

CMaps can be external or embedded:

- When the CMap is external, it is referenced in the PDF by a name.

  Note: Some CMaps are shipped (as external files) along with PitStop.

- When the CMap is embedded, it's often also referenced inside the PDF.

4.16.2.2. Check corrupt font widths

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for fonts that have corrupt widths. You might want to remove or replace these fonts.

By default, horizontal writing is checked, but you can also include vertical writing by selecting the **Also check metrics for vertical writing** checkbox.

Corrupt font widths may occur in a PDF, when "artificial" bold or italic was used instead of the "bold" or "italic" version of the font concerned. For example, if "Futura" is used in your PDF, the "Futura-Bold" and "Futura-Oblique" fonts should be used instead of applying bold and italics on the regular Futura font. Artificial font may cause problems when printing the PDF.

As of PitStop 2022, you can set a threshold in the **Tolerance** field. This value, expressed in 1/1000 em, specifies the maximum acceptable deviation of the standard font width. For example, if the

tolerance is set to 5, a font width that deviates 5/1000 em (or less) from the normal font width will not be logged.

Some PDF standards allow font size deviations. For example, PDF/X-4 allows a deviation of 5 1/1000 em, PDF/X-6 allows a deviation of 1 1/1000 em ... This Action can be used to search for font widths that do not comply with certain PDF/X versions.

About the em as unit

The unit used to set the tolerance is '1/1000 em'. 'em' is used because the size of an 'em' is relative to the size of the font: it denotes the point size. For example: 1 em in a 16-point typeface is 16 points, 1 em in an 8-point typeface is 8 points. As a consequence, if the tolerance is set to 1, the relative size is the same, but the absolute size differs depending on the font size.

The name 'em' comes from the width of the capital M in the typeface.

Related Actions

- *Select corrupt font widths* on page 437
- *Change corrupt font widths* on page 235

4.16.2.3. Check embedded font is OpenType

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Allows you to check if the embedded font is OpenType.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

- *Select embedded fonts* on page 438
- *Select OpenType embedded fonts* on page 441

4.16.2.4. Check font by name

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks for the presence of a particular font.

Enter the name of the font you want to check for in the text field, or use the **FontPicker** button to select it.



Note: From version 12 update 2 onwards, you can use a regular expression to define the font name.

4.16.2.5. Check font embedding

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks whether or not fonts are embedded.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

- *Select embedded fonts* on page 438
- *Unembed font* on page 247

4.16.2.6. Check font license

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks which operations the font's license allows without obtaining permission from the font's owner.

These operations are:

- Embed
- Subset
- Outline
- Preview and print

Related Actions

Select fonts by license on page 438

4.16.2.7. Check font metadata

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Allows you to check if the fonts in the PDF have been added correctly to the metadata.

About font metadata

Font metadata is descriptive information about the fonts used in a PDF, for example the name of the font, its type and encoding. You can find the font metadata of a file in Adobe Acrobat by selecting **File** > **Document Properties** and switching to the **Fonts** tab.

Related Actions

Add font metadata on page 234

4.16.2.8. Check font subsetting

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if fonts are subsetted or complete.

If a font is subsetted, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible.

Related Actions

- *Select subset fonts* on page 443

4.16.2.9. Check font type

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks for particular font types in a PDF.

You can check for:

- TrueType
- Type 1
- Type 3
- Multiple Master
- Composite TT
- Composite T1
- Composite (all types)

About types of fonts

Related Actions

Select fonts by type on page 439

4.16.2.10. Check font vendor

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks to see if fonts from a particular vendor have been used in a PDF.

4.16.2.11. Check for artificial font style

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for instances of artificial font style (artificial bold, italic or outline style).

About artificial font style

Some fonts consist of specific **font families** for each style. The font Futura, for example, has the font families Futura (for “regular” Roman style), Futura-Bold, Futura-Oblique etc. This implies that, if you want to put text in Futura and in bold, for example, you will have to select the font family “Futura-Bold”.

Certain design programs or word processors allow you to adapt the style of these fonts artificially. You can select text and to put it in italics or in bold by selecting the respective style within this font family. Sometimes, you can even do this by means of shortcuts, e.g. Control+b for bold or Control+i for italics. Text that has been modified in this manner uses a so-called **artificial bold or italic style**.

This method may seem very handy but it is recommended to avoid it, because these artificial styles can cause problems when printing: e.g. artificial bold is created when printing two characters on top of each other, one being one point size bigger than the other.

4.16.2.12. Check for city fonts

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for instances of city fonts.

City fonts are bitmap fonts that tend not to produce good results when printed.

4.16.2.13. Check for inconsistent Type 3 font width information

Belongs to

- **Category:** Text
- **Type:** Checks
- **Since:** PitStop 2022

What it does

Searches a PDF for Type 3 fonts that have corrupt widths (inconsistent d0 or d1 values). You might want to remove, replace or fix these fonts. Note that there's a dedicated Action to fix them.

Related Actions

- *Check corrupt font widths* on page 349
- *Fix inconsistent Type 3 font width information* on page 243

4.16.2.14. Check if a subset font contains a complete CharSet or CIDSet

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the subset fonts embedded in the document (if any) contain a complete character or CID set.

If a font is subset, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible. This Action allows you to check if all characters of the font are embedded. In case of simple fonts, the complete set is referred to as "CharSet"; in case of composite fonts, it's referred to as "CIDSet".

CID (Character Identifier) fonts are a format of Type 1 fonts that are typically used for Chinese, Japanese and Korean fonts.

Related Actions

- *Select subset fonts* on page 443
- *Check font subsetting* on page 351

4.16.2.15. Check if font contains all glyphs and metrics for all characters used

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches the PDF document for fonts that don't have the character set required to display and print the used characters correctly.

Optionally, you can include in your check the glyphs that were removed by subsetting fonts.

You can then replace these fonts by embedded or subset fonts that do have all required glyphs and metrics.

4.16.2.16. Check if invalid character (.notdef glyph) is used

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the PDF contains invalid characters.

.notdef glyphs are replacement characters for undefined characters in a PDF; they often look like a small box containing an X or a question mark and are not PDF/X compliant. You might want to remove or fix them.

Related Actions

Fix invalid characters (.notdef usage) on page 244

4.16.2.17. Check if TrueType fonts are PDF/X compliant

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if TrueType fonts are compliant with a particular PDF/X version. Options are PDF/X-4 and PDF/X-6.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

Select non-PDF/X or PDF/A compliant TrueType fonts on page 440

4.16.2.18. Check presence of ToUnicode map in font

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the unicode mappings of the fonts are compliant with a particular PDF/A version.

PDF/A requires that all text in the PDF file can be mapped to Unicode. Therefore, fonts used in the PDF should contain a character-to-glyph mapping that is consistent with character semantics as defined in the Unicode Standard.

This mapping is used to override the default text extraction behavior, for example when using the Acrobat text tool to copy and paste text to another application like Notepad.

4.16.2.19. Check text point size

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks the text point size against a particular value.

Examples

Text point size must be equal to 5 pt.

To check the minimum text point size, select "Text point size must be more than or equal to ... pt" and enter the appropriate value.

4.16.2.20. Check text x-height

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Check text x-height checks the font size by measuring the height of the lowercase x (= the x-height). The x-height refers to the distance between the baseline and the mean line in a typeface; this is typically the height of the letters x, u, v, w, and z. You can set a threshold for the text x-height expressed in points.

Note that the check only can work if at least one of the characters to be measured (x, u, v, w or z) is available in the PDF.

4.16.2.21. Check that composite TrueType CIDToGIDMap is present

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if the PDF contains a mapping table for composite TrueType fonts to map CID (Character IDs) to GID (Clyph IDs), and if it's correctly defined. This is required by the PDF/A specification.

CID (Character Identifier) fonts are a format of Type 1 fonts that are typically used for Chinese, Japanese and Korean fonts.

GID (Glyph Identifier) are identifiers to identify all glyphs in a font.

4.16.2.22. Check TrueType font encoding according to PDF/A

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks whether the Truetype font used in the PDF complies with a given version of the PDF/A specification. Fonts must for example be embedded in the PDF.

4.16.3. Informs

4.16.3.1. Gather font information

Belongs to

- **Category:** Text
- **Type:** Informs

What it does

Collects information about fonts used in a PDF and presents it in the log.

The following information is logged:

- Font Name
- Type
- Encoding
- Embedded
- Subset

4.16.4. Selections

4.16.4.1. Select by inconsistent Type 3 font width information

Belongs to

- **Category:** Text
- **Type:** Selections
- **New since:** PitStop 2022

What it does

Selects Type 3 fonts containing characters with a corrupt font width (Type 3 glyphs d0 or d1 values that are inconsistent with the font's widths array).

Type 3 fonts are usually wrongly converted SVG fonts, i.e. fonts that are used in Illustrator, Indesign, Photoshop, ... but that are not supported by the PDF specs and most RIPs, and therefore converted to Type 3. PitStop fixes this, so the font can be handled by most RIPs.

Related Actions

- *Check for inconsistent Type 3 font width information* on page 353
- *Fix inconsistent Type 3 font width information* on page 243

4.16.4.2. Select clipping and non-clipping text

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all text segments, even if they have been clipped and are not visible anymore.



Tip: If you want to select non-clipping text only, you can use *Select text segments*.

4.16.4.3. Select corrupt font widths

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select all text with a corrupt font width.

By default, horizontal writing is checked, but you can also include vertical writing by selecting the **Also check metrics for vertical writing** checkbox.

Corrupt font widths may occur in a PDF, when "artificial" bold or italic was used instead of the "bold" or "italic" version of the font concerned. For example, if "Futura" is used in your PDF, the "Futura-Bold" and "Futura-Oblique" fonts should be used instead of applying bold and italics on the regular Futura font. Artificial font may cause problems when printing the PDF.

As of PitStop 2022, you can set a threshold in the **Tolerance** field. This value, expressed in 1/1000 em, specifies the maximum acceptable deviation of the standard font width. For example, if the tolerance is set to 5, a font width that deviates 5/1000 em (or less) from the normal font width will not be selected.

Some PDF standards allow font size deviations. For example, PDF/X-4 allows a deviation of 5 1/1000 em, PDF/X-6 allows a deviation of 1 1/1000 em ... This Action can be used to select font widths that do not comply with certain PDF/X versions.

About the em as unit

The unit used to set the tolerance is '1/1000 em'. 'em' is used because the size of an 'em' is relative to the size of the font: it denotes the point size. For example: 1 em in a 16-point typeface is 16 points, 1 em in an 8-point typeface is 8 points. As a consequence, if the tolerance is set to 1, the relative size is the same, but the absolute size differs depending on the font size.

The name 'em' comes from the width of the capital M in the typeface.

Related Actions

- *Check corrupt font widths* on page 349
- *Change corrupt font widths* on page 235

4.16.4.4. Select embedded fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select all embedded or unembedded fonts in a PDF document.

The selection of embedded fonts includes OpenType embedded fonts.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

- *Check font embedding* on page 350
- *Unembed font* on page 247
- *Check embedded font is OpenType* on page 349

4.16.4.5. Select fonts by license

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select fonts that allow certain operations without obtaining permission from the font's owner.

These operations are:

- Embed
- Subset
- Outline
- Preview and print

Related Actions

Check font license on page 351

4.16.4.6. Select fonts by name

Belongs to

- **Category:** Text

- **Type:** Selections

What it does

Allows you to select all the fonts with a particular name.



Note: From version 12 update 2 onwards, you can use regular expressions to define the font name.

Example

To select all the Times, Arial, Helvetica and Courier fonts in a PDF, you could use the following sequence of Actions:

```
Select font Times
Select font Arial
OR
Select font Helvetica
OR
Select font Courier
OR
```

4.16.4.7. Select fonts by type

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects text using a particular font type.

You can select one of the following font types:

- TrueType
- Type1
- Type3
- Multiple Master
- Composite TT
- Composite T1
- Composite (all types)

About types of fonts

Example

For example, to unembed TrueType fonts without unembedding any other font types, do the following:

```
Select TrueType fonts
Unembed font <!-- See Unembed font on page 247 -->
```

Related Actions

Check font type on page 352

4.16.4.8. Select fonts that can be emulated

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects fonts that can be emulated.

Fonts that can be emulated are fonts that can be represented on screen, even if the font is unavailable on your system and even though it has not been embedded. If you are certain the document only needs to be viewed on screen, and will not be printed, fonts that can be emulated do not need to be embedded. This makes your PDF lighter, for example for distribution on the internet.

Example

To select fonts and then unembed them:

```
Select fonts that can be emulated
Unembed font <!-- See Unembed font on page 247 -->
```

4.16.4.9. Select non-PDF/X or PDF/A compliant TrueType fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select a TrueType font that is not compliant with a particular PDF/X or PDF/A version, for example a symbol font. Options are PDF/A-1, PDF/A-2, PDF/X-4 and PDF/X-6.

After this selection, you might want to remove or replace this font.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

Check if TrueType fonts are PDF/X compliant on page 355

4.16.4.10. Select objects that use neither stroke nor fill

Belongs to

- **Category:** LineArt;Text
- **Type:** Selections

What it does

Selects vector or path objects that contain no stroke or fill color value in a PDF.

Related Actions

Select invisible objects without fill and stroke on page 382 (same functionality)

4.16.4.11. Select OpenType embedded fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all embedded fonts that are OpenType, or alternatively, all embedded fonts that are not OpenType.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Example

To search for all OpenType fonts and then unembed them, proceed as follows:

```
Select embedded fonts that are OpenType
Unembed font
```

Related Actions

- *Check embedded font is OpenType* on page 349
- *Unembed font* on page 247

4.16.4.12. Select rendering objects

Belongs to

- **Category:** LineArt;Text;Image
- **Type:** Selections

What it does

Selects all objects with a rendering intent.

This includes paths, text and images with any of the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation



Note: This Action does not allow you to make a selection based on **one particular** rendering intent. To select objects by **one** of the listed rendering intents, use *Select by rendering intent* on page 367.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select by rendering intent* on page 367

4.16.4.13. Select standard 14 fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects the standard 14 PostScript fonts.

The 14 fonts are automatically installed with Adobe Acrobat and embedded by default (since PDF 1.5).

Example

To save on file size, you could select these fonts and unembed them. Proceed as follows:

```
Select standard 14 fonts
Unembed font <!-- Unembed font on page 247-->
```

4.16.4.14. Select subset fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects fonts that are subsetted.

If a font is subsetted, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible.

Example

If you have the original font on your system, you could choose the subsetted fonts and embed them completely for later editing. To do so, proceed as follows:

```
Select subset fonts
Embed font
```

Related Actions

- *Check font subsetting* on page 351

4.16.4.15. Select text by key phrase

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select text objects containing a particular key word or phrase.

To take into account the case of the key phrase (uppercase/lowercase as entered in the text field), select the **Case sensitive** checkbox.



Tip: To only select a particular key word (and not the entire text object it belongs to), you could first split the text objects, using *Split in words* on page 246.

4.16.4.16. Select text by point size

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects text in a font that is below, above or equal to a certain size (expressed in points).

This Action is useful to select text that is too small to print correctly.

4.16.4.17. Select text by x-height

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Select text by x-height allows you to select text by a font size expressed in x-height. The x-height refers to the distance between the baseline and the mean line in a typeface; this is typically the height of the letters x, u, v, w, and z. You can set a threshold for the text x-height expressed in points.

Note that this Action only can work if at least one of the characters to be measured (x, u, v, w or z) is available in the PDF.

4.16.4.18. Select text segments

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all text objects in a PDF.



Tip: This Action does not select clipping text, which is not visible in the PDF. If you want to select clipping text as well, you can use *Select clipping and non-clipping text* on page 437.

5. Actions sorted alphabetically

5.1. A

5.1.1. Add alternate images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

If you are working with PDFs that contain very high resolution images and render slowly on screen, you can speed up rendering by adding alternate images and then clicking the PitStop **Speed Up Image Display** button (available in the Enfocus View Modes toolbar (Acrobat 8 and 9) or the PitStop View Panel (Acrobat X and XI)).

You can use this Action to add low resolution alternate images.

How to proceed

1. Select the preferred downsampling.

   Bicubic looks best but is slowest; subsampling looks worst but is fastest.
2. Specify the preferred resolution.

   72dpi is good for screen viewing.
3. Set **Resample above** to a higher value than the dpi chosen above.

   PitStop suggests a value, but you can change it as required.
4. Select **Convert to RGB** for even faster on screen rendering, but in RGB color values.

Related Actions

- *Select by alternate images* on page 384
- *Check for alternate images* on page 285
- *Remove alternate images* on page 116

5.1.2. Add background

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Adds a background to the selection that preceeds this Action in your Action List.

You can choose a color for the background and define a size (size of one of the page boxes or the same size as the bounding box of all objects).

5.1.3. Add copied graphics

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Copies graphic elements and positions them on the page. The graphics can be rotated, put in the foreground or background. You can place them at any position on the page and use the "repeat" feature to more precisely position the graphic.

How to proceed

1. Select the graphic(s) from a file or by making a selection. Do one of the following:
   - Select **Use first page of file** and select the file concerned. You can also use a variable.
   - Select the graphic you want to copy in your PDF using the PitStop Select Objects tool and select **Use grabbed graphics**. Click **Grab Selection**. The selected graphic is shown in the field below the button. If the graphic should be rotated, specify a rotation angle, e.g. 45.
2. Switch to the different tabs and select the appropriate options.

Tabs

Tabs	On this tab, do the following:
Graphics	Select the graphics you want to copy (either elements you selected in the PDF or the first page of a particular PDF).
Attributes	Determine if the graphic should be pasted in the foreground or in the background. Select or clear the **Use page rotation** and **Use page scaling factor** checkbox: • To take into account page rotation and/or scaling factor, select this checkbox. The Action will be applied to the actual position of the page content. • To ignore page rotation and/or scaling factor, clear this checkbox. The Action will be applied to the original position of the page content (i.e. BEFORE applying page rotation and/or scaling factor). Enable **Share graphics between copies** to add the copied graphic as a shared form XObject. This means that the graphic is defined only once, but used several times, on several pages. This is an easy way to reduce the file size.

Tabs	On this tab, do the following:
	Note: Only use this option if you're sure that all instances/ occurences of the graphic will remain the same (as is the case with a logo), because changing one graphic will change them all.
Region	Determine the region where the copied graphics should (or should not) be placed, relative to the page box of your choice. Margins can easily be set by grabbing the offsets from a selected area (use the Grab Offsets button ).
Repeat	If the graphics should be placed more than once on a page, change **No repeat** to: • **Distribute/Repeat fixed number of graphic elements** if you want to determine how often they should be pasted (e.g. 6 times horizontally, 4 times vertically) • **Distribute/Repeat graphic elements in region** if you want PitStop to fill the region (specified on the Region tab). If you want PitStop to divide the copied graphics evenly across the defined region, choose "distribute" rather than "repeat". In case of "Distribute graphic elements in region", you can choose the maximum or minimum distance between the copied graphics. If you choose "repeat", you should define the exact distance between the copied graphics yourself. The distance can be between the bounding boxes of the copied graphic (choose: **Between edges**) or from center to center (choose: **Between centers**). **Note:** Remember that you can use Smart Preflight variables to define the distances.
Position	Indicate how the graphic elements should be positioned relative to the chosen region. Note that, when adding multiple copies, the same corner should be used to position the graphic elements in the region.

5.1.4. Add default color spaces for color spaces that are not compliant to the Output Intent

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

If you are using an Output Intent that does not support a certain color space, you can use this Action to replace it with another color space that does comply.

You can select an alternative color space for Gray, RGB, and/or CMYK.

The following PDF/X and PDF/A standards are supported:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1
- PDF/A-2

5.1.5. Add missing creation and modification date

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Inserts the creation and modification date.

In some legacy PDF applications it was possible to create a PDF file without a creation or modification date. This Action fixes this issue.

Related Actions

Check creation and modification date on page 301

5.1.6. Add object

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Inserts a chosen object (a line, a rectangle, an ellipse or a text) and positions it relative to one of the page boxes. This can be useful to add information to be trimmed off later.

Note: If you're inserting text, you can make use of predefined variables, such as the name of the document, the author, the page number, page count, the page box dimensions, ...See the example below.

The **Fill** and **Stroke** tabs allow you to define the color of the objects you are inserting.

Add rectangle

When adding a rectangle, you can choose different corner styles, e.g. rounded corners, chamfered corners or inverted corners. You can also determine the radius (only positive values are accepted).

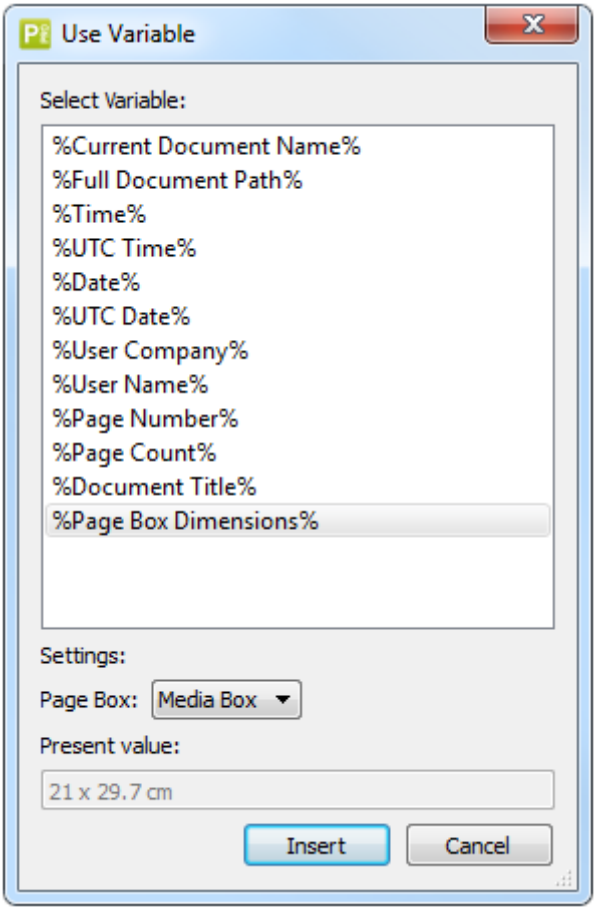
This option is useful for customers who want to automatically generate cutter guides or dielines for labels based on a PDF page box such as the trim box. See also the Action Lists based on this Action, which make a dieline in an overprinting spot color based on the trim box.

Example

To add the width and height of the media box to your document, proceed as follows:

1. In the attributes for the Add object Action, on the **Object and position** tab, choose **Add text in foreground**.
2. Click the **Variable** button.
3. Select **%Page Box Dimensions%**.
4. Select the page box of which you want to insert the dimensions, in this example **Media Box**. The current value is shown.
5. Click **Insert**.
6. Select a font and a font size and determine where the text must be inserted in the document, for example in the center of the media box with a particular offset.
7. Specify whether or not to take into account page rotation and page scaling factor if applicable.

Below is an example of the dialog that allows you to insert predefined text variables.



5.1.7. Add page number

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Adds page numbers (including section and chapter numbers) to a PDF.



Note: The Global Change **Add Page Number** provides the same functionality.

How it works

You must first create a sample piece of text, which will be used to determine the format and style used for page numbering (font, color, size etc):

- If you want to add a page number only, the sample should only be a number, e.g. "3".
- If you want to add a page number with more information (for example: include the word "Page" and the total number of pages) add this to the sample, e.g. "Page 1 of 10".

The text strings (including spaces and punctuation) in this sample will be used as they are. For the numbers in this sample, you should indicate which one refers to the page number, hence should be considered a variable. For example, if your sample is "Page 1 of 10", "1" refers to the page number (Page %pagenr% of 10) and will be different on each page. "10" will not be changed, as it is not possible to use variables for other information than page numbers.

How to proceed

1. Create an example piece of text.
2. Select the sample by using the PitStop Select Objects tool .
3. In the attributes of the Action, click the **Grab Sample from Selection** button.

