

# **Automation Engine 10.1**

ArtPro Action List Editor

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# 1. The ArtPro Action List Editor

The **ArtPro Action List Editor** allows you to create and manage ArtPro **Action Lists** (\*.aal files) that you can then launch with the [Apply ArtPro Action List](#) task.

## 1.1 Automating ArtPro Processing

Automation Engine can automate the processing of ArtPro native files. This can be a single action or a list of actions. Such lists of actions could formerly have been run as (parts of) Nexus workflows.

All this processing is initiated by one task, the [Apply ArtPro Action List task](#). This task takes native ArtPro files as input, processes them and can then output either ArtPro files or convert them to a range of vector formats. Several actions can also process other file formats or even gravure TIFFs.

**Note:** This workflow is in some documents referred to as "ArtPro Processor on Automation Engine".

The task runs an **ArtPro Action List** that defines the chain of actions to be executed. Such "Action Lists" can be created and edited by using the [ArtPro Action List Editor](#).

### About Converting Nexus Workflows into Automation Engine Workflows:

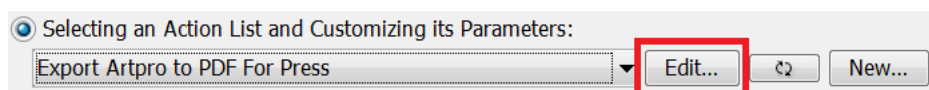
In Nexus Manager, you can select a part of a Nexus workflow and choose 'Save as Action list'. However, you still may have to adapt settings to get an identical result (fonts, marks, etc.).

Especially when you have complicated Nexus Processor workflows with file dependencies and "Select File" activities, your similar Automation Engine workflow will probably be a combination of small action lists and Automation Engine workflow controls like Router, Select File, etc.

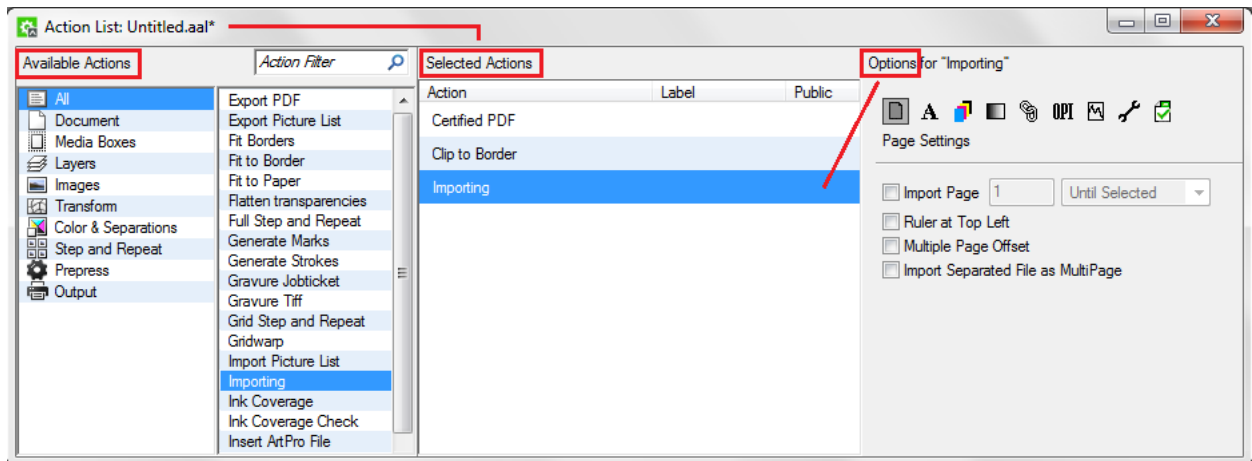
## 1.2 Working with ArtPro Action Lists

There are 2 ways to open the **ArtPro Action List Editor**:

- Start it from the desktop shortcut or application icon on your client computer. Then use the menu options.
- Or select an Action List in the **Apply ArtPro Action List task** and click the **Edit...** button to open it directly in the editor.



When you open an **Action List**, the dialog contains 3 main parts:



- (Left) The library of **Available Actions**: This section shows two columns. The left one offers to filter by category. The next column shows the full or filtered list. You can drag and drop actions from this column to the **Selected Actions** section.
- (Middle) **Selected Actions**. This shows the actions in this (opened) action list (of which the name is shown in the title bar). You can double click in the column **Label** to add a label that helps to identify these unique actions, for example when using public parameters.
- (Right) **Options for the selected action**. This displays the all settings for the selected action. Edit them as wished. When you close the window, you will be asked to save the changes you made.

### 1.2.1 Action List Menu Options

Here is a quick overview of the menu options in the **ArtPro Action List Editor**:

**1. In the File menu:**

- **New / Open / Save Action List...**
- **Import NeXML File....** Use this to import Nexus workflow tickets.
- **Save Action List As...**: Apart from defining a (new) name, notice that you will be proposed to save the \*.aal file in its default location \\AEServerName\\bg\_data\_custom\_v010\\dat\\ArtPro Action Lists .This is also the folder that the **Apply ArtPro Action List** task looks in.