   The sample text appears in the Sample field.
4. Specify the position of the page numbers relative to the text and one of the page boxes. You can use a default offset, manually enter offset values or grab the document's offset values.
5. To start numbering on a different page than the first page of the document, enter the page number. For example, if you want to start numbering after the table of contents, for example on the third page of the document, enter "3". Note that you can also use a variable for this (added in PitStop 2020).
6. By default, the pages are numbered consecutively based on all pages of the PDF. However, if you want to base the page numbering on a selection of pages, select **For generating page number sequence, use: Selected pages**.

   Example:

```
Select pages <!-- page range 1-3, only odd pages -->
Add page number
```

   Output in case of PDF pages (default):

- Page 1: numbered 1, page 2: not numbered, **page 3: numbered 3**

Output in case of Selected pages:

- Page 1: numbered 1, page 2: not numbered, **page 3 numbered 2**

7. If your sample text contains numbers, the **Variable number sequence** list is activated. This list allows you to indicate which number should be considered a variable (indicated by "%pagenr %").

   For example, if your sample text is "Page 2, Section 1", you will have three options:

   - "Page 2, Section 1" will insert "Page 2, Section 1" on every page.
   - "Page %pagenr%, Section 1" will insert "Page 1, Section 1" on page 1, "Page 2, Section 1" ... (Section 1 will not change)
   - "Page 2, Section %pagenr%" will insert "Page 2, Section 1" on page 1, "Page 2, Section 2" ... (Page 2 will not change)

8. Switch to the **Options** tab and select the appropriate checkbox:

   - **Remove any overlapping text** will remove existing page numbers.
   - **Only number pages that already have a number** will not add page numbers to pages that currently don't have any.
   - **Add white background** ensures that the page numbers are visible, even if the PDF has a dark background.

5.1.8. Add pages

Belongs to

- **Category:** Add; Page
- **Type:** Changes

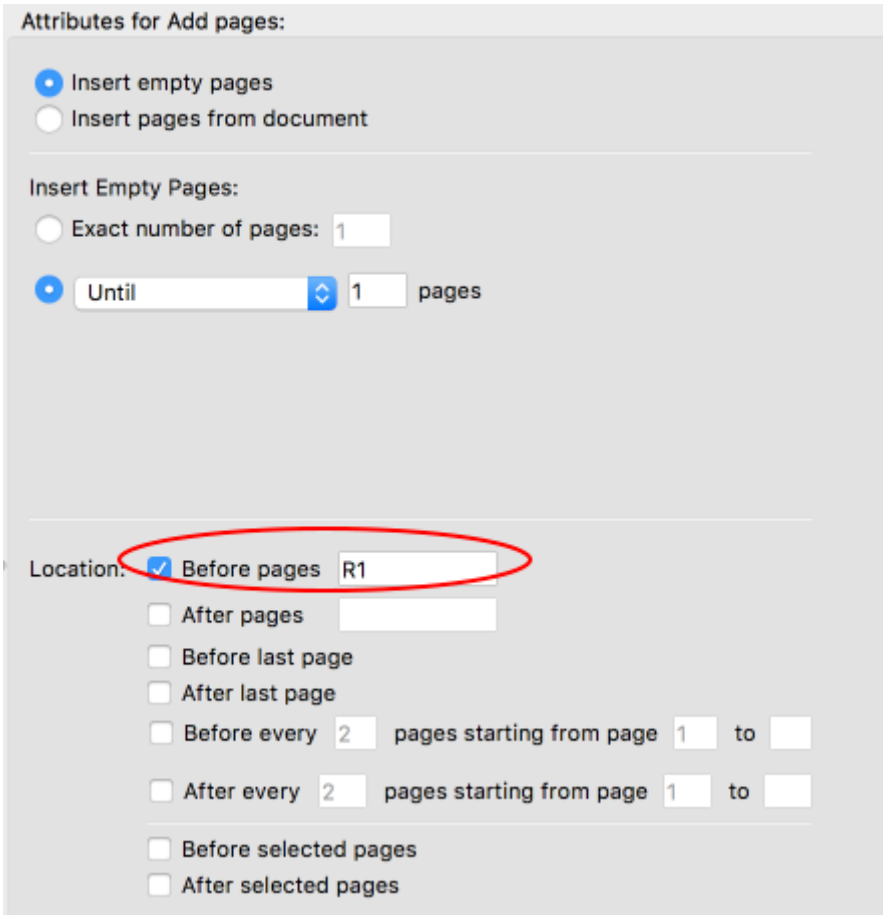
What it does

Allows you to insert either empty pages or pages from a particular PDF file (by embedding the file or by using the file path (optionally specified by a variable)).

You can choose the number of pages to add, the location of the new pages in the PDF ...

As of PitStop 2019, you can insert pages before or after a selection you made earlier in your Action List. You could for example select all pages with a certain string and insert empty pages based on this selection. See also the example Action List below.

"R[number]" notation
If you want to add pages starting from the end of the PDF, you can use the "R[number]" notation in the **Before pages/After pages** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ... This allows you for example to add a backup interleave page to every page in the PDF.



Example Action List

Suppose you have a mixed landscape/portrait document and you want to insert an empty page after every landscape page. That's possible with the following Action List.

```
Select all
Select by page orientation <!- select if page orientation = landscape ->
Add pages <!- select "insert empty pages" and "after selected pages" ->
```

5.1.9. Add unique document IDs

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Adds a unique document ID (generated at random) to your document.

Related Actions

Check document unique IDs on page 271

5.1.10. AND

Belongs to

- **Category:** Operators
- **Type:** Selections

What it does

AND is a logical operator. This means it is used to select a single object with more than one attribute.

Example

To select text that was Helvetica AND size 12 pt, use:

```
Select Font Helvetica
Select Text if Point Size = 12.00 pt
AND
```



Note: AND is NOT used to select two different objects!

For example, **the following is incorrect** because a font cannot be both Helvetica and Arial:

```
Select Font Helvetica
Select Font Arial
AND
```

5.1.11. Apply page rotation

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Sets the page rotate key defined in the PDF to 0 °. This may have a visual effect.

5.1.12. Apply page scaling factor

Belongs to

- **Category:** Position/Size;Page
- **Type:** Changes

What it does

Apply page scaling factor removes the page scaling factor and scales the page to compensate.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By applying the page scaling factor, the actual page size will become 20 by 20 inches.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.



Note: When the result of applying the scaling factor exceeds the size of 200x200 inches, the page may not be displayed well. This is a limitation of Adobe Acrobat.

Related Actions

- *Check if page scaling factor is used* on page 323
- *Remove page scaling factor* on page 175

5.1.13. Apply transfer function

Belongs to

- **Category:** Prepress;Text;LineArt;Color;Image
- **Type:** Changes

What it does

Adds a transfer function to paths, text, images or all these types of objects. You can exclude spot colors or apply the transfer function on tint values or alternate values only.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Check for custom transfer function* on page 344
- *Remove custom transfer function* on page 226

5.2. C (Part 1: Center - Change)

5.2.1. Center page content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Places all objects in the center of the page.

You can:

- Center the objects horizontally, vertically or both.
- Center the content relative to a page box and set margins (left, right, top and bottom).
- Use page rotation and scaling factor as required.
- Only center the visible part of the content.

5.2.2. Change annotations print setting

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Change annotations' print setting allows you to set the selected annotations to **Printing** or **Non-Printing**.

5.2.3. Change art box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize an art box.

You must choose one of the following options:

- To create a new art box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize the art box relative to the axes of the existing art box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of the art box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**

- **Always require page box to be defined**

5.2.4. Change binding

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Allows you to redefine a document's binding; you can set binding to the right or to the left.

Most European language documents are bound on the left.



Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Check binding* on page 300
- *Select by binding* on page 399

5.2.5. Change bleed box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a bleed box.

You must choose one of the following options:

- To create a new bleed box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a bleed box relative to the axes of the existing bleed box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a bleed box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**

- **Always require page box to be defined**

5.2.6. Change blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Changes

What it does

Allows to change the blending color space and/or the luminosity softmask blending color space (if defined in the PDF document).

You can:

- Change the color to CMYK, gray or RGB, or
- Remove the blending color space, by selecting "none" from the first list, or
- Leave one of the color spaces unchanged, by selecting **Do not change**.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Check if blending color space is defined* on page 261
- *Select by blending color space* on page 364

5.2.7. Change character spacing

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the amount of space between two characters in a selected text string.

The amount of space is expressed in 'em' units. An 'em' refers to the width of the capital M in the current font.

5.2.8. Change color

Belongs to

- **Category:** Color

- **Type:** Changes

What it does

Allows you to change the fill and/or stroke colors in a PDF.

How to proceed

Define the target colors as follows:

1. Select the appropriate checkbox, depending on what you want to change (Fill color or Stroke color).
2. Select the appropriate target color in one of the following ways:
   a. Select an object with the PitStop Select Objects tool and use the icon to grab the fill or stroke color (depending on what you're defining).
   b. Click the color picker icon and select the appropriate color.
   c. Select the required color space:
      - Device colors can be Gray, RGB or CMYK
      - Calibrated colors can be Gray or RGB
      - User Swatch (= user-defined colors)
3. Fine tune the color by moving the sliders.

5.2.9. Change crop box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a crop box.

You must choose one of the following options:

- To create a new crop box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button. Note that boxes are defined from lower left to upper right.
- To resize a crop box relative to the axes of the existing crop box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a crop box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**

- **Always require page box to be defined**

5.2.10. Change dash pattern

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Changes the pattern of dashed lines or converts them to continuous lines.

How to proceed

To use continuous lines, click .

To create a dashed pattern, click  and configure the following fields:

- In the **On** fields, enter the desired length of the dashes.
- In the **Off** fields, enter the desired size of the spaces between the dashes.
- In the **Phase** field, enter a value to indicate where the dash pattern should begin. For example, if you have chosen dashes of 5 cm each, if you have specified a phase of 2 cm, the first dash will have a length of 3 cm (5 cm - 2 cm).

5.2.11. Change default color spaces

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to set the default color spaces for Gray, RGB and CMYK objects in a PDF. These spaces are chosen from the list of available profiles (or you can browse for profiles on your system) and can be applied to all objects or only to objects with absent color spaces.

5.2.12. Change document encoding

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Changes the PDF encoding to binary or ASCII.

About document encoding

ASCII encoding was formerly required to ensure that PDF files could be safely transported via e-mail or the Internet. However, most e-mail software in use today handles non-ASCII documents normally, eliminating the need to ASCII-encode your document.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Check data format* on page 271
- *Select by document encoding* on page 380

5.2.13. Change document info

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Changes the document information as found in the document properties in Acrobat.

You can change, remove or replace the following details:

- Producer
- Title
- Subject
- Author
- Creator
- Keywords

If you want to replace document info, you can make use of fixed strings and/or variables, such as the user name, company, date ...

Example

To replace the current keywords in your document with the document title and the word "PDF", proceed as follows:

1. Run the Change document info Action to remove the current keywords:

```
Change document keywords <!-- select Remove -->
```

2. Run the Change document info Action to insert the new keywords:

```
Change document keywords <!-- select: Set to PDF, %Document Title% -->
```

Related Actions

- *Check document info* on page 301

- *Select by document info* on page 400

5.2.14. Change document information dictionary compliance

- **Category:** Metadata, PDF 2.0
- **Type:** Changes
- **New since:** PitStop 2021

What it does

Makes the information dictionary compliant with the chosen PDF version.

About the info dictionary

The info dictionary contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document Properties.

The specifications for the info dictionary depend on the PDF version:

- PDF 1.7: The info dictionary is optional. If it's present, it may contain the following entries: Title, Author, Subject, Keywords, Creator, Producer, CreationDate, ModDate and Trapped.
- PDF 2.0: The info dictionary is optional. If it's present, it may be empty, or contain CreationDate and/or ModDate. The other entries are deprecated.
- PDF/X-6: There should be no info dictionary, or if there is one, it should be empty.



Note: There is one exception to the above: if there is a PieceInfo dictionary in the document catalog dictionary, the info dictionary is required and must contain the ModDate entry.

Note that as of PDF 2.0, the *info* dictionary is officially called *information* dictionary.

Options

- **PDF 1.7**: PitStop only adds an info dictionary (including ModDate) if document level PieceInfo is present.
- **PDF 2.0**: PitStop removes deprecated entries from the info dictionary (if necessary). If document level PieceInfo is present, it makes sure there is an info dictionary that contains ModDate.
- **PDF/X-6**: PitStop removes the info dictionary if there is one, except if document level PieceInfo is present; then it makes sure there is an info dictionary that contains ModDate.
- **Current document version**: PitStop detects the current PDF version and makes sure the info dictionary is compliant with the current PDF version.
- **None (leave it unchanged)**: This option prevents PitStop from interfering with the info dictionary at the time of saving the file.

5.2.15. Change fill and/or stroke

Belongs to

- **Category:** LineArt;Text

- **Type:** Changes

What it does

Allows you to turn on or off the fill and/or stroke for the selected objects.

5.2.16. Change fill type

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to change the fill type of the selected objects to either Non-Zero Winding (Fill) or Even-odd (Eofill).

About the fill type

The fill type is an attribute of polygons and loops: compound paths with intersecting lines. To determine whether a point is part of the shape, two different rules can be applied:

- The **Non-Zero Winding** rule (or standard rule). This rule supposes that you draw a line from a point inside the shape to the outside of the shape, without passing through a vertex. You must now count the number of times edges wind around the point inside the shape, in a counter-clockwise direction:
  - For every edge that crosses the line from the point inside the shape in one direction, add 1 to the winding number.
  - For every edge that crosses the line in the opposite direction, subtract 1.

  If the winding number is not equal to zero, the shape area to which the point belongs, is filled. For more information, refer to *http://www.wikipedia.org/wiki/nonzero-rule*.
- The **Even-odd rule**: This rule also supposes that you draw a line between a point inside the shape outline and a point outside its outline.
  - If that line crosses the line of the shape an odd number of times, the shape area to which the point belongs, is filled.
  - If the number of crossings is even, the area is not filled.

Checking the fill type of line art

To see which rule is applied, check the object's fill attributes:

1. Select the object, using the Enfocus Select tool .
2. Click to display the Enfocus Inspector and select > .
3. At the bottom, check which button is selected:
   - If **Fill** is selected, the **Non-zero Winding rule** applies.
   - If **Eofill** is selected, the **Even-odd** rule applies.

5.2.17. Change flatness

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Allows you to set the flatness of a PostScript curve.

The flatness determines how the objects in a document are printed on a PostScript printer.

The default setting for flatness is 1. Increasing this value will speed up printing, but can reduce the print quality (resulting in visible segments in the curve). Decreasing this value will slow down printing, but will improve the print quality.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

5.2.18. Change font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to replace the current font with another one.

Choose the font that should replace the current font:

- To combine a font name with the preferred type and subtype, select **Search for a font by name**:
  1. Click **Select Font Name** and select the appropriate font. Click **OK**.
  2. Select the preferred type and subtype.
  3. Select the **Embed** checkbox as required.
- To use an existing font, select **Select an existing font**.
  1. Click **Create Font Resource**.
  2. Select the appropriate font.
  3. Select **Embed**, **Don't embed** or **Embed Subset**.
  4. Click **OK**.

You should also indicate how the embedded composite font should be handled.

5.2.19. Change image compression

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Change image compression changes the compression of selected images.

Color and Gray images can be compressed with JPEG, JPEG2000, ZIP or LZW compression (ZIP and LZW are lossless, JPEG lossy).

Monochrome images can be compressed with CCIT Group 3 & 4, ZIP or RunLength compression.

In addition, an ASCII Hex or 85 filter can be applied.

5.2.20. Change line join

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes how a corner on a vector line looks like.

How to proceed

- To have a sharp corner, click  **miter**.
- To put a round corner on the line, click  **round**.
- To flatten the corners, click  **bevel**.

5.2.21. Change line weight

Belongs to

- **Category:** LineArt;Text
- **Type:** Changes

What it does

Changes the thickness of a selected line to the desired line weight.

Related Actions

- *Select by line weight* on page 392
- *Check line weight* on page 296

5.2.22. Change media box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a media box.

Choose one of the following options:

- To create a new media box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a media box relative to the axes of the existing media box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a media box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Position the page content**

The last option allows you to determine the position of the content on the page. Note that the dropdown only controls *the distance between the new page box and the content*. Options are:

- **No move**: The content stays where it was (the coordinates do not change), regardless of the new size or position of the media box. It is possible that the content does no longer fit in the media box!
- **Center**: The content will keep its position relative to the center of the mediabox. For example, if the content is placed in the bottom left corner of the media box, that will also be the case after resizing, but again: it is possible that the content does no longer fall inside the media box (e.g. if the new box is too narrow).
- **Lower left/lower right**: The content will keep its position relative to the lower left or lower right of the media box; the distance to the lower left or lower right of the media box will be kept the same. For example, if the content is placed in the rightmost corner of the media box, that will also be the case after resizing.

- **Upper left/upper right**: The content will keep its position relative to the upper left or upper right of the media box; the distance to the upper left or upper right of the media box will be kept the same. For example, if the content is placed in the rightmost corner of the media box, that will also be the case after resizing.
- **Shrink to fit**: This option makes sure that the content fits the new page box; the content may be resized as well if needed.

Remark

Be aware that this Action does not change the crop box; only the media box and the content (if moved along with the media box) are affected. As Acrobat uses the crop box definition for display, when opening the file in Acrobat, the content may not be visible/no longer centered due to the media box being resized and content being moved along. You can fix this by removing the crop box or by changing the crop box in the same way as the media box (see *Remove crop box* on page 174 or *Change crop box* on page 165).

If no crop box was defined, Acrobat uses the media box for display.

5.2.23. Change miter limit

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Changes the length of the extension of a corner on a vector line.

The miter limit is the limit when a join switches from mitered (pointed) to beveled (squared-off). To allow “pointier” angles, you can increase the miter limit.

5.2.24. Change object order

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Changes the layer position of an object in a PDF.

You can choose to move the object forwards, backwards, to the front, or to the back depending on where you want your object to appear in the layer stack.

5.2.25. Change OPI info

Belongs to

- **Category:** Image

- **Type:** Changes

What it does

Updates the OPI information of the document, for example if you have changed an OPI path with the PitStop Inspector in PitStop.



Note: This Action is mainly meant for OEMs, who can change OPI dictionaries through the PitStop Library. If an image with OPI information is encountered during processing, PitStop Library will call the OEM's code to replace it with the OEM's values.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

5.2.26. Change Output Intent

Belongs to

- **Category:** Color; Metadata
- **Type:** Changes

What it does

Changes a PDF's Output Intent to comply with a particular PDF/X or PDF/A version, using a particular ICC profile and/or ICC characterization.

Note that you can change the document Output Intent or the page level Output Intent.

Related Actions

Check Output Intent on page 265

5.2.27. Change overprint

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the overprint for a selected object's fill and/or stroke.

How to proceed

Proceed as follows:

1. To change the Fill/Stroke overprint, select the Fill/Stroke overprint checkbox.

   Note: The checkbox only indicates **what** you want to change, **not how** you want it to change. If none of the checkboxes has been selected, the name of the Action will change into "Do not change overprint".

2. To enable or disable Fill/Stroke overprint, click the buttons:

   -  Overprint is off.
   -  Overprint is on.

     Tip: Check the Actions field, to see if the Action is configured appropriately. For example, if you selected the Fill overprint checkbox and clicked the button next to it, the name of the Action should change into "Set fill overprint to off."

Related Actions

- *Check if object is set to overprint* on page 343
- *Select by overprint* on page 433

5.2.28. Change overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to change the overprint mode of a selection to Standard overprint (OPM 0) or Illustrator overprint mode (OPM 1).

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

Related Actions

- *Select by overprint mode* on page 433

5.2.29. Change page box layout

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the page box layout in a PDF to Press, Screen viewing or PDF/X Layout.

The attributes depend on the chosen layout:

- **Press layout** (typically used for print)

  If you select this layout, the trim box will be derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, and *art box* is the second, the trim box will be derived from the bleed box, if found; if there is no bleed box found, the trim box will be derived from the art box; if there is no art box, the Action will search for the third page box in the list, and so on.

  You must also define the minimum distance between the media and bleed boxes and between the bleed and trim boxes.

  To get the PDF to display at the size of the media it will be printed on, select the appropriate option:

  - **Crop box must equal trim box**, or
  - **No crop box must be defined or the crop box equals the media box**. This means that, if the crop box is not defined yet, it will not be added by this Action; if the crop box is defined, it will get the same size and position as the media box.

- **Screen viewing**

  If you select this layout, the page is defined solely by the crop box, which should have the same size as the media box. No other page boxes are allowed. The crop box/media box is derived from the first page box (out of the list below) that is present on the page. Use the **Up** and **Down** button to move the preferred page box to the top of the list. For example, if *bleed box* is the first item in the list, the crop box/media box will be derived from the bleed box if found in the PDF; if the bleed box is not found, the second page box in the list will be searched for, ...

- **PDF/X layout**

  If you select this layout, the exact page box layout depends on the chosen PDF/X version.

  - If you have chosen PDF/X-1a:2003 or PDF/X-3:2003, the art box or trim box shall not extend beyond the boundaries of the bleed box and the crop box.
  - PDF/X-4 allows either a trim or an art box but forbids having both.
  - PDF/X-6 allows an art box, next to the mandatory trim box.

  To define the trim box relative to the media box, define the desired margins.

Related Actions

Check page box layout on page 326

5.2.30. Change page format

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Snaps the page box of your choice to a multiple of either columns or rows.

This Action is useful for newspapers or magazines with content displayed in columns and rows.

How to proceed

To configure the Change page format Action

1. Select the page box you wish to define.
2. Select **A multiple of columns** and/or **A multiple of rows** as required.
3. Set the preferred column or row width.
4. Add column/row spacing as required.

See also *Check page format* on page 327

5.2.31. Change page orientation

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the page layout to either portrait, landscape or the orientation that is used most in the PDF.

The page orientation is based on the selected page box. If you don't want to change the page orientation in case all pages have already the same orientation, enable the **Only apply if not all pages have the same orientation** checkbox.

Related Actions

- *Select by page orientation* on page 413
- *Check page orientation* on page 327

5.2.32. Change PDF/X version key

Belongs to

- **Category:** Metadata

- **Type:** Changes

What it does

Changes the version key tag in a PDF/X document to another version key.

The following version keys are supported:

- PDF/X-1a:2001
- PDF/X-32002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDFX/-4p

About PDF/X version keys

PDF/X is a specialized subset of the PDF specification, also known as "PDF for Exchange".

The PDF/X version key identifies the version of the PDF/X standard the document complies with. If the version key is not set correctly, the document is not PDF/X compliant. Note that changing the **key** does not change the compliance of the document! It will only allow you to continue with your workflow.

Related Actions

- *Remove PDF/X version key* on page 155

5.2.33. Change point size

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the point size of a selection by or to a given amount.

5.2.34. Change position

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Moves selected objects to a new position.

You can define an absolute or a relative target position:

- **Move absolute to** moves either all selected objects in one go or each of the selected objects individually to a new position relative to the page they are on.

- **Move relative by** moves an object in relation to itself.

Indicate whether page rotation and/or the page scaling factor (if applicable) should be taken into account when moving the selection.

5.2.35. Change rendering intent

Belongs to

- **Category:** Prepress;Color
- **Type:** Changes

What it does

Modifies the rendering intent of an object to one of the following:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96

5.2.36. Change rendering parameter

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the rendering parameter of your choice to the corresponding rendering parameter of the grabbed object.

Example

To apply a transfer curve from an object to the objects of your selection in the Action List

1. Select an object in your PDF document, by using the PitStop Select Objects tool .
2. In the attributes of the Change rendering parameter Action, select Change **transfer**.

3. Click **Grab Transfer From Selection**.

5.2.37. Change smoothness

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Changes the value of smoothness of a selected PostScript curve.

A value of 1 is a good default.

5.2.38. Change spot color suffix

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Either modifies a selected spot color's suffix to one of the suffixes in the table below or removes any known spot color suffix.

This allows you to use the latest Pantone naming conventions when checking and correcting Pantone suffixes.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types. For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)

Suffix	Meaning
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Check spot color suffix* on page 268

5.2.39. Change stroke adjustment

Belongs to

- **Category:** LineArt; Text
- **Type:** Changes

What it does

Allows you to enable or disable stroke adjustment.

Stroke adjustment takes care of the rendering of paths on a raster device (printing device, computer monitor, etc.).

Example

If stroke adjustment is **turned off**, the device will draw the pixel only if it covers the path for more than 50%.

This means that a 1 pixel wide line can be drawn in different ways:

- If the line is drawn nicely on top of a pixel of the screen, the line will look fine.
- If the line is spread over 2 pixels of the screen, the width will be 2 pixels on some places and 1 pixel on other places, turning the line into an ugly, jaggy line.

If stroke adjustment is **turned on**, a correction will be made in such a way that the line looks nice and has the same width (1 pixel) everywhere.

5.2.40. Change transparency

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to modify the transparency of the objects in a PDF file.

You can:

- Modify the alpha channel of a fill and/or stroke, by moving the sliders to the desired percentage. Note that, to gain full opacity, you should move the slider to 100%.
- Change the blending modes.

  This will change the way in which the colors of a transparent object on top blend with the colors of underlying objects.

  To select the blending modes you want to apply, proceed as follows:

  1. Select a blending mode under **Available**.
  2. Click **Add** to move it to the **Selected** list.
  3. Repeat steps 1-2 as required.

     The blending modes will be applied in the order as they appear in the Selected list.

- Turn on or off **Alpha is Shape** as required. This may affect anti-aliasing. (Do not turn it on, unless you really need it.)
- Turn on or off **Text Knockout**.

  If Text Knockout is enabled, the inks of underlying objects, if any, will be cut out on the other separations. This option may be useful in case of overlapping characters.



Note: As of PitStop 2022, this Action also works on transparent annotations.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Remove transparency* on page 228

5.2.41. Change trapped flag

Belongs to

- **Category:** Metadata

- **Type:** Changes

What it does

Modifies the trapped flag.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

5.2.42. Change trim box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to create or resize a trim box.

You must choose one of the following options:

- To create a new trim box, select **Define new rectangle** and enter the required values, or grab them from a selected area using the **Grab Offsets** button . Note that boxes are defined from lower left to upper right.
- To resize a trim box relative to the axes of the existing trim box, select **Resize** and enter the required values.
- To re-use the dimensions from another box, select **Use box size** and select the appropriate page box.
- To determine the size of a trim box based on a selection, select **Resize page box to fit the selection** and enter the offset values.

There are some additional options available:

- **Only apply if not all pages have the same size**
- **Ignore page rotation and scaling factor**
- **Always require page box to be defined**

5.2.43. Change word spacing

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Changes the word spacing of a selected text string to a given value (in em).

5.3. C (Part 2: Check - Crop)

5.3.1. Check annotations print setting

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Check annotations' print settings allows you to log annotations with a particular print setting (print or non-printing).

Related Actions

Check annotation flags settings on page 298

5.3.2. Check annotations type

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Check annotations' type allows you to log the occurrence of particular types of annotations in a PDF, for example: text, hyperlinks, movies,...

5.3.3. Check article threads

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks for the existence of article threads in a PDF file.

Article threads are electronic threads defined by the author of the PDF. They indicate which elements in a PDF belong together as part of a single story, even if they do not follow each other sequentially in the layout of the document.

5.3.4. Check binding

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if binding is left or right.

Most European language documents are bound on the left.



Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Select by binding* on page 399
- *Change binding* on page 143

5.3.5. Check bookmarks

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains bookmarks.

Bookmarks are links in the left hand side bar of a PDF that take you to different sections.

5.3.6. Check Certified PDF state

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the Enfocus Certified PDF status of a PDF.

You can log whether

1. The Certified Preflight Profile matches a particular Profile. You can select a Profile from the database on your computer or from your disk/network (which hasn't been imported yet in PitStop).
2. The PDF being checked is Preflighted or Preflighted without errors.
3. All saved sessions or only the last saved session must be valid.



Note: A session is invalid if it refers to changes made by an external program.

Related Actions

See also *Remove Certified PDF workflow information* on page 229

5.3.7. Check color type

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if a particular color space is used for particular objects.

For example, check if the **device-specific color space** is used for **text and line-art**.

You can ignore process colors in DeviceN color spaces, as required. (It may not be required to check for the presence of process colors, as they are by default available on the printer.)

In case of ICC Profile Colors, you can either check for all types or for one particular ICC space (ICC based gray, ICC based RGB, ICC based CMYK or ICC based Lab).

5.3.8. Check contents compression

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF contains streams that are not compressed with some content compression method (CCITT, Flate, DCT or JBIG2). Compression allows you to make the file smaller.

5.3.9. Check creation and modification date

Belongs to

- **Category:** Metadata
- **Type:** Check

What it does

Checks the creation and modification date.

You can indicate which metadata location should be checked, for example only the most recently changed one, or "any" metadata location (if it doesn't matter), ...

About metadata locations in a PDF file

There are two metadata locations in a PDF file:

- The **info dictionary** contains information about the file, such as the title, the author, the creation date ... and is visible through the file's Document properties. It's not in XML format.
- The **XMP metadata stream** also contains information about the file, but this information is represented as XMP metadata - XMP referring to Adobe's labeling technology **E**xtensible **M**etadata **P**latform. All information in the info dictionary is also represented in the XMP metadata stream dictionary, in the form of XMP properties.

Inconsistencies may occur when only one of the metadata locations has been updated.

Related Actions

Add missing creation and modification date on page 141

5.3.10. Check data format

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the data format of a PDF is either Binary (=non-ASCII) or ASCII.

ASCII-encoding increases the file size, but allows files to be sent through older network protocols that cannot handle non-alphanumeric characters.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Select by document encoding* on page 380
- *Change document encoding* on page 100

5.3.11. Check default color spaces

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether default color spaces are used and whether or not they are PDF/X-3 compliant.

5.3.12. Check document info

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Searches for the requested document info in the document properties of the PDF.

You can check:

- Title
- Subject
- Author
- Keywords
- Producer
- Creator

Use the **Compare with** field to enter (part of) the name of the document info you are looking for.

Use the operator methods **equals** and **doesn't equal** if you are looking for an exact match; use **contain** or **doesn't contain** if the entered value is just part of the document info you are looking for.

Select the **Match case** checkbox if you want the search to take into account the lower and upper cases of the entered value.



Note: From version 12 update 2 onwards, you can use regular expressions to define the value in the **Compare with** field (if you select **Equals/Does not equal** as operator method).

Related Actions

- *Change document info* on page 143

- *Select by document info* on page 400

5.3.13. Check document permissions

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Allows you to check the permission settings of a PDF, such as (low/high resolution) printing, copying, editing, ...

About document permissions

The table below gives an overview of the permissions that can be set in a PDF.

Document permission	If enabled...
Assembly	Users can insert, delete and rotate pages, and create bookmarks and thumbnails.
Content accessibility	Accessibility software (such as a screen reader) is allowed to use the content of the document.
Fill-in or changing	Users can fill in and change forms.
Annotating	Users can make annotations.
Copying	Users can select and copy contents to the clipboard.
Editing	Users can make modifications to the document.
Low resolution printing	Users can print a low-resolution bitmapped image of the pages (for personal use).
High resolution printing	Users can print the document with a high resolution output.
Printing	Users can print the document.

To view a summary of the document permissions, proceed as follows:

1. Open Adobe Acrobat.
2. Select **File** > **Properties**.
3. Switch to the **Security** tab. The document restrictions are displayed in the lower part of the dialog.

5.3.14. Check document security

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Checks if a particular encryption was used to secure the PDF file.

Options:

- A PDF version (1.3 - 2.0)
- A combination of "none" and a PDF version (1.3 - 2.0)
- None
- None or Standard (= no custom security)
- Custom (enter a custom name in the text field)

5.3.15. Check document trapped flag

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Allows you to check the value of the trapped flag in a PDF.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped
- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

The trapped flag is stored in the info dictionary and/or in the XMP metadata stream, but the data can be inconsistent; that's why you must indicate where the trapped flag must be taken from, e.g. from the most recent metadata location.

Related Actions

- *Change trapped flag* on page 148
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

5.3.16. Check document unique IDs

Belongs to

- **Category:** Doc
- **Type:** Changes

What it does

Allows you to check if the PDF has a unique document ID.

Related Actions

Add unique document IDs on page 99

5.3.17. Check embedded font is OpenType

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Allows you to check if the embedded font is OpenType.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

- *Select embedded fonts* on page 438
- *Select OpenType embedded fonts* on page 441

5.3.18. Check external hyperlink annotations

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the annotations in the PDF contain hyperlinks to files, applications, and/or web pages.

5.3.19. Check flatness

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Allows you to check the minimum or maximum flatness of a line art curve.

The default setting to produce a smooth curve is 1. A value higher than 1 can produce a jaggy edge; lower than 1 can slow down the RIP.

Related Actions

- *Check flatness* on page 341
- *Select flatness* on page 434

5.3.20. Check font by name

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks for the presence of a particular font.

Enter the name of the font you want to check for in the text field, or use the **FontPicker** button to select it.



Note: From version 12 update 2 onwards, you can use a regular expression to define the font name.

5.3.21. Check font embedding

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks whether or not fonts are embedded.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

- *Select embedded fonts* on page 438
- *Unembed font* on page 247

5.3.22. Check font subsetting

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks if fonts are subsetted or complete.

If a font is subsetted, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible.

Related Actions

- *Select subset fonts* on page 443

5.3.23. Check font type

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks for particular font types in a PDF.

You can check for:

- TrueType
- Type 1
- Type 3
- Multiple Master
- Composite TT
- Composite T1
- Composite (all types)

About types of fonts

Related Actions

Select fonts by type on page 439

5.3.24. Check font vendor

Belongs to

- **Category:** Text

- **Type:** Checks

What it does

Checks to see if fonts from a particular vendor have been used in a PDF.

5.3.25. Check for action dictionaries

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains particular action dictionaries, i.e. action types.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

You may want to remove these actions, as they are not allowed in a PDF/X file. The Remove action dictionaries Action will remove the action only; the object (the bookmark, annotation) the actions are linked to will not be removed. For example, if you remove the action from a bookmark, the bookmark is still visible, but not clickable anymore.

Related Actions

- *Remove action dictionaries* on page 151

5.3.26. Check for alternate images

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Searches a PDF for alternate images.

Alternate images are low resolution versions of images that are used for on-screen proofing because they render more quickly. PitStop can check for the presence of all alternate images or only those that are set to print as default.

Related Actions

- *Add alternate images* on page 112
- *Select by alternate images* on page 384
- *Remove alternate images* on page 116

5.3.27. Check for annotations inside art box or trim box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Searches a PDF for any annotations that appear inside the art box or trim box - an undesirable location for printing.

5.3.28. Check for annotations inside printable area

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Searches a PDF for any annotations that appear in the printable area of the PDF.

5.3.29. Check for artificial font style

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for instances of artificial font style (artificial bold, italic or outline style).

About artificial font style

Some fonts consist of specific **font families** for each style. The font Futura, for example, has the font families Futura (for “regular” Roman style), Futura-Bold, Futura-Oblique etc. This implies that, if you want to put text in Futura and in bold, for example, you will have to select the font family “Futura-Bold”.

Certain design programs or word processors allow you to adapt the style of these fonts artificially. You can select text and to put it in italics or in bold by selecting the respective style within this font family. Sometimes, you can even do this by means of shortcuts, e.g. Control+b for bold or Control+i for italics. Text that has been modified in this manner uses a so-called **artificial bold or italic style**.

This method may seem very handy but it is recommended to avoid it, because these artificial styles can cause problems when printing: e.g. artificial bold is created when printing two characters on top of each other, one being one point size bigger than the other.

5.3.30. Check for city fonts

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches a PDF for instances of city fonts.

City fonts are bitmap fonts that tend not to produce good results when printed.

5.3.31. Check for custom black generation

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if custom black generation curves (BG) have been included in the PDF document.

Black generation (BG) is the process of adding black ink to CMY-generated black and gray, in order to achieve a clear black color and to save valuable color ink.

Related Actions

Remove black generation on page 226

5.3.32. Check for custom halftone

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches a PDF for objects to which custom halftones are applied.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Custom halftones are mostly used for screening frequency and angles.

Associated with every output device is a default halftone definition that is appropriate for that device. Only relatively sophisticated documents need to define their own halftones to achieve special effects. In general, when a PDF document provides its own halftone specifications, it sacrifices portability: they may lead to unpredictable printed output when the same document is sent to different printers. This is why they are generally undesirable.

Related Actions

Remove halftone on page 226

5.3.33. Check for custom transfer function

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if a PDF contains objects to which transfer functions are applied.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Apply transfer function* on page 83
- *Remove custom transfer function* on page 226

5.3.34. Check for custom undercolor removal

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if custom undercolor removal definitions (UCR) have been included in the PDF document.

Undercolor removal is the process of removing large percentages of cyan (C), magenta (M), and yellow (Y) ink prior to printing, and replacing them with black (K) ink, in order to achieve a clearer black color in print, and to save on color inks.

Related Actions

Remove undercolor removal on page 229

5.3.35. Check for differences in page boxes

Belongs to

- **Category:** Page

- **Type:** Checks

What it does

Allows you to compare a certain page box's size with that of another page box.

Note: As of PitStop 2021, you can use variables to specify the difference in size.

Example

Check if the media box is x inch wider and y inch higher than the trim box.

5.3.36. Check for embedded PostScript fragments

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches for fragments of embedded PostScript in a PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

- *Select embedded PostScript fragments* on page 381
- *Remove PostScript* on page 111

5.3.37. Check for empty pages

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the PDF has pages without content.

Additionally, you can specify that elements outside of a specific page box should be ignored.

It's also possible to ignore visually empty pages (with paper-white and invisible (fully transparent) objects on it).

Related Actions

- *Remove empty page* on page 175

- *Select empty pages* on page 415

5.3.38. Check for external streams

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains links to external data.

5.3.39. Check for flipped objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Searches a PDF for objects that have been flipped, normally using QuarkXpress. These can slow down the RIP.

Related Actions

- *Flip content* on page 170
- *Flip selection* on page 199

5.3.40. Check for images with 16 bits per channel

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Searches a PDF for images with 16 bits per channel.

These images have a much larger color range than standard 8 bit images. Note that not all of these colors can be accurately reproduced on press.

5.3.41. Check for invisible objects without fill and stroke

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Searches the PDF document for any objects that have no fill or stroke color associated with them.

Designers sometimes leave such objects in a document rather than deleting them.

Related Actions

- *Select invisible objects without fill and stroke* on page 382
- *Remove invisible objects without fill and stroke* on page 231

5.3.42. Check for Javascript

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF contains instances of the JavaScript programming language.

This language is often used to add interactive functionality to PDF files. However, in a print production environment, these scripts serve no purpose and may result in increased file sizes.

Related Actions

Remove Javascript on page 152

5.3.43. Check for NChannel colors with non-trivial process dictionary

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the PDF contains NChannel colors with non-trivial process dictionary.

About NChannel

NChannel is an extension of the DeviceN color space, a multi-component, device-dependent color space. NChannel color spaces give applications greater flexibility when representing colors that are not available on a target device.

NChannel is supported from PDF 1.6 (Acrobat 7.x) onwards. If you are opening a PDF in an earlier version of Adobe Acrobat, colors can print or display incorrectly.

About process dictionaries

NChannel requires a process dictionary which maps the names used in the colorants list to device colors. This allows giving aliases for process colors.

A "trivial" process dictionary uses aliases that are easy to understand, e.g. maps "Cyan" to the process color "Cyan".

A "non-trivial" process dictionary would use custom aliases, such as "My Process color".

Related Actions

- *Make DeviceN without NChannel information* on page 90

5.3.44. Check for non-PDF/X compliant halftone

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches a PDF for objects with halftones that are not compliant with the PDF/X specification.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Some of these halftones are not allowed according to the PDF/X specification.

Related Actions

Remove non-PDF/X compliant halftone on page 227

5.3.45. Check for pre-separated pages

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the PDF document contains any pages that already have been separated.

A pre-separated PDF contains pages that have been separated into their CMYK components. In offset printing each of these colors is printed with a separate plate. This means that each page in a PDF document is separated into its four constituent colors: cyan, magenta, yellow and black. For example, a pre-separated PDF file for a two-page CMYK print job, results in a PDF file with 8 pages.

This separation process is usually carried out by the RIP, and not in the source PDF document.

5.3.46. Check for rotated objects

Belongs to

- **Category:** Position/Size

- **Type:** Checks

What it does

Checks if a PDF contains rotated objects. Objects can have been rotated by page layout applications such as QuarkXPress, and this may cause problems for (older) RIPs.

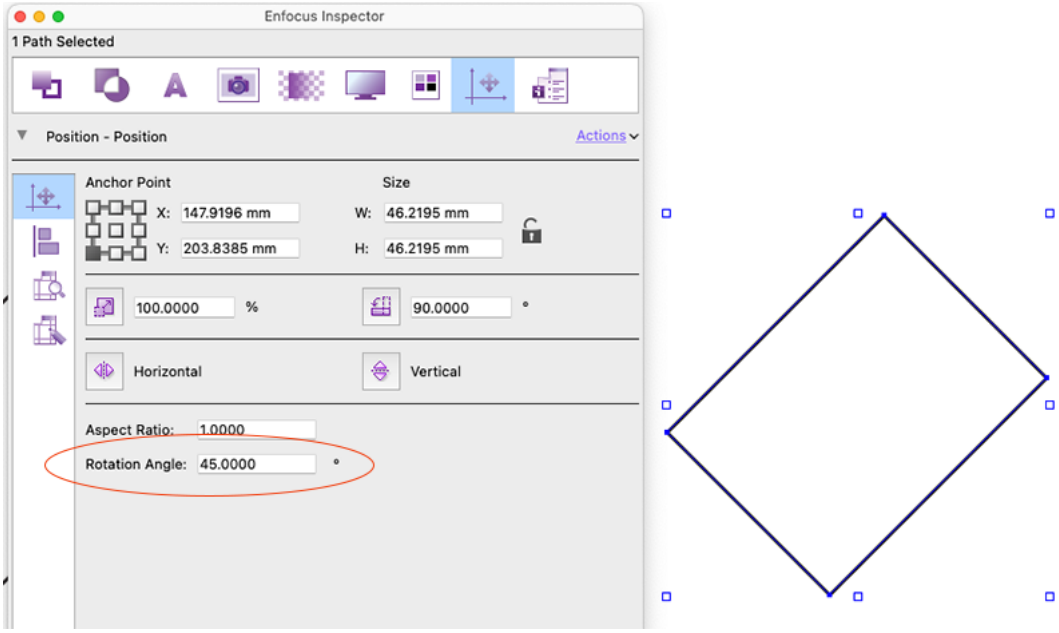
You can specify the non-permitted level of rotation, for example 'objects must not be rotated more than 2 degrees', optionally combined with two extra options:

- **Interpret all angles as rotations between 0 and 45 degrees from vertical or horizontal**: This option allows you to find small rotations in either direction. To decide whether or not an object is rotated, the measured angle is converted to an interval [0,45] degrees compared to the nearest horizontal or vertical page edge. As a consequence, a rotation of 88 degrees is converted to 2 (90-88) and a rotation of 271 degrees is converted to 1 (271-270). When checking for rotations smaller than 4 degrees, both rotations will be logged, whereas for example a rotation of 290 degrees (converted to 20 => 290-270) won't be logged. See example 1 below.

- **Ignore objects that are aligned horizontally or vertically**: This option allows you to exclude objects that are aligned exactly 0, 90, 180 or 270 degrees to the page edges. Such objects (rotated a multiple of 90 degrees) do not look rotated, so in most cases they should not be logged. See example 2 below.

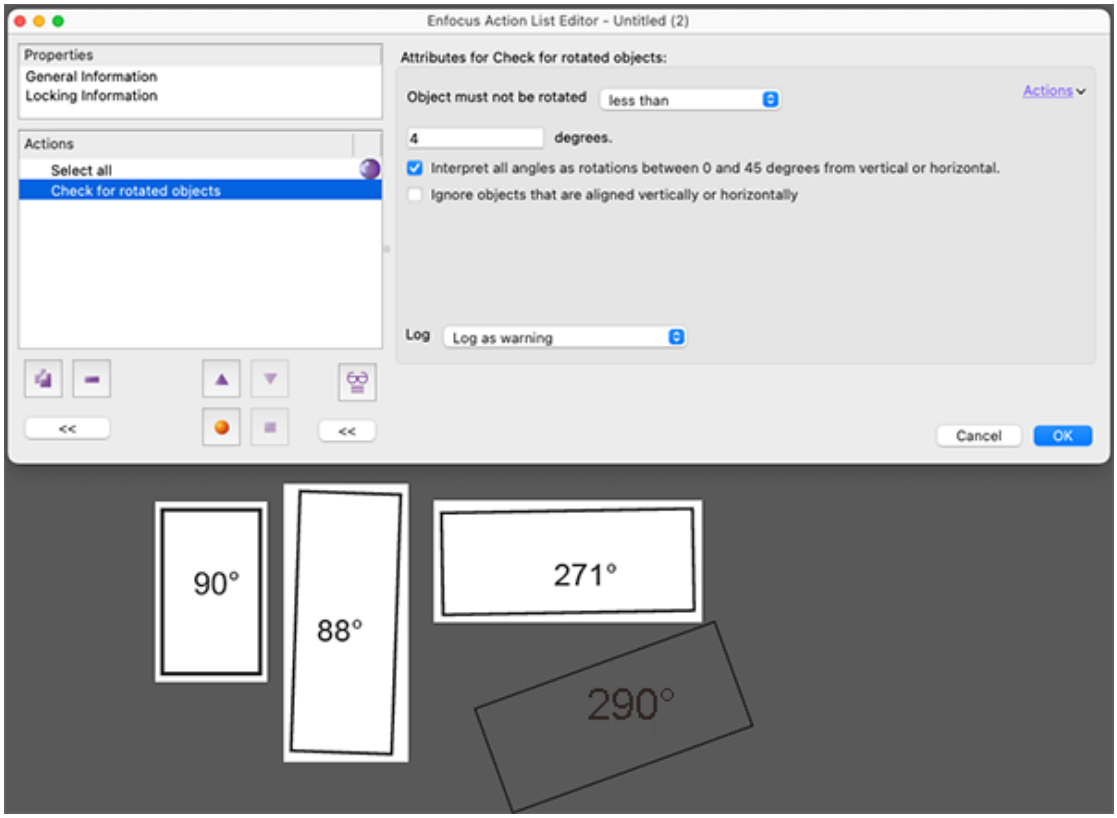
Remark

Note that you can check the rotation angle of an object using the PitStop Inspector.



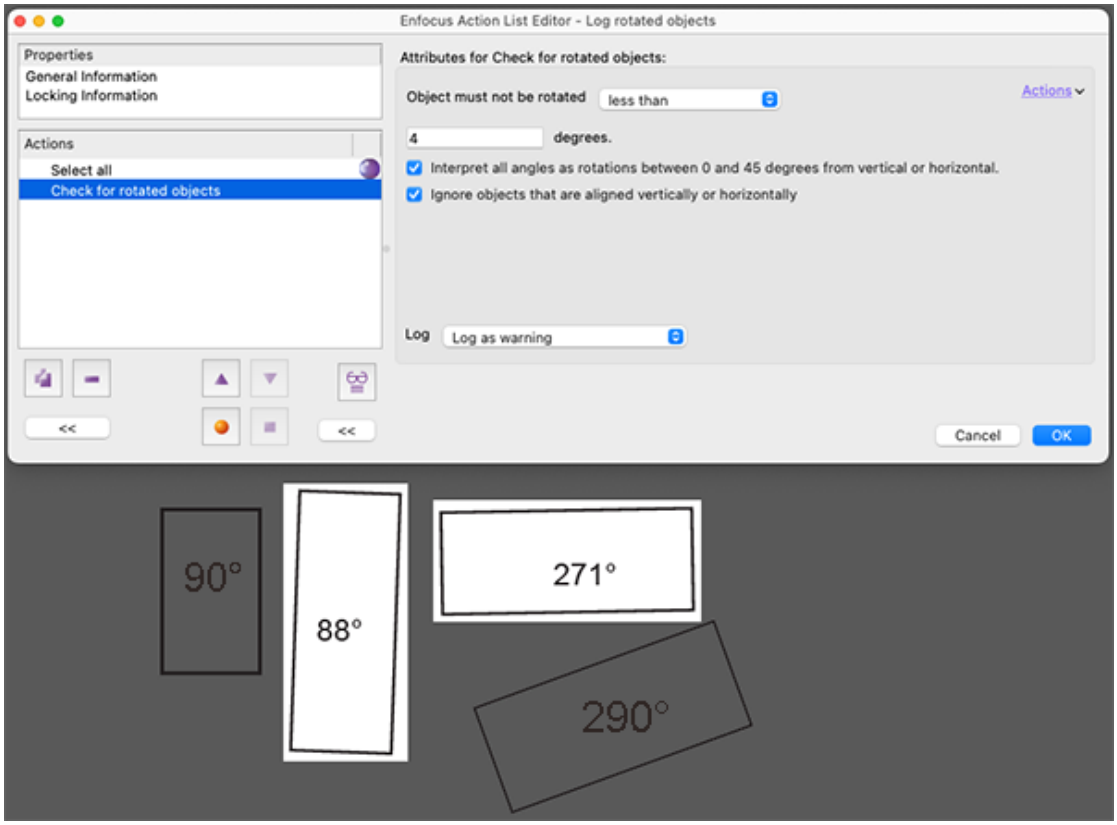
Example 1

In the example below, all angles are interpreted as rotations between 0 and 45 degrees from vertical to horizontal (first option). The first three objects are logged because they have a rotation angle of less than 4 degrees from the nearest vertical or horizontal page edge (as explained higher).



Example 2

When the **Ignore objects that are aligned horizontally or vertically** checkbox is selected, the object that has a rotation angle of 90° is no longer logged.



Related Actions

- *Rotate object* on page 204
- *Rotate content* on page 178
- *Rotate objects as group* on page 204
- *Select rotated objects* on page 429

5.3.47. Check for sheared objects

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Checks if the PDF contains objects that have been disproportionally skewed or twisted in a page layout application such as QuarkXpress.

5.3.48. Check for spot color ambiguity

Belongs to

- **Category:** Color

- **Type:** Checks

What it does

Searches for ambiguous spot colors. Spot colors are considered ambiguous if the name of the spot color refers to more than one set of color values.

You can set a number of options, to make the check less strict. You can also include a check on DeviceN color spaces.

5.3.49. Check for transparent objects

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Searches the PDF document for any objects with transparency. You can restrict your search to transparent objects with fill overprint, strike overprint or spot color.



Note: As of PitStop 2022, this check is also applied to annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Select transparent objects* on page 435
- *Select pages with transparent objects* on page 418
- *Remove transparency* on page 228

- *Change transparency* on page 221

5.3.50. Check for unknown objects

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the PDF contains unknown objects.

Unknown objects in this context are objects that are not defined in the PDF 1.3 standard. The PDF/X standards require all objects in the document to be “known”, or defined in the PDF 1.3 specification.

This avoids differences in output between older and newer RIPs, for example. Older RIPs may not be able to process certain objects, and produce blank pages, whereas a more recent RIP can deal with those objects correctly and will produce the intended output.

5.3.51. Check form fields

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Looks for the presence of form fields in a PDF.

Related Actions

- *Remove form fields* on page 152

5.3.52. Check halftone phase

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks the PDF documents for the presence of halftone phases.

A halftone phase is a shift in the alignment of halftone and pattern cells in device space, to compensate for window system operations that involve scrolling. It is no longer used, but may still be found in documents containing artwork from older source applications.

Related Actions

Remove halftone phase on page 227

5.3.53. Check ICC profile version

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if the ICC profile version is equal to or lower than a particular version number.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99

5.3.54. Check ICC tagging

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks objects to see whether or not they are ICC tagged or tagged with a particular ICC profile in a particular color space. You can check if the fill and/or stroke of the objects are ICC tagged.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors

produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Tag object with an ICC profile* on page 99
- *Check ICC profile version* on page 259

5.3.55. Check if blending color space is defined

Belongs to

- **Category:** Color; Page
- **Type:** Checks

What it does

Checks if the page blending color space has been defined in the PDF document.

You must set the required blending color space and the required luminosity softmask blending color.

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The **page blending color space** is the blending color space assigned to a page; it is used when individual artwork does not have a blending color space.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85
- *Select by blending color space* on page 364

5.3.56. Check if document does not need repair

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks whether a PDF is damaged and needs to be repaired when it is opened.

A PDF file can be damaged, for example, if you downloaded it from the Internet and the file transfer was incomplete.

If a PDF is damaged, you can try to redistill it or save it in Adobe Acrobat, using **File** > **Save as**. If this doesn't solve the problem, you will have to recreate the PDF from the source file, or download it again (if the problem was caused by a corrupt download).

5.3.57. Check if document is optimized for Fast Web View

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Verifies if the document is optimized for the Web.

A document that has been optimized for the Web often has a significantly smaller file size. This is achieved by replacing images that occur more than once in the document with pointers to the first instance of these images. Also, the PDF document is restructured to allow page-at-a-time downloading over the Internet: only the page viewed by the user is downloaded, thus avoiding long loading times for larger PDF documents.

5.3.58. Check if document is produced by PDFWriter

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if a PDF was produced by PDFWriter.

PDFs created with PDFWriter are not suitable for high-end printing.

5.3.59. Check if document requires PostScript LanguageLevel 3

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks a PDF to see if it contains PostScript Level 3-specific features such as transparency or smooth shadings.

About Adobe PostScript

Adobe PostScript is a page descripting language developed by Adobe in 1985. The language has changed over the years, resulting in different versions:

- Adobe PostScript Level 1: first, original version.
- Adobe PostScript Level 2: enhanced version; added support for different page sizes and better color printing.
- Adobe PostScript LanguageLevel 3: improved handling of graphics, supports more fonts, and speeds up printing.

For more information, refer to *http://www.adobe.com/products/postscript/pdfs/PLRM.pdf*.

5.3.60. Check if font contains all glyphs and metrics for all characters used

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Searches the PDF document for fonts that don't have the character set required to display and print the used characters correctly.

Optionally, you can include in your check the glyphs that were removed by subsetting fonts.

You can then replace these fonts by embedded or subset fonts that do have all required glyphs and metrics.

5.3.61. Check if object is completely outside page box

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Searches for (and optionally selects) objects that lie completely outside the selected page box.

Depending on your workflow, you may want to remove these objects before printing.

5.3.62. Check if object is set to knockout

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if a selected object is set to knockout or not. You can distinguish between the fill and stroke being 'knocked out'.

If an object is set to knockout, the colors of this object cut out the area underneath. The background color is erased.

5.3.63. Check if object is set to overprint

Belongs to

- **Category:** Prepress
- **Type:** Checks

What it does

Checks if the fill and/or stroke of a selected object is set to overprint.

Black objects and particularly smaller text objects should be set to overprint, to compensate for misregistration and to preserve the legibility of the text.

Related Actions

Change overprint on page 219

5.3.64. Check if page box is defined

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the selected page box (trim, crop, art or bleed box) has been defined in the PDF.

5.3.65. Check if page box is too large

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if the selected page box (art, bleed, crop, or trim box) lies inside the media box.

5.3.66. Check if page scaling factor is used

Belongs to

- **Category:** Page; Position and size
- **Type:** Checks

What it does

Checks whether the PDF uses a page scaling factor. If so, you can optionally check if a certain page scaling factor applies.

A page with scaling factor 2 will be displayed and printed twice the original size (= scaling factor 1). Page scaling has been introduced in PDF 1.6 and allows you to extend the maximum page size beyond 200 by 200 inch.

Related Actions

- *Apply page scaling factor* on page 163
- *Remove page scaling factor* on page 175

5.3.67. Check image compression

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks image filters to ensure that the images in the PDF are not compressed using a particular compression method.

You can check for the following compression methods:

- CCITT
- JPEG
- ZIP
- LZW
- RunLength
- JBIG2
- JPEG2000

By default, soft-mask images are not included, unless you select the **Also check soft-mask images** checkbox.

5.3.68. Check image compression ratio

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks the compression ratio of the images in a PDF against a particular threshold.

You can check the compression ratio of images compressed with one of the following compression methods:

- CCITT
- JPEG

- ZIP
- LZW
- RunLength
- JBIG2
- JPEG2000

Example

If the JPEG images in your PDF should not be compressed at all, use the following values:

```
Compression ratio of JPEG images must be        <!-- Choose JPEG -->
equal to 100                                    <!-- Choose  "equal to" and "100" -->
```

A compression ratio of "100" means "no compression"; a compression ratio of "50" means "50%" , ...

5.3.69. Check ink coverage (basic object check)

Belongs to

- **Category:** Color;Prepress
- **Type:** Checks

What it does

Checks the total CMYK ink coverage of the color of the **objects** in the PDF.

You can for example check if the ink coverage is at least 300%.

When including images in the ink coverage check, the threshold will determine the minimum area in which the ink coverage has to be exceeded before reporting an error or warning. For example, when entering '0', even 1 dot exceeding the maximum ink coverage will be reported.

Related Actions

Select by ink coverage (basic object check) on page 366

5.3.70. Check layers

Belongs to

- **Category:** Layers
- **Type:** Checks

What it does

Checks the layers in a PDF.

You can set a number of different checks, such as:

- Document must not have layers, i.e. optional content is not allowed.
- The document catalog dictionary must not contain OCProperties key.
- Document must not have alternate layer configurations, i.e. only one Layers panel ("layers palette") is allowed.

- Layer configuration (i.e. the Layers panel) must have a name.
- Multiple layer configurations (i.e. Layers panels) must not have the *same* name.
- Layer group must not be missing from order, i.e. the Layer group must be present in the order of the Layer panel.
- Layer configuration (i.e. the Layers panel) must not contain application specific usage entry.

About PDF layers

Layered content usually comes from applications such as InDesign, AutoCAD or Visio. When converted to PDF, the layers are retained and can be viewed and navigated in Adobe Acrobat. However, if you print a PDF file that contains layers, only the content that is visible on-screen is printed. This may or may not be desired.

"Conventional" layers versus PDF layers

Layers in digital image editing ("conventional" layers) are used to separate the different elements of an image. Each element is drawn on exactly one layer. The different layers are stacked on top of each other, and the order of the layers defines how the image looks like.

Layers in PDF have a different meaning. They are used to hide or show page content:

- Turning *on* a layer, all objects on this layer are shown on-screen.
- Turning *off* a layer, all objects on this layer are hidden, i.e. they become invisible.

As such, layers are also called "optional content groups": groups of objects that can be selectively viewed or hidden by the author of the document. Objects can belong to different layers, and the order of the layers is of no importance.

To work with layers in a PDF document in Adobe Acrobat, select **View** > **Show/Hide** > **Navigation Panes** > **Layers**.

For more information, refer to the Adobe Acrobat help.

5.3.71. Check line weight

Belongs to

- **Category:** LineArt; Prepress
- **Type:** Checks

What it does

Checks if the line weight of the selected objects is higher or lower than a particular value.

Related Actions

- *Change line weight* on page 131
- *Select by line weight* on page 392

5.3.72. Check marked content

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Logs content that has been identified with a marked content tag in a PDF.

Marked content is content tagged with special messages so that the application that opens it can read it in a particular way.

Related Actions

Remove marked content on page 153

5.3.73. Check maximum path length

Belongs to

- **Category:** Line Art
- **Type:** Checks

What it does

Checks for a maximum amount of nodes in a path.

5.3.74. Check number of pages

Belongs to

- **Category:** Page;Doc
- **Type:** Checks

What it does

Checks the number of pages in a PDF.

You can for example check if there are less/more than x page(s), or if the PDF contains an odd/even number of pages ...

5.3.75. Check number of separations (total page check)

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks the number of separations that occur in a PDF file. You can set a precise number (e.g. 5 separations) or a range (e.g. less than 5) and choose whether or not to exclude certain colors (e.g. CMYK plates, spot color All ...). You can also use regular expressions to indicate which separations should not be counted.



Note: From PitStop 2019 onwards, you can exclude C, M, Y and K separately. This is useful when checking black and white jobs, or jobs that have K and a spot color.

You can check the number of separations for the complete document, or for each page separately. The new page-based option allows you to work with a selection, so you can check specific pages, page ranges or other page based selections, for example, you could check if every even page has two color separations.

Note that this option is also useful if you want to know on which page an issue occurs, because the page number is mentioned in the Preflight Report and in the Navigator.

Checking ICC tagged objects

ICC tagging is a way to specify colors independent from the output device: objects are tagged with an ICC profile that contains the transformation from the object's color to a device-independent color. When outputting this on a specific device, that device-independent color is in turn converted to the output device's color space.

Because this conversion depends on the output device, and because it will rarely (if ever) result in less than 4 color plates being used, checking the number of separations on an ICC tagged object will always result in 4 separations.

For example, if you have a black (100% K) ICC tagged object, the number of separations reported by this Action will be 4 (C, M, Y, K) instead of 1 (only K) because some ink will be used on all plates in order to reproduce the color correctly.

5.3.76. Check number of spot colors

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks the number of spot colors in a document.

You must enter the number of spot colors the document must have.

If you select the option **Spot colors whose names differ only by their suffix are counted as one**, spot colors with the same name but with a different suffix (e.g. PANTONE 3258 C, PANTONE 3258 U, PANTONE 3258 M) are counted as one color instead of different (3 in this example) colors. For more information about suffixes, refer to *Change spot color suffix* on page 86.

Note that spot color "All" is also counted. This spot color appears on all printing plates (hence the name) and is used for registration and printer marks that lie outside the trim and bleed boxes.

Related Actions

- *Check number of separations (total page check)* on page 263 (this Action has an option to not count Spot Color All)

5.3.77. Check object compression

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks the compression of the PDF structure (possible as of PDF 1.5).

You can also check if the compression is compliant with PDF/X.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to check if the PDF contains such compressed streams, which you can afterwards remove if required.

Related Actions

- *Remove object compression* on page 231
- *Check optimal compression* on page 283

5.3.78. Check OPI path

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

If your document contains objects with OPI information, you can use this Action to detect images that cannot be found in the location specified in the OPI pointer.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Change OPI info* on page 115
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

5.3.79. Check OPI type

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks which OPI types are allowed in a PDF.

You can check for the following OPI types:

- None
- 1.3
- 2.0
- both 1.3 and 2.0

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Change OPI info* on page 115
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

5.3.80. Check optimal compression

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Checks if the latest and most efficient compression mechanisms have been applied in the PDF document.

Previous versions of Adobe Acrobat (2.1, 3.0, 4.0) featured less advanced compression mechanisms.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to check if the PDF contains such compressed streams, which you can afterwards remove if required.

Related Actions

- *Check object compression* on page 276
- *Remove object compression* on page 231

5.3.81. Check Output Intent

Belongs to

- **Category:** Color

- **Type:** Checks

What it does

Checks if the desired color management Output Intent is used on page or document level. Note that the document can only have one Output Intent, whereas different pages in the document can have different Output Intents.

You can check for compliance with a particular PDF/X version and/or check if a particular ICC profile or ICC characterization is used.

Related Actions

Change Output Intent on page 85

5.3.82. Check page bleed box

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks and compares the size of the bleed box with the size of the trim or crop box.

As of PitStop 2022, you can indicate which side(s) should be checked (left, right, top or bottom). Also, you can enable **Mirror according to page binding**, a new option that, when selected, checks the inner and/or outer side instead of the left and/or the right side of the page. This is useful in case of books, where you may want to ignore the inner edge (which does not require bleed).

5.3.83. Check page boxes consistency

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if two different page boxes (if defined) have the same size and position.

You can either compare the trim and art box, or the trim and crop box.

5.3.84. Check page box layout

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks whether the page boxes comply with the selected layout (Press, Screen viewing or PDF/X layout).

The attributes depend on the chosen layout:

- **Press layout** (typically for print)

  If you select this layout, the Action derives the correct media size from the first page box that is present in the document. The order in which is searched, is fixed: first the art box, then the trim, crop, bleed and finally the media box.

  You can define the minimum distance required between the media and bleed box and between the bleed and trim box, and you should choose one of the following options:

  - **Crop box must equal trim box**, or
  - **No crop box must be defined or the crop box equals the media box**. This means that it is OK if the crop box is not defined, but if it is defined, it should have the same size and position as the media box.
- **Screen viewing**

  If you select this layout, the Action checks if the page is defined solely by the crop box, which should have the same size as the media box. No other page boxes are allowed.
- **PDF/X layout**

  If you select this layout, the Action checks if the page box layout is compliant with the selected PDF/X version.

  - If you have chosen PDF/X-1a:2003 or PDF/X-3:2003, the art box or trim box shall not extend beyond the boundaries of the bleed box and the crop box.
  - PDF/X-4 allows either a trim or an art box but forbids having both.
  - PDF/X-6 allows an art box, next to the mandatory trim box.

Related Actions

Change page box layout on page 167

5.3.85. Check page format

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Ensures that the media box is defined as being the width or height of a multiple of a particular measurement. This allows you to check whether the page size of your document fits your column and/or row layout.

Example

To set all your page boxes to a multiple of 22cm wide

1. Select **A multiple of columns**.
2. To have pages that are always multiples of 22 cm:

a. Enter 22 cm as column width.
b. Enter 0 as column spacing.

Related Actions

Change page format on page 168

5.3.86. Check page orientation

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks if all the pages in a PDF have a given orientation (portrait, landscape, all the same orientation or the most used orientation).

The orientation is based on the selected page box.

Related Actions

- *Change page orientation* on page 169
- *Select by page orientation* on page 413

5.3.87. Check page safe type zone

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks for text or objects that overlap or come close to an edge limit in a PDF.

The safe type zone is the area where you must not place any text or objects, unless these objects are intended as bleed.

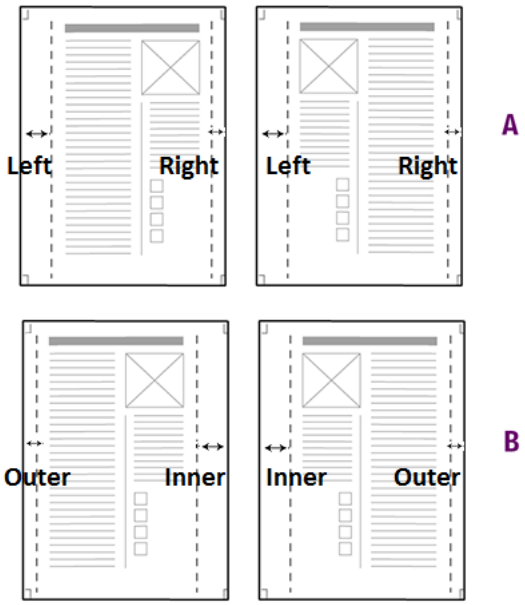
How to proceed

1. Define the safe type zone as one of the page boxes.
2. Optionally define values for the left, right, top and/or bottom margin.

3. To make sure that even and odd pages are mirrored, select **Mirror horizontal margins**. This is recommended if the left and right margin have a different size.

Figure 3: Mirror horizontal margins illustrated

A = ***Mirror horizontal margins*** *is not selected. Margins of odd and even pages are the same; the left margin is larger than the right margin.*
B = ***Mirror horizontal margins*** *is selected. Odd and even pages are mirrored; the outer margin is smaller than the inner margin.*



4. To only check for text in the page safe type zone, select the **Restrict this check to text** checkbox.

5.3.88. Check page size

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Allows you to check if the size or position of a specific page box matches the desired size or position.

How to proceed

1. Do one of the following:
   - To check the coordinates of the selected page box, select **Rectangle**.
   - To check the height and width of the selected page box, select **Size**.
2. Select the page box of which you want to check the size or position.
3. Enter the required values (coordinates or width and height).

4. In the **Precision** field, indicate how much the actual size or position is allowed to deviate from the entered values.

   A precision of 0 means that no deviation is allowed: the size or position needs to match exactly the entered values. For example, if you are checking for a height of 10 inch, even a very small difference (e.g. a page box height of 10.001 inch) will result in an error or warning.
5. Disable **Ignore page orientation** as required.

   When enabled (default setting), the smallest value is considered the width and the largest value is considered the height. When disabled, the page orientation is taken into account, meaning that the first value is considered the width and the second the height.

   Note: Action Lists upgraded from older versions (before this option was introduced) will have **Ignore page orientation** disabled. There's one exception: in Action Lists upgraded from version 17.1 to 2018, the checkbox will be *enabled*, and this may yield unexpected results. We advise reviewing such Action Lists before using them.

Related Actions

Select by page size on page 414

5.3.89. Check pages have same size

Belongs to

- **Category:** Page
- **Type:** Checks

What it does

Checks whether all pages in a PDF have the same size. The page size is based on the selected page box.

5.3.90. Check PDF/Acrobat compatibility

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Checks

What it does

Allows you to checks if a particular Acrobat or PDF version is used in a PDF document.

You can for example check if the Acrobat version is equal to or higher/lower than a particular version.

Note: As of PitStop 2020, you can check a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Note that the PDF version can be specified in 3 different locations (in the PDF header, in the document catalog and in the Adobe extension). If the versions are different, PitStop uses the

version from the Adobe extension. If there is no version specified in the Adobe extension, the header version or catalog version are considered, and the highest version number is taken.

5.3.91. Check PDF/X version key

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks the PDF/X version key.

Related Actions

- *Change PDF/X version key* on page 146

5.3.92. Check PDF/X viewer preferences

Belongs to

- **Category:** Doc
- **Type:** Checks

What it does

Checks if the PDF document complies with the viewer preferences as required by the PDF/X specifications.

PDF/X-1a:2001 and PDF/X-3:2002 have no special viewer requirements.

PDF/X-1a:2003, PDF/X-3:2003, PDF/X-4 and PDF/X-4p require the view area, view clip, print area and print clip to be set to the media (or bleed) box. If set to the bleed box, PDF/X-3:2003 requires that at least one page has a bleed box, whereas PDX/-4(p) requires that all pages have a bleed box.

PDF/X-6 and PDF/X-6p do not allow a view area, view clip, print area or print clip.

Related Actions

Make viewer preferences PDF/X compliant on page 102

5.3.93. Check rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Checks

What it does

Allows you to check the rendering intent of particular objects (Paths, Text, Paths or Text, Images, or all Rendering objects) in a PDF.

You can check whether or not they use rendering, and if they do, which type:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Change rendering intent* on page 86
- *Remove rendering intent* on page 96

5.3.94. Check required color set

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks for a restrictive range of tints in a PDF.

How to proceed

Define the color set to be checked:

1. To allow the use of 100% black, select **Black**.

   Note: If only black is allowed in the PDF, **only** select the **Black** checkbox. Do not add any other color.

2. To add another color that is allowed in the PDF:
   a. Click **New**. A new entry will appear in the text box.
   b. To allow a spot color (optionally), select the **Spot color** checkbox and type the name of the spot color in the text field. You should define a CMYK equivalent too (see next step). The name of the spot color will be shown in the text box.
   c. Enter the required values for CMYK (expressed in %) in the fields below the New/Remove button. Your changes will be shown in the text box.
3. If only one color should be used for images, select that color from the **Images must use only** list.

Related Actions

Snap color to color set on page 98

5.3.95. Check resolution

Belongs to

- **Category:** Image
- **Type:** Checks

What it does

Checks the resolution of particular image types (color or grayscale images, 1-bit images or any images) against a particular value, e.g. checks if the resolution is not more/less/... than x ppi.

This Action checks for the **effective** resolution; if the image has been resized, this is the resolution after scaling.

As of PitStop 2018 you can disregard any soft-mask images that are used in the PDF, by selecting the **Ignore soft-masks** option. The resolution of a soft-mask image can be lower than what it acceptable for images, but as this does not affect the end result, it's safe to exclude them from the resolution check.

Note that the log message also mentions the resolution of the matching images.

Related Actions

Select by image resolution on page 385

5.3.96. Check spot color by alternate color space

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Searches for spot colors with an alternate color space definition.

You can search for the following alternate color spaces:

- Device CMYK
- Device gray
- Device RGB
- ICC tagged gray
- ICC tagged RGB
- ICC tagged CMYK
- ICC tagged Lab
- Calibrated gray
- Calibrated RGB
- Lab

5.3.97. Check spot color by name

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks if one or more particular spot colors are present in the document.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the spot color name.
- From version 13 update 1 onwards, there is an extra option to search for spot color(s) based on a list of names. This new option is useful if different spot color names refer to the same color. It also allows you to check for different spot colors in one go.

How to proceed

In the attributes of the Check spot color Action, proceed as follows:

1. Select the appropriate option from the list:
   - If you choose **Check all spot colors**, no other options have to be set.
   - If you choose one of the other options, you have to specify the name of the spot color(s) that have to be checked. Proceed with step 2.
2. Enter the name of the spot color(s) concerned:
   - In case of **Check spot color by regular expression**, you can use regular expressions. PitStop supports Boost Regular Expressions. For an overview of the options, refer to *http://www.boost.org/doc/libs/1_55_0/libs/regex/doc/html/boost_regex/syntax/perl_syntax.html*.
   - In case of **Check spot color by name** or **Check spot color by name from list**, you can simply type the name of the spot color(s) concerned or use the color picker  or the Grab color button . Note that, in case of a list, you must enter the names one by one, each on a separate line. It is for example not possible to select two colors in the document, and select them in one go, using the Grab color button . Instead, you must select the first color, grab it, then select the second color, and grab it and so on.
3. If the case of the spot color name (upper or lower case letters) does not matter, select the **Ignore case** checkbox.

Related Actions

Select spot color on page 376

5.3.98. Check spot color suffix

Belongs to

- **Category:** Color
- **Type:** Checks

What it does

Checks whether the spot colors in the PDF have a given suffix. It's also possible to check for unknown suffixes.

You can find an overview of the available suffixes in the table below.

About spot color suffixes

Suffixes represent the **apparent** color of the color when printed on different types of paper. For example, PANTONE 3258 **C** and PANTONE 3258 **U** refer to the same color, but when printed on **c**oated, respectively **u**ncoated paper, they will look different, although the same ink formula was used.

Besides C (coated), U (uncoated) and M (matte), in software color palettes, you can find suffixes that refer to on-screen simulations of how colors will look when printed on different paper types. For example, PANTONE 3258 CVU is an on-screen indication of how PANTONE 3258 will look like when printed on uncoated paper.

Suffix overview

Suffix	Meaning
CV	Computer video (electronic simulation)
CVC	Computer video - coated
CVU	Computer video - uncoated
CVS	Process coated (old; now C)
CVP	Solid to process (old; now PC)
C	Coated paper
M	Matte paper
U	Uncoated paper
EC	Euro process simulation, coated paper
PC	Process simulation, coated paper
CP	Coated paper, process simulation (e.g. PANTONE 185 CP (used in PANTONE+ COLOR BRIDGE COATED)
UP	Uncoated paper, process simulation (e.g. PANTONE 185 UP (used in PANTONE+ COLOR BRIDGE UNCOATED)
HC	Hexachrome coated

Suffix	Meaning
TC	TC Textile Cotton
TCX	Textile Cotton eXtended
TP	Textile Paper
TPX	TPX Textile Paper eXtended
XGC	eXtended Gamut Coated

Related Actions

- *Change spot color suffix* on page 86

5.3.99. Check text point size

Belongs to

- **Category:** Text
- **Type:** Checks

What it does

Checks the text point size against a particular value.

Examples

Text point size must be equal to 5 pt.

To check the minimum text point size, select "Text point size must be more than or equal to ... pt" and enter the appropriate value.

5.3.100. Check thumbnails

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks if the PDF contains thumbnails.

5.3.101. Check Trapnets for PDF/X

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Checks whether trapnet information in a PDF is compliant with PDF/X-1, PDF/X-3 or PDF/X-6 standards.

About trapping

In printing, even the slightest misregistration of the plates can cause gaps or color shifts between colored objects to appear. **Trapping** is a technique that compensates for misregistration by expanding adjacent colored objects so that they overlap. Trapping can be performed by the source application, in the PDF, by dedicated trapping tools, or during the RIP-process.

If the traps in a document were added before the PDF document was created, they are included in the PDF file as **trap networks**. A page may have more than one trap network, e.g. one for each intended output device, but all the different trap networks are stored in the same trap network, also called **trapnet annotation**. When printed, the trapnet annotation provides all the required trapping information for the page.

About the PDF/X Requirements for trapping

When trapnet annotations are found in the document, **PDF/X-1a:2001** requires that:

- The **trapped flag** in the document is set to either True or False (Unknown is not allowed).
  - If the trapped flag is **False**, the document does not contain trapnet annotations.
  - If the trapped flag is **True**, the document is completely trapped, and the document contains trapnet annotations.
- **Font substitution** is not used.
- The **CMYK** color space is used.

When trapnet annotations are found in the document, **PDF/X-3:2002** requires that:

- Trapping occurs only when all the **fonts in the document are embedded**.
- The **CMYK** color space is used.

In **PDF/X-6 and PDF/X-6p**, trapnet annotations are not allowed.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Change trapped flag* on page 148

5.3.102. Check unused destinations

Belongs to

- **Category:** Metadata
- **Type:** Checks

What it does

Destinations identify locations or views in a PDF you can point to using bookmarks or links. As destinations increase the file size, you may want to check for and remove destinations that are not used.

This Action allows you to **verify** if there are any unused destinations in a PDF document.

The Action *Remove unused destinations* allows you to **remove** them from the PDF.

5.3.103. Check XY scaling difference

Belongs to

- **Category:** Position/Size
- **Type:** Checks

What it does

Checks the proportional scaling of a selected object.

If the XY scaling difference is 0%, the object is scaled proportionally, i.e. the height-to-width ratio is maintained. The object is enlarged or reduced both horizontally (X) and vertically (Y) with the same percentage.

In some cases, a small XY scaling difference is allowed, for example in line art (e.g. a rectangle in one color); in images this may cause distortions.

5.3.104. Clean up unused resources

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes resources that are not used, for example embedded images or fonts, to reduce the file size.

5.3.105. Close path

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Joins the connection between the first and the last anchor point of a path (as required).

5.3.106. Combine subpaths

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Combines two selected paths.

About subpaths

A path is considered the combination of the path itself which represents most graphic state properties such as color, line-weight, etc. and the subpaths which represent the lines. For example, a doughnut is a single path with a single fill and stroke color, which consists of two subpaths (=two circles).

Related Actions

- *Select subpaths* on page 396
- *Split in subpaths* on page 141

5.3.107. Convert alternate color space to CMYK

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the alternate color space for a spot to CMYK.

If you want to change all alternate color spaces except for gray, select the **Do not convert if alternate color space is gray** checkbox.

About alternate color spaces

The alternate color space is used as a 'backup' color space when the original spot color is not available on a specific output device, and when converting the spot color into CMYK. If this alternate color space is defined as anything other than CMYK or plain gray, the output results may not be up to standards.

5.3.108. Convert color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the color space of an object to gray, RGB, CMYK or a given spot color.

You can convert the fill and/or stroke color as required.

5.3.109. Convert images to indexed color space

Belongs to

- **Category:** Color;Image
- **Type:** Changes

What it does

Changes the color of images to the indexed color space.

About the indexed color space

The indexed color space uses no more than 256 colors, and is as such particularly suited for use in Web applications. Images are typically converted to indexed color mode in order to **decrease their file sizes**. When an image is converted to indexed color, a color lookup table is created, in which the colors that were used in the image are stored and indexed. Using an indexed color table lets you reduce the file size of an image while maintaining the visual quality that you need.

5.3.110. Convert process to DeviceN

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts all instances of device CMYK to DeviceN.

You must indicate what is most important to you:

- Reducing the number of color plates to a minimum, or
- Keeping the overprint settings

5.3.111. Convert spot color to equivalent CMYK color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Changes the color of a spot color object to its CMYK equivalents (for example to save on ink).

You can do this for all spot colors, or only for spot colors of which the alternate color is CMYK or Gray (less risk of getting small color variations).

5.3.112. Convert text to outlines

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to outline the text segments in your selection.

This means you turn the text characters into a set of compound paths. In other words, your text will no longer be a true font, but it will be replaced with a graphical representation of the characters. You can then for example change the fill or stroke color as required.

This can be useful to make sure that your text is printed exactly "as is" or, if you cannot embed the font, for example due to font licensing restrictions.



Note: By default, invalid characters (often represented as a small box containing an X or a question mark) are not converted, unless you select the **Outline invalid characters (.notdef glyph)** checkbox.

5.3.113. Create varnish

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Creates a varnish on top of the selected object.

This varnish is a user-defined spot color with the same shape of the selected object.

How to proceed?

Enter a name to recognize this spot color by, and indicate whether or not you wish to set it to overprint.

5.4. D

5.4.1. Duplicate top of selection stack

Belongs to

- **Category:** Operator

- **Type:** Selections

What it does

Duplicate top of selection stack is a logical operator. It is used to **duplicate** the top of the current Action list stack. It's typically combined with the *Remove top of selection stack* ("delete") operator.

For internal use only

Both "Duplicate top of selection stack" and *Remove top of selection stack* are only used internally by PitStop.

When running a Preflight Profile, PitStop turns this Profile into an Action List; the more checks and fixes there are in the Preflight Profile, the longer and more elaborate its Action List representation. In order to avoid having to perform complex selections multiple times, PitStop optimizes the internal Action List by duplicating these selections when they are needed multiple times.

5.5. E

5.5.1. Embed font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Embeds a selected font if it is available on the system of the machine PitStop is running on.

You can include the entire font or only embed a subset.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

- *Unembed font* on page 247
- *Select embedded fonts* on page 438
- *Check font embedding* on page 350

5.6. F

5.6.1. Flip content

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Flips the contents of a selected object horizontally or vertically.

You can flip the content relative to the center of one of the page boxes. Note that you can take page rotation into account as required.

Related Actions

- *Check for flipped objects* on page 338
- *Flip selection* on page 199

5.7. G

5.7.1. Gather color information

Belongs to

- **Category:** Color
- **Type:** Informs

What it does

Collects information about the color spaces used in a PDF and presents it in the log.

5.7.2. Gather filters information

Belongs to

- **Category:** Doc
- **Type:** Informs

What it does

Collects information about:

- The data format of the file (ASCII/binary)
- Whether or not compression is used
- The compression filters (if any), for example: ZIP, JPEG, LZW, ...

This information is presented in the Preflight Report under **General File Information** > **Compression**.

Related Actions

Check data format on page 271

Check contents compression on page 271

5.7.3. Gather font information

Belongs to

- **Category:** Text
- **Type:** Informs

What it does

Collects information about fonts used in a PDF and presents it in the log.

The following information is logged:

- Font Name
- Type
- Encoding
- Embedded
- Subset

5.7.4. Gather image information

Belongs to

- **Category:** Image
- **Type:** Informs

What it does

Collects information about the images used in a PDF and presents it in the log.

The following information is logged:

- Type
- Color Space
- Physical Resolution
- Effective Resolution
- Page found
- Angle
- Skew
- Flipped

- Custom Transfer
- Custom Halftone
- Custom BG (black generation)
- Custom UCR (undercolor removal definitions)

5.7.5. Gather OPI information

Belongs to

- **Category:** Image
- **Type:** Informs

What it does

Collects information about the OPI (Open Prepress Interface) used in a PDF and presents it in the log.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Change OPI info* on page 115
- *Remove OPI* on page 117
- *Select images with OPI info* on page 386

5.7.6. Gather Output Intent information

Belongs to

- **Category:** Doc
- **Type:** Informs

What it does

Collects information about the Output Intents used in a PDF document and presents it in the log.

In the report, you can find the following information (if Output Intents are used):

- ICC profile or ICC characterization name
- Registry name

- Additional information

5.7.7. Gather page box information

Belongs to

- **Category:** Page
- **Type:** Informs

What it does

Collects information about the page boxes used in a PDF document and presents it in the log.

In the report file (under Page boxes), each page box layout is represented by 2 drawings:

- One to show the page boxes that were defined in the document ("defined" page boxes)
- One to show the actual position of the page ("effective" page boxes).

Below these drawings, an overview of all page boxes and their sizes is listed:

- The pages this page box layout applies to
- The start position of the media box
- The page rotation
- The page scaling factor

5.7.8. Gather pages information

Belongs to

- **Category:** Metadata; Page
- **Type:** Informs

What it does

Collects information about the pages (number of pages and range) in a PDF and presents it in the log.

5.7.9. Group Actions

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Allows you to group several Actions within an Action List.

This Action is useful to organize and document your Action List.

Note: Instead of using the Group Actions Action, you can as well right-click an Action in the Action List and select **Make Group** from the context menu.

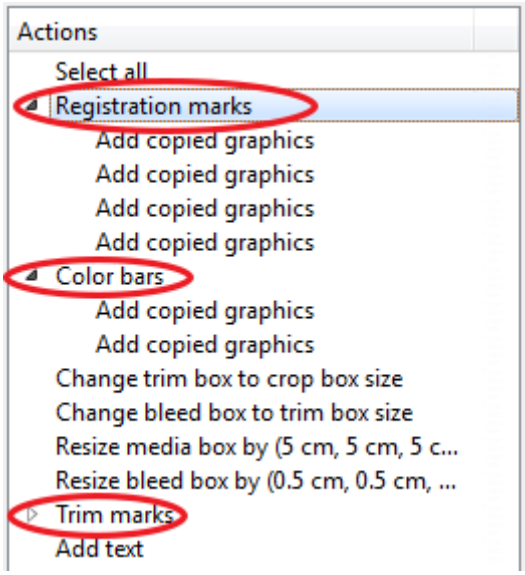
How to proceed

1. Double-click **Group Actions** to add it to the Action List.
2. Specify a meaningful name for your Action group and enter a description.
3. Move **Group Actions** to the desired position. You can drag and drop it, or use the options in the context menu (**Move Up**, **Move Down**).
4. Add the required Actions to your Action List and drag them to your group.

Example

The screenshot below shows the **Add my Printer Marks and Enlarge** Action List (by default provided with PitStop). This Action List contains 3 Action groups (preceded by an icon: ◢ if the group is expanded; ▷ if the group is collapsed):

- The **Registration marks** group contains the different Actions required to add registration marks to the top, bottom, left and right of the page.
- The **Color bars** group contains the Actions to create two color bars.
- The **Trim marks** group contains the Actions to set the trim marks (using *Add object* on page 65).



5.8. I

5.9. L

5.9.1. Log selection

Belongs to

- **Category:** General
- **Type:** Checks

What it does

Allows you to log the presence or absence of a selection you made with another Action in the same Action list.

This Action is useful if you want to check something for which no "Check" Action is available. For example, if you want to check if the PDF contains red text, you can first select all red text, and then use Log selection to display a message either if the document does or does not contain red text.

Note that you can also log the presence or absence of layers.

How to proceed

1. From the list at the top of the pane, choose the appropriate option:
   - To display a message if the selection was found, select *Log a message if* **objects are selected**.
   - To display a message if the selection was NOT found, select *Log a message if* **no objects are selected**.
2. Indicate whether or not the following information should be logged as well (if applicable):
   - The type of page and document objects
   - The annotation objects

   Note: By default, annotations aren't logged. Even if Log selection applies to a selection made by *Select annotations*, nothing will be logged, unless the **Report the annotation objects** checkbox is selected.
3. Enter the message that should appear in the Report if the selection was found/not found (depending on the choice made in step1).

   Note: You can configure different descriptions for different languages (for example: *JPEG images* in English versus *JPEG afbeeldingen* in Dutch). The language shown in the log file depends on the language (See **Edit** > **Preferences** > **Preferences**).
4. Select the desired log level.

   Note: In this case, it doesn't make sense to choose "Don't log", since the result of this Action is always shown in the Enfocus Navigator.

Example

To check for the presence of red text in a document, you could create the following Action List:

```
Select fill and stroke color
        <!-- Add Select color on page 370. Select fill and stroke and determine the
 color you want to check for, for example using the Grab fill and Grab stroke icon -->
Select text segments
        <!-- Select text segments on page 445 -->
AND
        <!-- AND on page 405 : necessary to combine the two previous Actions -->
Log selection
        <!-- Choose "Log a message if objects are selected".
             Configure an English message, for example "This document contains some
 text in red".
             Select "Log as warning". -->
```

If you run this Action List, all red text will be selected and logged as a warning. In the Enfocus Navigator, if you select an object in the Description field, you will see the description ("Red text") under Details. You will also find a warning in the Preflight Report (e.g. "This document contains some text in red (x times on pages y-z)").

Alternatively, if you only want a warning if no red text is found, in the attributes of **Log selection**, choose "Log a message if no objects are selected" and configure a message such as "This document does not contain any red text".

5.10. M

5.10.1. Make DeviceN without NChannel information

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Converts the color space to DeviceN without NChannel information.

About NChannel

NChannel is an extension of the DeviceN color space, a multi-component, device-dependent color space. NChannel color spaces give applications greater flexibility when representing colors that are not available on a target device.

NChannel is supported from PDF 1.6 (Acrobat 7.x) onwards. If you are opening a PDF in an earlier version of Adobe Acrobat, colors can print or display incorrectly.

About converting NChannel to DeviceN

This Action will convert NChannel to DeviceN, so the object looks as it will be printed when using devices not supporting PDF 1.6 features.

Note that there are three options. You can convert the color space to:

- **DeviceN**

- **NChannel with regular DeviceN color information only**
- **NChannel with color information additional to regular DeviceN**



Note: This Action will have no visual effect if all colors are available on the target device.

PitStop provides an Action List with the same functionality: Convert NChannel Color Space to DeviceN

Related Actions

- *Check for NChannel colors with non-trivial process dictionary* on page 256

5.10.2. Make mask

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Creates a mask from at least two selected objects (line art or text).

Related Actions

Release mask on page 225

5.10.3. Make viewer preferences PDF/X compliant

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Allows you to change the viewer preferences of the PDF document, to make them PDF/X compliant.

PDF/X-1a:2003 and PDF/X-3:2003 require the view area, view clip, print area and print clip to be set to the media (or bleed) box.

As of PitStop 2022 it's also possible to remove the viewer preferences (all or only the one(s) of your choice).

Related Actions

Check PDF/X viewer preferences on page 277

5.10.4. Move media box to 0.0

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Changes the coordinates of the media box, so that the lower left corner of the media box is located at coordinates 0,0. This won't change the way the file looks.

The media box is the largest page box and defines the size of the physical medium on which the page will be printed or displayed. Some applications don't give the lower left 0,0 coordinates, but for example 100,100, which will cause problems when preflighting the file.

5.10.5. Move objects into the page box

Belongs to

- **Category:** Page;Position/Size
- **Type:** Changes

What it does

Moves the selected objects into a particular page box.

You can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects out of the page box* on page 171

5.10.6. Move objects out of the page box

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the selected objects out of a particular page box.

You can can include annotations as required.

Related Actions

- *Move objects to corner* on page 201
- *Move objects into the page box* on page 171

5.10.7. Move objects to corner

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Moves the selected graphic elements to the defined corner of the selected page box.

How to proceed

Proceed as follows:

1. Select the anchor point of the object you want to use for positioning the object, for example "upper left".
2. Select the anchor point of the specified page box you want to use for positioning, for example "center".
3. Select the page box itself, for example "crop box".
4. Select the **Use page rotation** checkbox as required.

Example

To move the images in your document to the lower right corner of the page, without cutting off the images, use:

```
Select images
Move objects to corner
     <!-- settings (example): Place the lower right corner of the graphic elements
 relative to the lower right corner of the trim box -->
```

If you have chosen to place the center of the graphic elements relative to the lower right corner of the trim box, the center point of the image will be positioned on the lower right corner point of the trim box, meaning that the right hand side and lower half of the image will lie outside of the trim box.

Related Actions

- *Move objects out of the page box* on page 171
- *Move objects into the page box* on page 171

5.10.8. Move page content

Belongs to

- **Category:** Page; Position/Size

- **Type:** Changes

What it does

Moves the contents of a page in the preferred direction (horizontally or vertically) by the specified distance:

- A positive value, e.g. "1 cm" will move the content to the right (horizontally) or to the top of the page (vertically).
- A negative value, e.g. "-1 cm" will move the content to the left (horizontally) or to the bottom of the page (vertically).



Note: Remember that the unit used in Actions (in this example "cm") is defined in the Preferences (Units & Guides Category).

You can choose whether or not to take into account page rotation and scaling factor (if applicable).

5.10.9. Move page content to corner

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Moves the contents of a page to a chosen corner.

This Action does not center the object on the corner but moves the closest objects to that corner and moves the other objects by the same distance towards the corner (horizontally or vertically).

Example

To move the page content to the lower left

1. Select Move page content horizontally to **Left Side**.
2. Select Move page content vertically to **Bottom Side**.
3. Select the page box to be used as a reference, for example the **media box**.
4. Optionally, set **margins** to be added to the media box.
5. Select the **Use page rotation and scaling factor** checkbox, if page rotation and scaling factor should be taken into account.

5.11. N

5.11.1. NOT

Belongs to

- **Category:** Operators

- **Type:** Selections

What it does

NOT is a logical operator. It is used to exclude objects according to their attributes.

Example
To select all the text in a document that was not Arial, you need to exclude Arial from your selection.

```
Select Text
Select Font Arial
NOT <!-- NOT only applies to the immediately preceding item in the list of selections
 -->
AND
```

5.12. O

5.12.1. Open path

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Removes the connection between the first and the last anchor point of a path.

5.12.2. Optimize document structure

Belongs to

- **Category:** Document
- **Type:** Changes

What it does

Guarantees that the underlying document structure of your PDF is efficient, for example by improving the compression of the document as required.

5.12.3. OR

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

OR is a logical operator. It is used to select objects that share attributes.

Example

To select all text that is either Helvetica or Arial, use the following:

```
Select Font Helvetica
Select Font Arial
OR
```



Note: Do not use OR to exclude objects!

For example, the following will select all 12pt AND 14pt fonts:

```
Select Text if point size = 12.00 pt
Select Text if point size = 14.00 pt
OR
```

5.12.4. Overprint on all separations

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Ensures that if an object is set to overprint, it overprints on all separations. You can apply the overprint to the fill color and/or the stroke color.

The overprint rules in PDF are clearly defined but sometimes very surprising. For example, a gray object that is set to overprint will overprint on underlying Pantone colors, but it will not overprint on Cyan, Magenta and Yellow. This Action will ensure that the document will still print as Black, but with overprint on CMY.

5.12.5. Override color management settings

Belongs to

- **Category:** Color; General
- **Type:** Settings

What it does

Replaces any color management settings from the PDF Profile or general PitStop preferences with the settings defined here. These settings will be used when converting colors.

5.13. P

5.13.1. Put selection in form

Belongs to

- **Category:** Add
- **Type:** Changes

What it does

Allows you to gather all selected objects in a form (a so-called XObject form).

Forms are rectangular frames in a PDF document that contain objects. The way in which you edit these forms and the objects inside them is different from regular objects in a PDF document. For example, you can select a regular object and move it to a random position on the page in your PDF document. Objects in forms can only be moved inside the form and thus, you can use the form to crop the object.

Note that you can use PitStop's Edit Form tool in order to edit the form and the objects it contains.

5.14. R

5.14.1. Release mask

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes a selected mask.

In PitStop masks refer to clipping paths, i.e. objects (line art or text) of which the shape (partly) masks other artwork. Only areas inside the clipping objects are visible. This Action allows you to remove the mask, so that the different objects become visible again.

Related Actions

Make mask on page 225

5.14.2. Remap alternate color space to CMYK

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Remaps the alternate color spaces of the chosen spot colors to the preferred CMYK values.

How to proceed

1. To add the spot colors of which you want to remap the alternate color space, do one of the following:
   - To select the desired spot color from the list of spot colors (Spot color picker)
     1. Click .
     2. Select the preferred spot color and click **OK**. The selected color is shown in the table, with the corresponding CMYK values.
   - To define a new spot color
     1. Click the **Add New Color** button.
     2. In the table, in the first column (Name), replace "Color name" with the name of the new spot color.
   - To select the desired spot color from the Spot library picker
     1. Click the **Add Colors** button.
     2. Select the preferred spot color and click **OK**. The selected color is shown in the table, with the corresponding CMYK values.
2. Add or change the CMYK values as required.
3. To remove colors from the table
   - Use the **Remove All** button, or
   - Select a color and click  to remove only the selected color.

5.14.3. Remap color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Remap color is a complex but powerful Action that allows the remapping of colors from one color space to another.

For each color in the document you can specify whether or not you want to map it to another color (by means of "remapping rules"), and whether or not the overprint settings should change.

Note:

- Use the **Analyze page** or **Analyze document** buttons to get an overview of the colors in the document being processed.
- To change a remapping rule, click **Change** and make the required changes; to add a new one, click **Add**.
- Keep in mind that the order of the rules is important. You can change the order by selecting a rule and clicking **Up** or **Down**. The rules are evaluated from top to bottom. Every matching rule is executed, until a matching rule is found that is set to Keep for both To and Overprint. In that case, no further rules are evaluated (see also example 2 below).
- You can remap colors, color spaces, color ranges and channels.

New in PitStop 2022

When mapping Device Gray to Device CMYK, you can now disable color management by selecting the **Force gray to keep same intensity** checkbox. That way, the gray value will only be mapped to the black component of the CMYK color space. In other words, the Gray brightness becomes equivalent K screen value.

Example: 30% gray will be remapped to 70% K, instead of a mix of C, M, Y and K.

Example 1

Suppose you have a CMYK PDF that you want to print in a single spot color, MySpot.cv.

To remap all the colors to this spot:

1. Under Attributes for Remap color, select the row that mentions **All other** and click **Change**.
2. In the **Color Remap Rule** popup, under **To:**, select **Color**.
3. Select the repository color MySpot.cv. You should have specified this color earlier in PitStop.
4. Select the desired overprint setting:
   - **Keep** the overprint settings as they are, do not change.
   - Enable overprint: **On**
   - Disable overprint: **Off**
5. Click **OK**.

To remap everything except, for example, 100% black text and objects to the selected target color MySpot.cv, you need a slightly more elaborated action:

1. Click **Add**.
2. Under **Remap**, select **Color** and **Device CMYK**.
3. Set the values to: C 0% M 0% Y 0% K 100%.
4. Under **To:**, select **Keep**.

5. Select the desired overprint setting.
6. Click **OK**.
7. Select **Add**.
8. In the **Color Remap Rule** popup, under **Remap**, select **Device CMYK**.
9. Under **To:**, select **Color**.
10. Select the repository color MySpot.cv. You should have specified this color earlier in PitStop.
11. Click **OK**.

The above Actions must be performed in the correct order. Under **Attributes for Remap color**, you should have three lines:

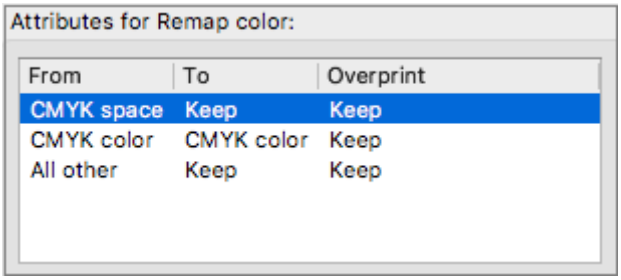
- The rule for "keep 100% Black" at the top
- Then the rule for "remap to MySpot.cv"
- "All other" at the bottom

Example 2

Suppose your document contains a rectangle in CMYK (100K).

When running the below Action, the rectangle won't be remapped: it will remain 100K, because of the first rule (= keep the color space). As a consequence, the other rules won't be checked anymore.

If the first rule would be removed (or placed at the bottom), the color of the rectangle would be remapped from 100K to 100C.



5.14.4. Remap spot color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to remap all spot colors in a document, or one particular spot color to:

- Gray
- The color's CMYK equivalent
- A custom CMYK equivalent
- Another spot color

You can apply the Action to either the fill or stroke color, or to both.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the color that should be remapped.
- From version 2021 onwards, you can use variables to define the CMYK values.

5.14.5. Remove action dictionaries

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes action dictionaries ("actions") from a PDF.

About action dictionaries

Action dictionaries are actions that are executed when you click a bookmark or a link, hover over an annotation, open a file ... There are several types of actions, e.g. a music track can be played, a specific page or website can opened ...

You may want to remove these actions, as they are not allowed in a PDF/X file. The Remove action dictionaries Action will only remove the **action**; the object (the bookmark, annotation) the actions are linked to will not be removed. For example, if you remove the action from a bookmark, the bookmark is still visible, but not clickable anymore.

Related Actions

Check for action dictionaries on page 305

5.14.6. Remove alternate images

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Removes alternate images from a PDF.

If you are working with PDFs that contain very high resolution images and render slowly on screen, you can speed up rendering by adding alternate images and then clicking the PitStop **Speed Up Image Display** button (available in the Enfocus View Modes toolbar (Acrobat 8 and 9) or the PitStop View Panel (Acrobat X and XI)).

As these alternate images are not necessary for print, you may use this Action to remove them and only keep one version. You have three options:

- **Default for printing** only preserves the images that are marked "default for printing" (recommended if you know that the alternate images have been correctly marked for printing)

- **Lowest resolution** only preserves the version with the lowest resolution, regardless of the printing setting (best for print production)
- **Highest resolution** only preserves the version with the highest resolution, regardless of the printing setting (best for on-screen viewing)

Related Actions

- *Check for alternate images* on page 285
- *Select by alternate images* on page 384
- *Add alternate images* on page 112

5.14.7. Remove alternative blend modes

Belongs to

- **Category:** PDF 2.0, Prepress, Remove
- **Type:** Changes
- **New since:** PitStop 2022

What it does

Removes alternative blend modes in case of multiple blend modes, because using multiple blend modes is deprecated in PDF 2.0. Only the first blend mode is kept.

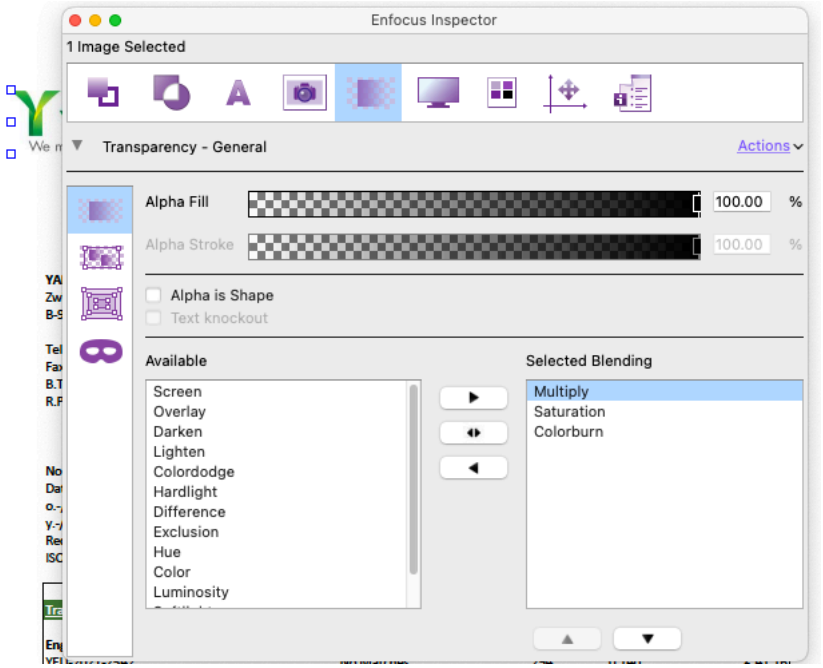
Note that you can check the blend modes using the PitStop Inspector (Transparency - General).

Blend modes determine how colors on different layers blend with each other. For more information about blend modes, visit the Adobe website (*http://www.adobe.com*) or refer to the Help or documentation of your design application (Adobe InDesign, QuarkXPress, ...)

Example

In this example, three blend modes are selected: Multiply, Saturation and Colorburn.

Running this Action will remove Saturation and Colorburn and only keep the first blend mode in the list: Multiply.



Note: As of PitStop 2022, it will no longer be possible to add multiple blend modes to a selected object using the Enfocus Inpector. However, if an object already has multiple blend modes, they will still be shown.

Related Actions

- *Select by blend modes* on page 431
- *Check for non-standard blend modes* on page 345

5.14.8. Remove black generation

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Allows you to remove black generation settings.

Black generation is a custom setting that tries to replace CMYK-mixed blacks and grays with a greater percentage of black to save on colored ink and give a clearer black. As many printers prefer to set these settings themselves, they can use this Action to remove them from a PDF.

Related Actions

Check for custom black generation on page 343

5.14.9. Remove bleed box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the bleed box from a PDF.

The bleed box delimits the size the area beyond the final cut size of a document onto which ink may be printed in order to provide a bleed effect (which is where ink goes right to the edge of the page). A bleed box is not essential to a PDF's structure and may be removed.

5.14.10. Remove Certified PDF workflow information

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes Certified PDF workflow information from a PDF.

Certified PDF workflow information is extra information that is added to a PDF when it's processed as part of an Enfocus Certified PDF workflow. This information can include save states of previous versions, a PDF Profile and other metadata.

For more information and examples, refer to *the Reference Guide* (Chapter: Working with Certified PDF documents).

Related Actions

See also *Check Certified PDF state* on page 270

5.14.11. Remove crop box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the crop box from a PDF.

The crop box is the PDF page box that defines the frame of a PDF as it is displayed on screen. If you remove this box, the PDF will display at Media Box size.

5.14.12. Remove custom transfer function

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Remove a custom transfer function applied to an object in a PDF.

Transfer functions are used for creative purposes, artistic effect and to correct the characteristics of a specific, maybe poorly calibrated, output device. For example, a file that is intended for output on a particular image setter may contain transfer functions that compensate for the dot gain inherent to that printer.



Note: Transfer functions are not allowed in PDF/X compliant documents.

Related Actions

- *Apply transfer function* on page 83
- *Remove custom transfer function* on page 226

5.14.13. Remove empty page

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Deletes any pages in a PDF document that contain no objects.

You can specify that elements outside of a specific page box should be ignored. This way you can make sure that pages containing only registration marks (which are graphic elements outside the visible or printable page area, i.e. the trim box) are considered empty.

You can also ignore visually empty pages (i.e. paper-white and invisible (fully transparent) objects).



Tip: When you've removed the empty pages, check whether the page numbering is still consistent. If necessary, you can correct the page numbering using *Add page number* on page 66. Also check other references to page numbers such as the table of contents, the index or cross-references. If these page numbers are incorrect, you will need to update your source files and create a new PDF document.

Related Actions

- *Check for empty pages* on page 319

- *Select empty pages* on page 415

5.14.14. Remove file specification from streams

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Removes links to embedded or external files from PDF streams.

PDF streams are holders of large amounts of data, such as image pixels, page contents, embedded fonts, etc. In some instances, the streams do not contain the data inside the PDF but point to embedded or even external files. This Action will remove the link to these files.

5.14.15. Remove form fields

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes any PDF form fields from a document.

You may lose data if you do this.

Related Actions

- *Check form fields* on page 304

5.14.16. Remove halftone

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any custom halftone information from a document.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Custom halftones are mostly used for screening frequency and angles.

Associated with every output device is a default halftone definition that is appropriate for that device. Only relatively sophisticated documents need to define their own halftones to achieve special effects. In general, when a PDF document provides its own halftone specifications, it

sacrifices portability: they may lead to unpredictable printed output when the same document is sent to different printers. This is why they are generally undesirable.

Related Actions

Check for custom halftone on page 344

5.14.17. Remove halftone phase

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes all halftone phases from a PDF document.

A halftone phase is a shift in the alignment of halftone and pattern cells in device space, to compensate for window system operations that involve scrolling. It is no longer used, but may still be found in documents containing artwork from older source applications.



Note: It may be interesting to remove halftone phases, because halftone curves, when defined, overrule general transfer curves.

Related Actions

Check halftone phase on page 342

5.14.18. Remove ICC tag

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Removes the ICC tags either from the selected objects or from the whole document (if no selection is defined). You can remove the ICC tags from fill and/or stroke colors as required.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

In some workflows, e.g. without color management, ICC profiles are unwanted and may cause inconsistent color reproduction. In that case, you can use this Action to remove the ICC tags.

Related Actions

- *Check ICC tagging* on page 258
- *Tag object with an ICC profile* on page 99
- *Check ICC profile version* on page 259

5.14.19. Remove invisible objects without fill and stroke

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes objects that have no fill or stroke color associated with them.

Designers sometimes leave such objects in a document rather than deleting them.

Related Actions

- *Check for invisible objects without fill and stroke* on page 280
- *Select invisible objects without fill and stroke* on page 382

5.14.20. Remove Javascript

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes JavaScript code (which might perform unwanted actions) from a PDF.

This language is often used to add interactive functionality to PDF files. However, in a print production environment, these scripts serve no purpose and may result in increased file sizes.

Related Actions

Check for Javascript on page 306

5.14.21. Remove marked content

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Strips PDF generator defined content from a PDF.

Marked content is content tagged with special messages so that the application that opens it can read it in a particular way.

Related Actions

Check marked content on page 311

5.14.22. Remove metadata

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Removes the selected metadata from a PDF. This is typically done to reduce the file size.

You can remove the following types of metadata:

- Annotations
- Thumbnails
- Article threads
- Page labels
- Acrobat capture info
- Bookmarks
- Structural information (= removes all tags, including Tagged PDF tags)
- PieceInfo
- Job ticket
- Named destinations (includes annotations and bookmarks)
- Metadata streams (to reduce the size of the file) - new option since PitStop 13 update 2



Note: In PitStop 2019, the 'Remove structural information' checkbox has been split up into two separate checkboxes: 'Structural information' and 'PieceInfo'. Action Lists from earlier versions with 'Remove structural information' enabled, will have both checkboxes selected.

5.14.23. Remove non-PDF/X compliant halftone

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any instances of halftones that are not compliant with the PDF/X specification.

Halftoning is a method of printing shades using a single color ink. By varying the size or density of dots, the eye can see a shade somewhere between the solid color and the color of the background paper. Some of these halftones are not allowed according to the PDF/X specification, which is why you might want to remove them.

Related Actions

Check for non-PDF/X compliant halftone on page 345

5.14.24. Remove object compression

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes the object compression from a PDF.

About object compression

In a PDF, objects have content streams that define (a part of) the object. These content streams can be compressed in order to create smaller files, so this is mostly used if a PDF is to be put on a website. As older RIPS may have problems with this compression, this Action allows you to remove this compression.

Related Actions

- *Check object compression* on page 276
- *Check optimal compression* on page 283

5.14.25. Remove OPI

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Removes OPI (Open Prepress Interface) information from a PDF.

OPI images are treated special as they are assumed to be preview images. They will for example not be preflighted as other images would be. If you don't use OPI in your workflow, run this Action to remove irrelevant OPI information and get correct editing and preflighting of documents.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Change OPI info* on page 115
- *Select images with OPI info* on page 386

5.14.26. Remove page scaling factor

Belongs to

- **Category:** Page; Position and size
- **Type:** Changes

What it does

Removes the page scaling factor an reverts the page to its original size.

A page of 10 by 10 inches and a page scaling factor 2 will be displayed and printed as a page of 20 by 20 inches. By removing the page scaling factor, the page size will be at 10 by 10 inches again.

Page scaling has been introduced in PDF 1.6. If the page scaling factor is not removed or applied, the page size can only be displayed correctly in Acrobat 7 or higher.

Related Actions

- *Check if page scaling factor is used* on page 323
- *Apply page scaling factor* on page 163

5.14.27. Remove PostScript

Belongs to

- **Category:** General
- **Type:** Changes

What it does

Removes all fragments of embedded PostScript in a PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

See also

- *Check for embedded PostScript fragments* on page 279
- *Select embedded PostScript fragments* on page 381

5.14.28. Remove rendering intent

Belongs to

- **Category:** Color; Prepress
- **Type:** Changes

What it does

Strips rendering intents from color managed objects in a PDF.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Select by rendering intent* on page 367
- *Check rendering intent* on page 265
- *Change rendering intent* on page 86

5.14.29. Remove selection

Belongs to

- **Category:** Remove
- **Type:** Changes

What it does

Removes any currently selected object in a PDF.

Note: If forms are selected (for example with the "Select forms" Action), they are not removed, unless they are empty.

5.14.30. Remove top of selection stack

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Deletes the top of the current Action list stack. It's typically combined with the *Duplicate top of selection stack* operator.

For internal use only

Both "Remove top of selection stack" and *Duplicate top of selection stack* are only used internally by PitStop.

When running a Preflight Profile, PitStop turns this Profile into an Action List; the more checks and fixes there are in the Preflight Profile, the longer and more elaborate its Action List representation. In order to avoid having to perform complex selections multiple times, PitStop optimizes the internal Action List by duplicating these selections when they are needed multiple times.

5.14.31. Remove transparency

Belongs to

- **Category:** Remove; Prepress
- **Type:** Changes

What it does

Removes transparency from the objects in a PDF file.

You can remove transparency from **all** objects in the PDF, or from objects for which:

- Fill is set to overprint, and/or
- Stroke is set to overprint, and/or
- Spot colors are used.



Note: As of PitStop 2022, this Action also removes transparent annotations.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341

- *Select pages with transparent objects* on page 418
- *Select transparent objects* on page 435
- *Change transparency* on page 221

5.14.32. Remove trim box

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Removes the trim box from a PDF document. The trim box defines the final cut size of a printed PDF document.

5.14.33. Remove undercolor removal

Belongs to

- **Category:** Prepress
- **Type:** Changes

What it does

Removes any custom undercolor removal information from a PDF.

Undercolor removal is the process of removing large percentages of cyan (C), magenta (M), and yellow (Y) ink prior to printing, and replacing them with black (K) ink, in order to achieve a clearer black color in print, and to save on color inks.

Related Actions

Check for custom undercolor removal on page 345

5.14.34. Remove unused destinations

Belongs to

- **Category:** Metadata
- **Type:** Changes

What it does

Destinations identify locations or views in a PDF you can point to using bookmarks or links. As destinations increase the file size, you may want to remove the destinations that are not used, to reduce the file size.

See also: *Check unused destinations* on page 314

5.14.35. Rename spot color

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

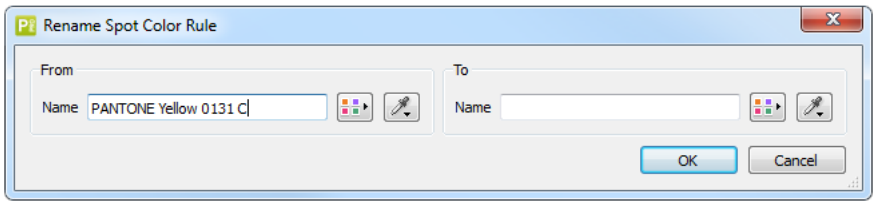
Allows you to change the name of spot colors in a document.

Note: From version 12 update 2 onwards, you can use regular expressions to define the source and target color. This is useful to rename variants of the same color, e.g. to rename “Varnish0”, “Varnish1”, “Varnish23” (i.e. "Varnish" followed by one or more digits) to “Varnish” (without any digits). To do so, build a rule that renames "Varnish([0-9])+" to "Varnish".

How to proceed

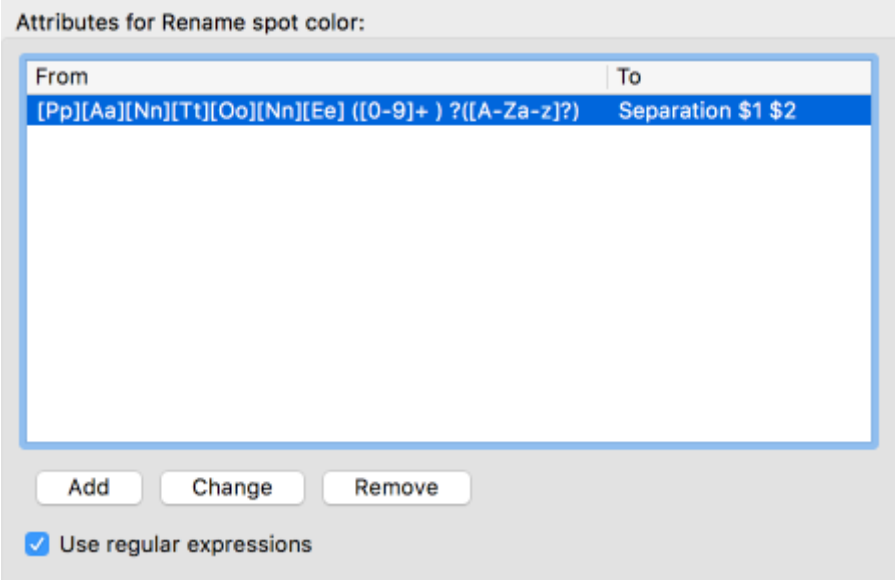
To rename one or more spot colors in a document

1. Select **Rename spot color**.
2. Optionally, select the **Use regular expressions** checkbox.
3. Click **Add**.
4. In the Rename **Spot Color Rule** dialog:
   - In the left part (under **From**), enter the name of the spot color that should be renamed.
   - In the right part (under **To**), enter a new name for the selected spot color.



5. Click **OK**.
6. To create another rule (i.e. to rename another spot color), repeat steps 3-5.

Example



The above rule will rename *Pantone* to *Separation* in spot color names like Pantone 0123 U (which will then become Separation 0123 U).

5.14.36. Resample image

Belongs to

- **Category:** Image
- **Type:** Changes

What it does

Resamples, i.e. changes the resolution of the selected image(s).

How to proceed

1. Select the preferred resampling or interpolation method:
   - **Average Resampling**: computes the average pixel color of the pixels in the sample area, and replaces the entire area with this average.
   - **Bicubic resampling**: calculates the values of the new dots on the basis of a weighted average of the pixels in the same area.
   - **Bicubic B-Spline resampling**: is a modified bicubic interpolation with more sharpening effects and is recommended for upsampling.
   - **Bilinear resampling**: uses weighted interpolation between 4 pixels in the original image.

   Note: Bicubic gives the best result for photographs (but takes the longest to compute).
2. Enter the preferred resolution, for example 72 ppi for screen viewing.

3. To only resample images with a resolution below a particular threshold, select the **Resample above ... ppi** checkbox and enter a value.

   For example, if you enter 150 ppi, only images with a resolution above 150 ppi will be resampled.

5.14.37. Rotate content

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Rotates the page content at a particular angle around a particular point.

You could for example rotate the page content at an angle of 90° relative to the center of the media box.

You can choose whether or not to take into account page rotation.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate object* on page 204
- *Rotate objects as group* on page 204

5.14.38. Rotate object

Belongs to

- **Category:** Position/Size
- **Type:** Changes

What it does

Rotates an object at a certain amount of degrees around a particular point.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate content* on page 178
- *Rotate objects as group* on page 204

5.14.39. Rotate objects as group

Belongs to

- **Category:** Position/Size

- **Type:** Changes

What it does

Rotates a selection of objects at a particular angle around a particular point.

You could for example rotate the selection around the center of the media box at an angle of 90 degrees.

Note: Rotating objects as a group means that all of the selected objects act as one large object during the rotation.

How to proceed

1. Select what specific place in the page box you want to use as the rotation point (center, lower left ...).
2. Specify the page box of your choice or choose "selection bounding box" or "visible area of selection". This last option is relevant if part of a selected image has been clipped away.
3. Define the rotation angle.
4. Select the **Use page rotation** checkbox as required.

Related Actions

- *Check for rotated objects* on page 338
- *Rotate content* on page 178
- *Rotate object* on page 204

5.14.40. Rotate page

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Allows you to set page rotation to -90, 0, 90 or 180 degrees (clockwise).

Related Actions

Rotate content on page 178

5.15. S

5.15.1. Scale page content

Belongs to

- **Category:** Page;Position/Size

- **Type:** Changes

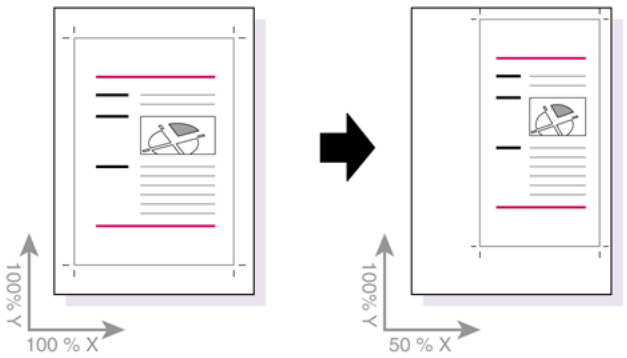
What it does

Scales page content along the X and/or Y axis by a certain percentage.

Note: If you want to scale the page content proportionally, you need to specify the same values for X and Y.

Example

Suppose you have an A4-size PDF document (210 x 297 mm). You want to keep the page size “as is”, but need to make the page content narrower. You also wish to move the page content to the upper right corner of the crop box.



How to proceed

1. Enter the preferred scaling percentage for the X and Y axis.
2. Do one of the following:
   - To define an anchor point, select **Anchored at**.
   - To define the target position of the page contents, select **Moving page content to**.
3. Define the anchor point or target position, for example (anchored at/moving to) the upper right of the crop box.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

5.15.2. Scale page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Scales the page content to fit the size of a particular page box. You can add extra margins, if necessary.

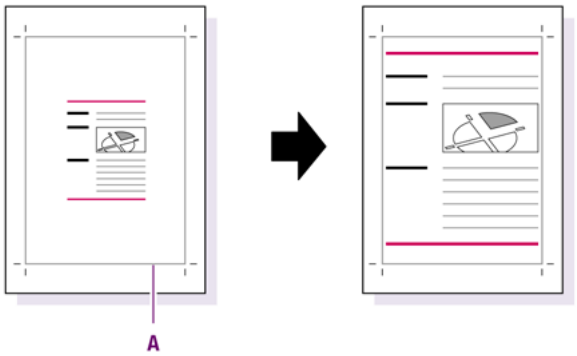
You should also define the target position of the page content inside the page box, e.g. "page content should move to the upper right".

You can choose whether or not to take into account the page rotation and scaling factor.

Scaling is by default restricted to the visible elements of the page (unless you clear the **Use only visible part of content** checkbox), to avoid that hidden content leads to incorrect results.

Example

In the example below, the page content is scaled to fit the size of the trim box (A).



Related Actions

- *Scale page content* on page 179
- *Scale to fit page size* on page 181
- *Shrink page content to fit* on page 183

5.15.3. Scale to fit page size

Belongs to

- **Category:** Position/Size; Page
- **Type:** Changes

What it does

Scales all page boxes (and optionally all page content as well) until the specified page box fits the target size.

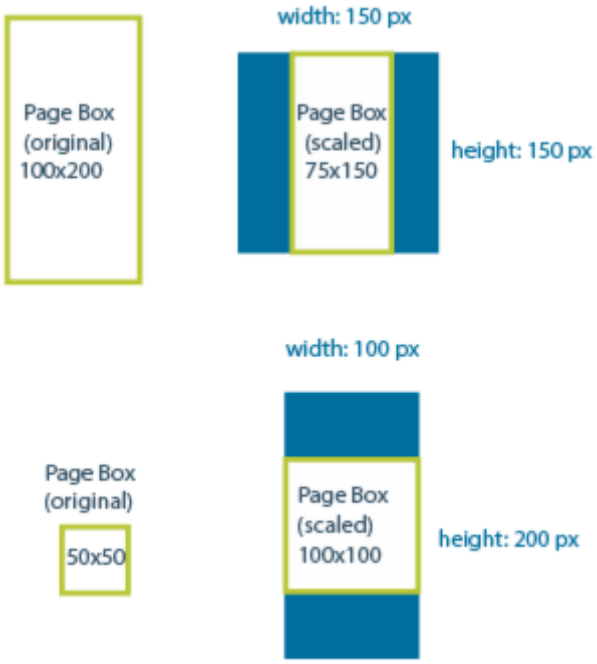
The target size should be specified by defining the target width and height either as a value, a percentage of the original value or proportionally relative to the other dimension.

Note that for both the page content and the page boxes you can separately decide whether or not to scale proportionally to match the target page size.

Remark

In case of proportional scaling (=default, **Allow non-proportional scaling** checkbox NOT selected), it may happen that the requested target width and height cannot be achieved without changing the aspect ratio; in that case, the target size serves as a frame in which the resized page box should fit.

For example, if the original page box is a rectangle and the requested width and height result in a square, the page box will be scaled to fit in the square (and vice versa). See the image below; the blue object represents the requested target dimensions.



Related Actions

- *Scale page content to fit* on page 180
- *Scale page content* on page 179
- *Shrink page content to fit* on page 183

5.15.4. Select all

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Allows you to select every object in a PDF document.

Example

To delete every object in a PDF:

```
Select all
Remove selection
```

Remark

Note that objects that are clipped away (hence are invisible) are selected as well. If you don't want this, we recommend removing them first. You can use *Select objects that are completely clipped away* on page 428 and *Remove selection* on page 233 to do so.

5.15.5. Select annotations

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations of a particular type in a PDF document.

Example

To delete all annotations of the type "Movie" and "Sound" in a PDF, configure the following Action List:

```
Select annotations <!-- select Movie and Sound -->
Remove selection
```

5.15.6. Select annotations by print setting

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations based on their print setting.

Example

To select all printing annotations and remove them

```
Select annotations by print setting <!--Option: Select annotations if set to print -->
Remove selection
```

To select all printing annotations and set them to non-printing

```
Select annotations by print setting <!-- Option: Select annotations if set to print --
>
Change annotations' print setting <!-- Option: Set annotation to Non-Printing -->
```

See also: *Change annotations print setting* on page 142

5.15.7. Select by alternate images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects either **all images with alternates** or **all images with alternates that are default for printing**.

An alternate can be a high resolution version of an image that is used in the PDF to preview the image on screen. If you want to make sure that the correct image is set to print, choose **all images with alternates that are default for printing**.

Related Actions

- *Add alternate images* on page 112
- *Check for alternate images* on page 285
- *Remove alternate images* on page 116

5.15.8. Select by binding

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows the selection of a PDF based on its binding (left-edge or right-edge binding).

Most European language documents are bound on the left.



Note: To check a document's binding, in Adobe Acrobat, go to **File** > **Properties** and switch to the **Advanced** tab. The document's binding property (Left Edge or Right Edge) is displayed under Reading Options.

Related Actions

- *Check binding* on page 300
- *Change binding* on page 143

5.15.9. Select by blending color space

Belongs to

- **Category:** Color; Page
- **Type:** Selections

What it does

Makes a selection based on the blending color space.

You must set the required blending color space and the required luminosity softmask blending color (or select the option **Undefined**).

About blending color spaces

When Adobe Acrobat interprets transparent objects and attempts to create a preview of the flattened artwork, it needs to do so using a single color space for all the items involved in the transparency group. This color space is called the **blending color space**.

The blending color space for soft masks (masks with soft transitions) is called the **luminosity softmask blending color space**. It is usually gray.

Related Actions

- *Change blending color space* on page 85
- *Check if blending color space is defined* on page 261

5.15.10. Select by color space

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects line art (fill and/or stroke) and/or other objects according to their color space.

Example

To select all ICC line art, proceed as follows:

```
Select by color space
<!-- Options:
1. Select both Fill and stroke color space.
2. For both, select "ICC tagged". Optionally, indicate the preferred number of color
 components.
3. Make sure the checkbox under Other objects is cleared
-->
```

```
Log selection
```

5.15.11. Select by document encoding

Belongs to

- **Category:** Doc
- **Type:** Selections

What it does
Selects a document based on its encoding (binary or ASCII).

About document encoding

ASCII encoding was formerly required to ensure that PDF files could be safely transported via e-mail or the Internet. However, most e-mail software in use today handles non-ASCII documents normally, eliminating the need to ASCII-encode your document.

ASCII versus Binary encoding

ASCII encoding may increase the file size, but allows you to edit the file manually.

Binary encoding makes the file smaller, but does not allow you to edit the file manually.

Related Actions

- *Check data format* on page 271
- *Change document encoding* on page 100

5.15.12. Select by document info

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows you to make selections based on document info, such as the title, subject, author, keywords, producer or creator of the PDF. You can specify where the information must be taken from, and what the expected value is.

Note: From version 12 update 2 onwards, you can use regular expressions to define the value in the **Compare with** field (if you select **Equals/Does not equal** as operator method).

Example

Suppose you want to select a document of which the author is Anne Banks. It doesn't matter where this information is taken from.

Attributes:

- Document info: author
- Read value from: any metadata location



Note: If you select **Both metadata locations**, the name of the author will be searched for in both the XMP metadata stream and the info dictionary; if you select **Most recent metadata location**, only the most recently changed metadata location will be checked.

- Operator method: equals
- Compare with: Anne Banks

If you are not sure about the spelling of the name *Anne* (spelled Ann or Anne?), you could select the **Use regular expressions** checkbox and enter "Ann(e)? Banks" in the **Compare with** field.

Related Actions

- *Change document info* on page 143
- *Check document info* on page 301

5.15.13. Select by graphic state attributes

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects based on their graphic state attributes.

You can select one of the following object types:

- Objects with non-PDF/X-1 compliant halftone info
- Objects with transfer function info
- Objects with halftone info
- None

Viewing the graphic state attributes of an object

Proceed as follows:

1. Select the object, using the PitStop Select Objects tool .
2. Click to display the Enfocus Inspector.
3. Select (**Prepress**) > (General) or (**Halftone**).

Related Actions

- *Check for non-PDF/X compliant halftone* on page 345
- *Check for custom transfer function* on page 344

5.15.14. Select by ICC tag subtype

Belongs to

- **Category:** Color

- **Type:** Selections

What it does

Allows to make a distinction between ICC-based RGB, ICC-based gray and ICC-based Lab.

Related Actions

- *Check color type* on page 254

5.15.15. Select by image resolution

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Makes a selection of images based on their resolution, for example all images with a resolution between 320 and 400 ppi.

You can select all images, or limit your selection to color or gray scale images, or to monocolor images only.



Note: This Action checks for the **effective** resolution; if the image has been resized, this is the resolution after scaling.

Related Actions

Check resolution on page 290

5.15.16. Select by ink coverage (basic object check)

Belongs to

- **Category:** Color; Prepress
- **Type:** Selections

What it does

Makes a selection of all objects that meet your ink coverage criteria.

You can for example select objects only if the ink coverage is at least 300%.

When including images in this selection, the threshold will determine the minimum area in which the ink coverage criteria have to be met in order to be selected. E.g. when entering '0', even an image of which only 1 dot meets the ink coverage requirement will be selected.

Related Actions

Check ink coverage (basic object check) on page 262

5.15.17. Select by intersecting bounding boxes

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Selects the objects defined by a first selection, that overlap the objects defined by a second selection (within the same Action List).

In order to define the first and second selection, this Action needs to be preceded by 2 other selection Actions.

Example

Suppose you have two magenta filled line art objects and two yellow filled line art objects. One of the two magenta objects physically overlaps 1 of the 2 yellow objects; that's the object you want to select and log.

To do so, proceed as follows:

```
Select color <!-- settings: Fill - CMYK - 100% M -->
Select color <!-- settings: Fill - CMYK - 100% Y -->
Select by intersecting bounding boxes
Log selection <!-- Choose user-defined text, for example: Magenta objects overlapping
 yellow objects have been found -->
```

5.15.18. Select by line weight

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Selects objects with a particular line weight.

For example, select objects with line weight *less than 0.0123* inch.

Related Actions

- *Select by line weight* on page 392

- *Check line weight* on page 296

5.15.19. Select by number of color plates

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects that occur on a certain number of color plates (separations). You can make the selection based on the object's fill and/or stroke.

Example

You could for example search for objects with 4 color plates (dark gray), and afterwards change gray to CMYK Black. This will reduce the number of plates from 4 plates to 1 plate.

```
Select by number of color plates <!-- Choose 4 -->
Change Gray to CMYK Black <!-- Change Gray to CMYK Black on page 84 -->
```

Related Actions

Check number of color plates (basic object check) on page 263

5.15.20. Select by overprint

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Selects objects based on the overprint mode of their fill and/or stroke.

How to proceed

Proceed as follows:

1. To select objects based on their fill/stroke overprint, select the corresponding checkbox. For example, to select object based on the overprint mode of their stroke, select **Stroke overprint**.
2. Indicate whether overprint must be enabled or disabled for the options selected in step 1, by clicking the buttons.
   -  Overprint is off.
   -  Overprint is on.



Tip: Check the Actions field, to see if the Action is configured appropriately. For example, if you selected the Stroke overprint checkbox and clicked the button next to it, the name of the Action should change into "Select if stroke overprint is off."

Related Actions

- *Check if object is set to overprint* on page 343
- *Change overprint* on page 219

5.15.21. Select by overprint mode

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects based on the overprint mode of their fill and/or stroke color.

About overprint modes

- In **Standard overprint mode** (OPM 0), the tint value 0 of one of the CMYK inks in the foreground object has a knockout effect on the color rendering of the underlying object. In other words, a foreground ink with a C, M, Y or K value of 0 % erases the corresponding background ink. Here, the “foreground inks win” principle applies.
- In **Illustrator overprint mode** (OPM 1), the tint value 0 is neutral: it is ignored (as if it were “not specified”) and has therefore no effect on the color rendering of the underlying object.

Related Actions

- *Change overprint mode* on page 220

5.15.22. Select by page orientation

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages by orientation.

Choose either Portrait, Landscape, Same orientation or Most used orientation to select all pages with this orientation, and select the page box the orientation must be based on.

Related Actions

- *Change page orientation* on page 169

- *Check page orientation* on page 327

5.15.23. Select by page size

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select pages based on the size of one of the page boxes.

You can for example select pages with a trim box of 21x29 cm.

The precision indicates how much the actual size is allowed to differ from the specified size. A precision of 0 means that no deviation is allowed: the size needs to match exactly the entered values.

Related Actions

Check page size on page 329

5.15.24. Select by PDF version

Belongs to

- **Category:** Metadata, PDF 2.0
- **Type:** Selections

What it does

Allows you to make a selection based on the PDF's Acrobat or PDF version.

The Acrobat version is the sum of the two numbers that make up the PDF version, for example: PDF 1.4 = Acrobat 5. This is not true anymore for PDF 2.0, as from this version onwards there is no link anymore between the Acrobat and the PDF version.



Note: As of PitStop 2020, you can select a PDF 1.7 by its extension level (Adobe Extension 1, 3, 5, 6 or 8). For more details concerning the extensions, refer to *https://www.adobe.com/devnet/pdf/pdf_reference.html*.

Example

To select PDFs with Acrobat version higher than 7.0, proceed as follows:

```
Select by PDF version <!-- options: Acrobat version must be more than 7.0 -->
```

Related Actions

- *Change PDF version* on page 145
- *Check PDF/Acrobat compatibility* on page 311

5.15.25. Select by rendering intent

Belongs to

- **Category:** Color;Prepress
- **Type:** Selections

What it does

Selects color managed objects based on a particular rendering intent.

You can select paths, text, images, or all rendering objects, with one of the the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. 'Remapping' means that colors from one output device's color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96
- *Select rendering objects* on page 388

5.15.26. Select by trapped flag

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Allows the selection of a PDF based on the value of the trapped flag.

About trapping

The trapped flag indicates whether or not a file has been "trapped", i.e. has been corrected for slight color misregistrations. The trapped flag must be defined in PDF/X documents.

The flag can be set to:

- **True**: the document has been trapped, or the creator of the document has decided that it should not be trapped.
- **False**: the document has not been trapped

- **Unknown**: it's not known whether or not the document has been trapped. Note that this status should be avoided.

The trapped flag is stored in the info dictionary and/or in the XMP metadata stream, but the data can be inconsistent; that's why you must indicate where the trapped flag must be taken from, e.g. from the most recent metadata location.

Related Actions

- *Check document trapped flag* on page 303
- *Select by trapped flag* on page 401
- *Check Trapnets for PDF/X* on page 313

5.15.27. Select clipping and non-clipping text

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all text segments, even if they have been clipped and are not visible anymore.

Tip: If you want to select non-clipping text only, you can use *Select text segments*.

5.15.28. Select color

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects objects by their fill or stroke color, or both.

How to proceed

Define the colors you want to select as follows:

1. Select the appropriate checkbox, depending on what you want to define (Fill color or Stroke color).

   Note: If both checkboxes are selected, objects that match both fill and stroke colors will be selected. This is equivalent to combining separate actions with the AND operator.

2. Select the appropriate color in one of the following ways:

   a. Select an object with the PitStop Select Objects tool and use the icon to grab the fill or stroke color (depending on what you're defining).

b. Click the color picker icon  and select the appropriate color.

c. Select the required color space:

- Device colors can be Gray, RGB or CMYK
- Calibrated colors can be Gray or RGB
- User Swatch (= user-defined colors)

3. Fine tune the color by moving the sliders.

5.15.29. Select color range

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select objects with a specific color, by specifying the color range of the fill and/or stroke color.

The available options depend on the chosen color space:

- Gray, CMYK or RGB: **search in converted values of other color spaces** (If selected, the result of the conversion is calculated in advance.)
- Separations: You can decide to select either all spot colors or only the spot colors with a particular name. You can type the name or click the **Load Spot Color** button to select it.
- DeviceN process colors: **allow spot colors in DeviceN color space**

Example

To catch all gray objects (either fill or stroke) with a brightness between 0% and 40 %, and turn them into CMYK objects with 100% Cyan color, you can do the following:

```
Select gray fill or stroke color
<!-- This is the "Select color range" Action with the options Fill and Stroke
 selected.
Select "Color space is gray", and in the Gray from field, enter values between 0% and
 40% -->
Change fill and stroke color
<!-- This is the "Change color" Action with Fill and Stroke selected.
Select "Device CMYK" and set Cyan to 100% -->
```

5.15.30. Select default color spaces

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select default color spaces or default color spaces that are not defined by PDF/X-3.

Default color spaces are defined on page level. They are used to systematically remap device-specific colors to device-independent colors.

Note: PitStop also provides an Action to ***change*** *default color spaces*.

5.15.31. Select embedded fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select all embedded or unembedded fonts in a PDF document.

The selection of embedded fonts includes OpenType embedded fonts.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Related Actions

- *Check font embedding* on page 350
- *Unembed font* on page 247
- *Check embedded font is OpenType* on page 349

5.15.32. Select embedded PostScript fragments

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects all fragments of embedded PostScript in the PDF document.

Embedded PostScript fragments do not show up in the screen preview, but could change the appearance of the printed document. They are generally undesirable in a print production environment.

Related Actions

- *Check for embedded PostScript fragments* on page 279
- *Remove PostScript* on page 111

5.15.33. Select empty pages

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects pages in a PDF document that contain no objects.

You can specify that elements outside of a specific page box should be ignored and/or visually empty pages (paper-white and invisible (fully transparent) objects).

Related Actions

- *Check for empty pages* on page 319
- *Remove empty page* on page 175

5.15.34. Select external hyperlink annotations

Belongs to

- **Category:** Metadata
- **Type:** Selections

What it does

Selects annotations with external links to other files, applications and/or web Pages embedded in a PDF document.



Tip: You can check the validity of the links with *Check external hyperlink annotations* on page 304.

5.15.35. Select flatness

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select objects with a flatness setting equal to or higher/lower than a certain value.

The default setting to produce a smooth curve is 1. A value higher than 1 can produce a jaggy edge; lower than 1 can slow down the RIP.

Example
If the curves in a PDF are showing visible line segments, try the following to solve the problem:

```
Select flatness <!-- Option: Select objects with a flatness higher than 1.0 -->
Change flatness <!-- Option: Change flatness to 1.00 -->
```

Related Actions

- *Check flatness* on page 341
- *Change flatness* on page 130

5.15.36. Select fonts by name

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select all the fonts with a particular name.

Note: From version 12 update 2 onwards, you can use regular expressions to define the font name.

Example

To select all the Times, Arial, Helvetica and Courier fonts in a PDF, you could use the following sequence of Actions:

```
Select font Times
Select font Arial
OR
Select font Helvetica
OR
Select font Courier
OR
```

5.15.37. Select fonts by type

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects text using a particular font type.

You can select one of the following font types:

- TrueType
- Type1
- Type3
- Multiple Master
- Composite TT
- Composite T1
- Composite (all types)

About types of fonts

Example

For example, to unembed TrueType fonts without unembedding any other font types, do the following:

```
Select TrueType fonts
Unembed font <!-- See Unembed font on page 247 -->
```

Related Actions

Check font type on page 352

5.15.38. Select fonts that can be emulated

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects fonts that can be emulated.

Fonts that can be emulated are fonts that can be represented on screen, even if the font is unavailable on your system and even though it has not been embedded. If you are certain the document only needs to be viewed on screen, and will not be printed, fonts that can be emulated do not need to be embedded. This makes your PDF lighter, for example for distribution on the internet.

Example

To select fonts and then unembed them:

```
Select fonts that can be emulated
Unembed font <!-- See Unembed font on page 247 -->
```

5.15.39. Select forms

Belongs to

- **Category:** General

- **Type:** Selections

What it does

Allows you to select all forms in a PDF document.

Forms are rectangular frames in a PDF wich contain objects, for example an image or a placed PDF.

Example

To select all forms and log them as an error:

```
Select forms
Log selection <!-- enter "Forms were found in this document" and select "Log as error"
 at the bottom -->
```

Related Actions

- *Log selection* on page 284

5.15.40. Select image by filter type

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select images according to the compression type they use.

You can choose one or more of the following filters:

- ASCII hex
- CCITT
- ZIP
- RunLength
- JPEG2000
- ASCII 85
- JPEG
- LZW
- JBIG2

Optionally, you can also include soft-mask images (of the chosen filter types) in your selection (i.e. the images that mask an image). These are not included by default.

5.15.41. Select image type

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Allows you to select a particular type of images.

You can select one of the following image types:

- 1-Bit images
- Grayscale images
- Color images
- Stencil mask
- Indexed images

Example

The following will convert color images to Grayscale but will not alter Black & White images:

```
Select image type <!-- In the popup, select Color -->
Convert color <!-- In the popup, select Grayscale -->
```

5.15.42. Select images

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects all the images in a PDF document.

Example

The following selects everything in a PDF except for the images:

```
Select all
Select images
NOT
AND
```

5.15.43. Select images with OPI info

Belongs to

- **Category:** Image
- **Type:** Selections

What it does

Selects all the images in a PDF document that contain OPI (Open Prepress Interface) information.

OPI images are treated special as they are assumed to be preview images. They will for example not be preflighted as other images would be.

About OPI

OPI (Open Prepress Interfaces) replaces high resolution images with "preview" images; low resolution substitutes which are stored in the PDF, together with the path to the high resolution images. This facilitates data storage and data transfer of PDFs with a large number of images.

Example

The following finds any such images and logs them as a caution:

```
Select images with OPI info
Log selection <!-- In the field, type your message (ex. 'Images with OPI comments were
 found in this PDF'), then select Log as warning at the bottom -->
```

Related Actions

- *Check OPI path* on page 289
- *Check OPI type* on page 289
- *Gather OPI information* on page 359
- *Remove OPI* on page 117
- *Change OPI info* on page 115

5.15.44. Select invisible objects without fill and stroke

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects objects that have no fill or stroke color associated with them. Even though these objects are not visible in the document, you might want to remove them.

Related Actions

- *Select objects that use neither stroke nor fill* on page 393 (same functionality)
- *Check for invisible objects without fill and stroke* on page 280
- *Remove invisible objects without fill and stroke* on page 231

5.15.45. Select last added objects

Belongs to

- **Category:** Operator
- **Type:** Selections

What it does

Selects the objects that were added recently (in the same Action List).

This Action must be preceded by an Action of the type "Add".

Example

The following Action List will first add graphics to the PDF. The added graphics will then be selected and used by the third Action.

```
Add copied graphics <!-- Add copied graphics on page 63 -->
Select last added objects
Check XY scaling difference  <!-- Check XY scaling difference on page 341 -->
```

5.15.46. Select line art

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Allows you to select objects that are drawn as line art (i.e. vector and not raster).

5.15.47. Select non-compliant Output Intent

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects the whole document if the Output Intent is:

- **Not compliant** with a particular PDF/X or PDF/A version, OR
- **Compliant** with a particular PDF/X or PDF/A version, **but the ICC profile or ICC characterization is not as specified**.

You can check the compliance with the following PDF/X versions:

- PDF/X-1a:2001
- PDF/X-3:2002
- PDF/X-1a:2003
- PDF/X-3:2003
- PDF/X-4
- PDF/X-4p
- PDF/X-6
- PDF/X-6p
- PDF/A-1

- PDF/A-2

5.15.48. Select objects if page is selected

Belongs to

- **Category:** Page
- **Type:** Selections

What it does
Allows you to select all objects on the selected page(s).

5.15.49. Select objects inside or outside region

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Makes a selection across pages defined by a user-defined area or by PDF page boxes.

This is useful to select (and afterwards remove or move) objects that lay outside the trim box, hence will not be printed.

How to proceed

1. Define the area inside or outside which the objects should be selected. Choose on of the following options:
   - **Define the region relative to the lower left of the media box**: You can manually enter the values of the X and Y axis (the anchor point) and the height and with (the size) of the area, or grab them by clicking the icon . Note that you can grab them from a selection or from a page box.
   - **Use** (one of the page boxes): You can choose one of the page boxes, the printing area or either the art or trim box, depending on what's defined (option **the art box (if defined) or trim box**).
   - **Use region relative to page box**: You can specify the exact location of the area to check, for example "place the center left of the region relative to the center right of the bleed box with a particular offset, height and width".
2. Indicate which objects relative to the defined area should be selected, for example the objects inside or overlapping the region.
3. Indicate whether or not annotations and clipping paths should be included in the selection.
4. If applicable, choose whether or not to take into account page rotation and scaling factor.

Example

To select any objects that lay outside of the trim box and delete them, you could use the following:

```
Select objects inside or outside region <!-- Select "Use trim box" and "Select objects
 outside region"  -->
Remove selection
```

5.15.50. Select objects that are completely clipped away

Belongs to

- **Category:** Position and Size
- **Type:** Selections

What it does

Allows you to select objects that are hidden ("clipped away") by other objects of which the shape masks the artwork.

Optionally, you can include invisible objects that belong to this form.

5.15.51. Select objects that use neither stroke nor fill

Belongs to

- **Category:** LineArt;Text
- **Type:** Selections

What it does

Selects vector or path objects that contain no stroke or fill color value in a PDF.

Related Actions

Select invisible objects without fill and stroke on page 382 (same functionality)

5.15.52. Select OpenType embedded fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all embedded fonts that are OpenType, or alternatively, all embedded fonts that are not OpenType.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

About OpenType embedded fonts

OpenType is an extension of the TrueType format that can contain TrueType and/or Type 1 font data. In PDF files it can only appear as an embedded font. It has been introduced in PDF 1.6.

Example

To search for all OpenType fonts and then unembed them, proceed as follows:

```
Select embedded fonts that are OpenType
Unembed font
```

Related Actions

- *Check embedded font is OpenType* on page 349
- *Unembed font* on page 247

5.15.53. Select page by its page box properties

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select a number of pages based on one of the following criteria:

- Whether or not a certain page box is defined.
- The fact that the crop or art box differs from the trim box.
- The fact that a certain page box lies (partially) outside of the media box.
- The fact that the size of the bleed box is not sufficient compared to the trim or crop box.

  This allows you to detect pages of which the page boxes are not well defined.

5.15.54. Select page if content is selected

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Allows you to select a page if the content is selected.

You can select or both the page object and the entire page content.

How to proceed

1. Specify **what** you want to select:
   - The page object only, or
   - Both the page object and the entire page content.
2. Specify on what **condition** you want to select it, for example if more than one objects are selected.

5.15.55. Select pages

Belongs to

- **Category:** Page
- **Type:** Selections

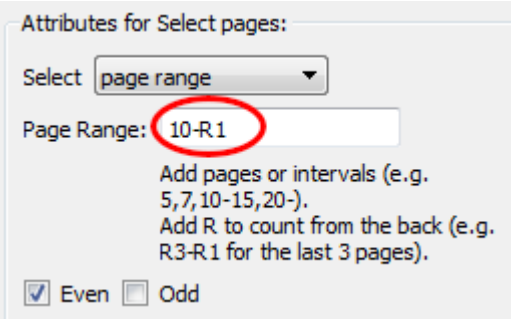
What it does

Allows you to select a particular page, a set of pages, or a page range, for example the first or last page of a PDF, all odd pages, pages from 1 to 5, ...

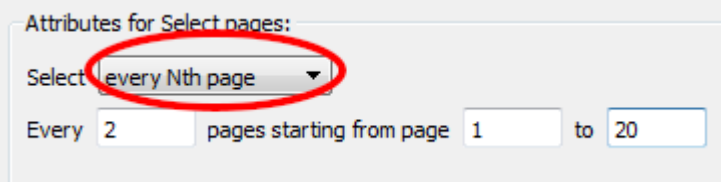
You can also make a selection based on the *number of pages* in the PDF, for example: Select if number of pages is not a multiple of 10.

New options added in 13 update 1

- **Rn notation** allowed in page range selection. If you want to add pages starting from the end of the PDF, you can use this notation in the **Page range** text box. R1 refers to the last page (= 1 page from the end), R2 refers to the last but one (= 2 pages from the end), ...



- **Extra option to select every Nth page**, e.g. every second page in the PDF in the first 20 pages of the PDF.



Example

To select every page but the first page of a PDF, and then add a copied graphic to that page, proceed as follows:

```
Select all pages <!-- Choose: Select all pages, Even and Odd -->
Select first page <!-- Choose: Select first page, Even and Odd -->
NOT
AND
Add copied graphics <!-- See Add copied graphics on page 63 -->
```

5.15.56. Select pages with PieceInfo

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Searches for pages containing PieceInfo.

This can for example apply to pages coming from Illustrator, containing Illustrator PieceInfo. If a PDF contains PieceInfo, it was saved with editing capabilities from applications such as Illustrator, which may be lost if you edit the PDF with another application.

Removing PieceInfo will make the file smaller, but it won't be possible anymore to import the document in Illustrator.

5.15.57. Select pages with transparent objects

Belongs to

- **Category:** Page
- **Type:** Selections

What it does

Selects pages containing transparency.

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Remove transparency* on page 228
- *Select transparent objects* on page 435
- *Change transparency* on page 221

5.15.58. Select rendering objects

Belongs to

- **Category:** LineArt;Text;Image
- **Type:** Selections

What it does

Selects all objects with a rendering intent.

This includes paths, text and images with any of the following rendering intents:

- Absolute Colorimetric
- Relative Colorimetric
- Perceptual
- Saturation



Note: This Action does not allow you to make a selection based on **one particular** rendering intent. To select objects by **one** of the listed rendering intents, use *Select by rendering intent* on page 367.

About rendering intents

A rendering intent is a remapping method, allowing to remap colors so that they best match the intended use. ‘Remapping’ means that colors from one output device’s color space are mapped to the color space of another device.

Related Actions

- *Change rendering intent* on page 86
- *Check rendering intent* on page 265
- *Remove rendering intent* on page 96

- *Select by rendering intent* on page 367

5.15.59. Select shading objects

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects all shading objects.

Shadings represent complex mathematical functions. That's why certain output devices may not be able to correctly interpret them. Shadings can also cause problems during color conversions.

Note: As of PitStop 7, shadings can be color converted.

5.15.60. Select size

Belongs to

- **Category:** Position/Size
- **Type:** Selections

What it does

Allows you to select any object in a PDF of which the height or width is less than, equal to, or greater than a certain size.

You can choose whether or not to take into account page rotation and scaling factor.

5.15.61. Select spot color

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Allows you to select either all spot colors in a PDF file, or one or more particular colors, based on their names.

Note:

- From version 12 update 2 onwards, you can use regular expressions to define the spot color name.
- From version 13 update 1 onwards, there is an extra option to select a spot color based on a list of names. This new option is useful if different spot color names refer to the

same color, so you can easily run a fix on objects with differently named spot colors. It also allows you to select different spot colors in one go.
- From version 2018 onwards, you can select spot colors by a Pantone Library.

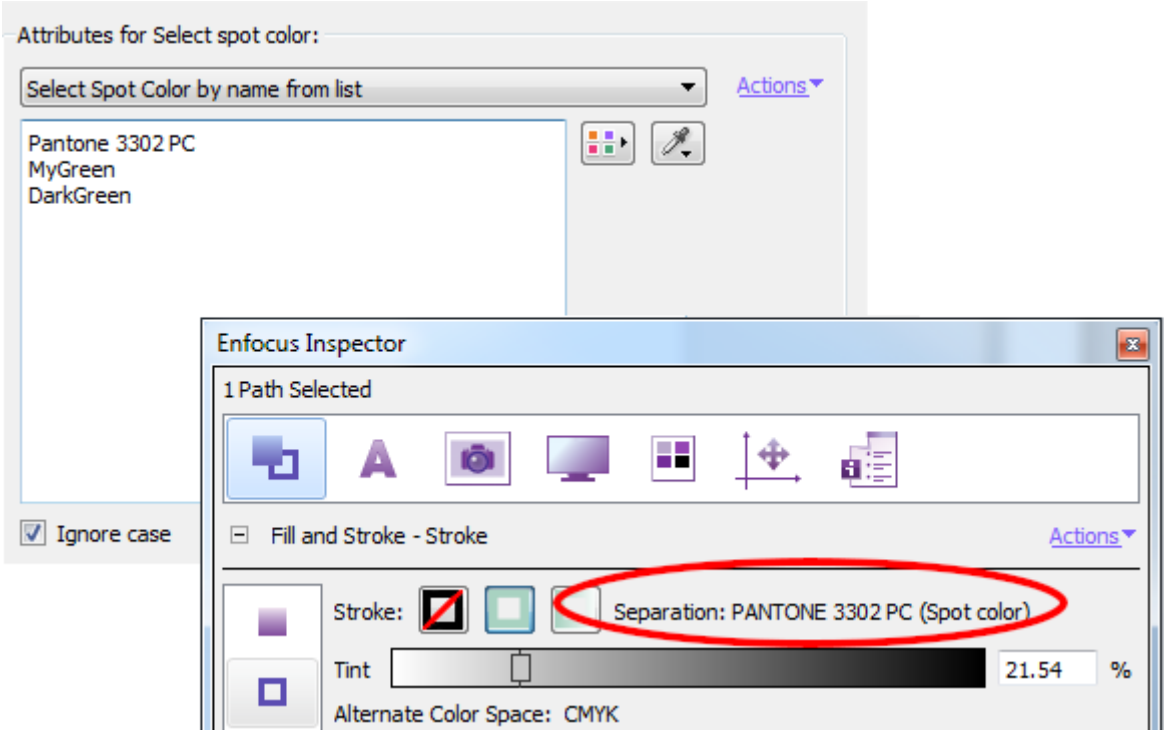
How to proceed

In the attributes of the Select spot color Action, proceed as follows:

1. Select the appropriate option from the list:
   - If you choose **Select all spot colors**, no other options have to be set.
   - If you choose **Select Spot Color by PANTONE color library**, you should select the library of your choice from another list that is displayed.

     You can further reduce your selection based on the alternate color values:
     - Ignore the alternate color values
     - Select only colors with correct alternate color values
     - Select only colors with wrong alternate color values
   - If you choose one of the other options, you have to specify the name of the spot color(s) that have to be selected. Proceed with step 2.
2. Enter the name of the spot color(s) concerned:
   - In case of **Select spot color by regular expression**, you can use regular expressions. PitStop supports Boost Regular Expressions. For an overview of the options, refer to *http://www.boost.org/doc/libs/1_55_0/libs/regex/doc/html/boost_regex/syntax/perl_syntax.html*.
   - In case of **Select spot color by name** or **Select spot color by name from list**, you can simply type the name of the spot color(s) concerned or use the color picker  or the Grab color button . Note that, in case of a list, you must enter the names one by one, each on a separate line. It is for example not possible to select two colors in the document, and select them in one go, using the Grab color button . Instead, you must select the first color, grab it, then select the second color, and grab it and so on.
3. If the spot color should be selected regardless of its case (upper or lower case letters), select the **Ignore case** checkbox.

Example



In this example, PitStop will search for three different spot color names (Pantone 3302 PC, MyGreen, DarkGreen, not taking into account the case of the names), which may (or may not) refer to the same color. Suppose the document contains a spot color called "PANTONE 3302 PC", then it will be found and selected.

Related Actions

- *Check spot color by name* on page 267
- *Check spot color by PANTONE library* on page 267

5.15.62. Select spot color by alternate color space

Belongs to

- **Category:** Color
- **Type:** Selections

What it does

Selects spot colors based on their alternate color space.

For example, select a spot color if its alternate color space is ICC tagged RGB or Device RGB.

Example

To convert a spot color's alternate color space to another color space, for example CMYK, proceed as follows:

```
Select spot color by alternate color space <!-- select the appropriate alternate color
 space(s) -->
```

```
Convert alternate color space to CMYK  <!-- (See Convert alternate color space to CMYK
 on page 87) -->
```

5.15.63. Select standard 14 fonts

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects the standard 14 PostScript fonts.

The 14 fonts are automatically installed with Adobe Acrobat and embedded by default (since PDF 1.5).

Example

To save on file size, you could select these fonts and unembed them. Proceed as follows:

```
Select standard 14 fonts
Unembed font <!-- Unembed font on page 247-->
```

5.15.64. Select subpaths

Belongs to

- **Category:** Line Art
- **Type:** Selections

What it does

Selects the subpaths if the entire path is selected.

About subpaths

A path is considered the combination of the path itself which represents most graphic state properties such as color, line-weight, etc. and the subpaths which represent the lines. For example, a doughnut is a single path with a single fill and stroke color, which consists of two subpaths (=two circles).

Related Actions

- *Combine subpaths* on page 132
- *Split in subpaths* on page 141

5.15.65. Select subset fonts

Belongs to

- **Category:** Text

- **Type:** Selections

What it does

Selects fonts that are subsetted.

If a font is subsetted, only the characters of the font that are actually used in the text are embedded in the document. This is done to to keep a file as small as possible.

Example

If you have the original font on your system, you could choose the subsetted fonts and embed them completely for later editing. To do so, proceed as follows:

```
Select subset fonts
Embed font
```

Related Actions

- *Check font subsetting* on page 351

5.15.66. Select text by key phrase

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Allows you to select text objects containing a particular key word or phrase.

To take into account the case of the key phrase (uppercase/lowercase as entered in the text field), select the **Case sensitive** checkbox.



Tip: To only select a particular key word (and not the entire text object it belongs to), you could first split the text objects, using *Split in words* on page 246.

5.15.67. Select text by point size

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects text in a font that is below, above or equal to a certain size (expressed in points).

This Action is useful to select text that is too small to print correctly.

5.15.68. Select text segments

Belongs to

- **Category:** Text
- **Type:** Selections

What it does

Selects all text objects in a PDF.



Tip: This Action does not select clipping text, which is not visible in the PDF. If you want to select clipping text as well, you can use *Select clipping and non-clipping text* on page 437.

5.15.69. Select transparent objects

Belongs to

- **Category:** Prepress
- **Type:** Selections

What it does

Allows you to select transparent objects.

You can check the transparency of different elements, such as the fill or stroke, the blend modes, ... For the whole list of options, check the attributes of the Action in PitStop.

You can select all transparent objects or restrict your selection to objects that have *all* or *at least one* of the following properties:

- Fill is set to overprint
- Stroke is set to overprint
- Graphic element uses a spot color



Note: When checking for transparency groups, pages will be selected if they have an explicit transparency group key (i.e. when "Page is transparency group" is selected in the transparency group properties in the Enfocus Inspector. For more information, refer to the PitStop Reference Guide).

About transparency in PDF

Transparency can cause some problems if you view documents in Adobe Acrobat 4.0 or earlier: transparent objects can be rendered incorrectly.

A transparent layer can also cause problems when you transpose the PostScript code of your PDF document to the halftone information of your printer (the 'ripping').

A typical example is saving graphics with transparent elements as PDF compatible with Acrobat 5.0 in Adobe Illustrator 9.0 or Adobe InDesign 2.0. In Adobe Acrobat 4.0, transparent objects in your PDF document are displayed and printed opaque, but transparency is not removed. If you

open the same PDF document in Adobe Acrobat 5.x, the transparent objects will look (and print) fine again.

It can be useful to make the distinction between spot colors and CMYK colors when checking the transparency settings in your documents, because different rules govern the overprinting of spot colors.

Related Actions

- *Check for transparent objects* on page 341
- *Select pages with transparent objects* on page 418
- *Remove transparency* on page 228
- *Change transparency* on page 221

5.15.70. Select XObjects

Belongs to

- **Category:** General
- **Type:** Selections

What it does

Selects any XObject in the PDF file.

XObjects are PostScript objects, such as background images, that are defined only once in a PDF file, but used several times (e.g. on several pages). Using XObjects can speed up printing but requires extra printer memory.

XObjects are supported as of PDF 1.4.

Example

To log the presence of XObjects, use:

```
Select XObjects
Log Selection
```

5.15.71. Set page size to the largest in document

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Increases the size of smaller pages in a PDF document, so they are all equal to the size of the largest page.

If a PDF contains pages of different sizes, this may cause problems during the printing process. You can use this Action to fix this problem.

Related Actions

Set page size to the smallest in document on page 183

5.15.72. Set page size to the smallest in document

Belongs to

- **Category:** Page
- **Type:** Changes

What it does

Decreases the size of larger pages in a PDF document, so that they are all equal to the size of the smallest page.

If a PDF contains pages of different sizes, this may cause problems during the printing process. You can use this Action to fix this problem.

Related Actions

Set page size to the largest in document on page 182

5.15.73. Shrink page content to fit

Belongs to

- **Category:** Page; Position/Size
- **Type:** Changes

What it does

Shrinks page content to fit the size of a particular page box. You can add extra margins, if necessary. You should also define the anchor point, for example "anchored at the lower left of the media box".

You can choose whether or not to take into account page rotation and scaling factor.

Related Actions

- *Scale page content to fit* on page 180
- *Scale to fit page size* on page 181
- *Scale page content* on page 179

5.15.74. Snap color to color set

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Allows you to remap any colors that vary a little from your desired colors back to the desired color. This Action can also remap images to Black or CMYK.

Snap color to color set can be useful to keep tight control over the range of colors in a document.

How to proceed

Define the color set to which the colors in the PDF must be changed as follows:

1. To remap variants of black to 100% black, select **Black**.

   Note: If you want to remap **all colors** in your document to black, **only** select the **Black** checkbox. Do not add any other color.

2. To add another color the colors in the document should be remapped to if they are close to it:
   a. Click **New**. A new entry appears in the text box.
   b. If you want to use a spot color (optionally), select the **Spot color** checkbox and type the name of the spot color in the text field. You should define a CMYK equivalent too (see next step). The name of the spot color is shown in the text box.
   c. Enter the required values for CMYK (expressed in %) in the fields below the New/Remove button. Your changes are shown in the text box.
3. From the **Map images to** list, select the preferred color space for images. You can choose between black, CMYK, and (if applicable) the spot color(s) defined in the previous step.

5.15.75. Split in characters

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Allows you to split text objects in a PDF in separate characters.

This allows you to change for example the font or format of single characters (e.g. increase the size of capital letters).

Related Actions

- *Split in words* on page 246

5.15.76. Split in subpaths

Belongs to

- **Category:** Line Art
- **Type:** Changes

What it does

Allows you to split any compound path into separate paths, for example to give them a different color.

Splitting compound paths in

In , you can as well split compound paths. Proceed as follows:

1. Select the compound path (by using the PitStop Select Objects tool).
2. Right-click it.
3. Click **Path** > **Compound Path** > **Release Compound Path**.

Related Actions

- *Combine subpaths* on page 132
- *Select subpaths* on page 396

5.15.77. Split in words

Belongs to

- **Category:** Text
- **Type:** Changes

What it does
Allows you to split the text objects in a PDF in separate words, for example to modify the spacing.

Related Actions

- *Split in characters* on page 246

5.16. T

5.16.1. Tag object with an ICC profile

Belongs to

- **Category:** Color
- **Type:** Changes

What it does

Tags objects with a Gray, RGB, CMYK or Lab color space with a chosen ICC profile.

You can only tag the stroke or fill color or both. If an object is tagged already, the ICC tag will not be modified, unless you select the **Change ICC profile if object is already tagged** checkbox.

About ICC tagging

Every input and output device reproduces color and grayscales in a slightly different way. As a result, the colors you see in a PDF file on your screen may not match the colors produced when you print the PDF to an output device.

ICC color profiles are used to avoid this. An ICC color profile is a mathematical description of the color space used by a specific device. In other words, the color profile describes how the colors produced by the device relate to the reference CIE LAB color space (a device-independent color space). As such, they allow you to set up a workflow in which all devices use color management to compensate for their individual color reproduction characteristics, based on the information in the ICC profiles.

Related Actions

- *Remove ICC tag* on page 95
- *Check ICC tagging* on page 258
- *Check ICC profile version* on page 259

5.17. U

5.17.1. Unembed font

Belongs to

- **Category:** Text
- **Type:** Changes

What it does

Removes embedded fonts from a document.

This can make the PDF lighter for internet distribution but risks messing up formatting if the font is not present on the end user's machine.

Optionally, you can choose not to execute this Action if the resulting font is unsafe.

About embedding fonts

Embedding fonts in a PDF document means that every character of this font is copied and stored in the PDF document. This is useful if you create PDF documents to be displayed on different systems and to be printed on different devices: these are often systems that do not contain exactly the same fonts.

Embedding a font as a **subset** means that only those characters of the font that are actually used in the text are embedded. This reduces the file size by not including superfluous font information.

Related Actions

Embed font on page 241

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