**2. Edit menu:**

- **Cut / Copy / Paste / Delete**: Use this option to cut / copy / paste / delete action(s) from the **Selected Actions** section. You can multi-select and use the available shortcuts.
- **Select All**. To select all **Selected Actions** in the current action list.
- **Edit Preferences....** To set your server, units or language preferences.

**3. View menu: Hide / Show Library:** To hide or show the library of **Available Actions**.

**4. Window:** Because you can open multiple action lists at the same time, each in their own dialog you can here select the one to be active.

5. **Help** menu: The **About** shows the software version of this tool.

## 1.2.2 Creating an Action List

To create an action list:

1. In the **File** menu, choose **New Action List....** A dialog opens for the new **Action List: Untitled.aal\***.
2. Add actions and define their parameters:
  - In the first column of the **Available Actions** section, select **All** to view all the available actions in the second column. Or filter the actions by category of by typing in a filter. .
  - Double click or drag actions from the second column of the **Available Actions** section to the **Selected Actions** section.
  - To remove an action, select it in the **Selected Actions** section and press **Delete**.
  - Select an action in the **Selected Actions** section to view its parameters in the **Options for "selected action"** section. Edit these parameters as wished.
3. Click **Save Action List As** in the **File** menu to save this action list with a proper name.

**Note:** Action lists have to be stored in the folder \\AEServerName\bg\_data\_custom\_v010\dat\ArtPro Action Lists to appear in the task's drop-down list.

## 1.3 Handling Fonts in ArtPro Files

**Important:** All fonts used in ArtPro files that are handled by Automation Engine should either be:

- embedded
- referenced and located in a folder accessible to the Automation Engine server.

When a font is not accessible, you will get an error when trying to add or edit text, update text objects using ArtLink, export the file to PS or PDF, etc.

### ArtPro Files coming from a Nexus on Mac OS

Type of ArtPro file in Nexus workflows	Consequence on fonts in Automation Engine
ArtPro files created, edited or opened in ArtPro.	<p>These ArtPro files have all fonts and outlines embedded (subset). They can be opened, repeated, output... in any ArtPro action list without any font problems.</p> <p>Exception: ArtPro files containing ArtLink'ed text containing a character that was not</p>

Type of ArtPro file in Nexus workflows	Consequence on fonts in Automation Engine
	embedded (not yet used in the ArtPro file and the font is not available).
ArtPro files created by a Nexus workflow (files that have not been opened and saved by ArtPro).	<p>These files do not contain any font embedding.</p> <p>Therefore, they cannot be used to generate PDF export, unless:</p> <ul style="list-style-type: none"> <li>You add a <b>Text to Paths</b> action before outputting the file to PDF.</li> <li>You add all the necessary font folders in your first action (see below). Note: you can also add fonts and images folders in the 'Export PDF' action (in Images &gt; File &amp; Font settings).</li> </ul>
ArtPro files created by a Nexus workflow starting with a PS/PDF import.	<p>Referenced fonts are not available during this workflow!</p> <p>Any action that needs text outlines (Generate Marks, Print to File, Export PDF,...) will error.</p> <p>To avoid this, you need to:</p> <ol style="list-style-type: none"> <li>1. Insert a <b>Save</b> action immediately followed by an <b>Open ArtPro file</b> action.</li> <li>2. In the <b>Open ArtPro file</b> action, define the necessary font folder.</li> </ol>

### Handling the Fonts Correctly in an ArtPro Action List

In general, opening an ArtPro file does not need the glyphs from the characters in the file, because ArtPro always stores the vectorized representation of the complete text block in the file.

When using ArtPro action lists and importing PDF files with non-embedded fonts, the fonts need to be available on the Automation Engine server. Follow these steps to make them available:

1. Create a fonts folder in an Automation Engine **Container** (a Windows network share made 'Container').
2. Move the fonts from the Mac to that folder (on Windows) using a third party font conversion tool (for example [CrossFont](#)).
3. In your action lists, adapt the parameters of actions that need font resources (for example the **Importing** action).

**Note:** We recommend using TrueType fonts.



**Caution:** When copying any font, make sure that you have the appropriate licenses to install and use this font!

## 1.4 Available Actions

**Note:** Many actions are identical or very similar to functionality in ArtPro. In those cases, this documentation only offers a basic explanation and refers to a more detailed description in the [ArtPro user guide](#).

### 1.4.1 Adjust Stroke Width

This action allows to change the width of all (selected) strokes.

You can use this for example to give hairlines a minimal width. To do this, first use the [Select Objects](#) action to select all strokes smaller than the minimum width, then use this **Adjust Stroke Width** action to change their width.

### 1.4.2 Apply Pictures

This action replaces a picture (= an image or a placed ArtPro File) with another picture. You can replace an earlier selected picture or all pictures in the file ("apply on all objects").

This function may be useful to replace the graphics in a step and repeat template with another graphics file.

- **Center Picture on:** For ArtPro and PDF files, choose which box is to be used to center the graphics when applying the picture (file) to the object(s) in the file.
- **Remove Unused Separations:** Removes all empty separations after the **Apply Pictures**.
- **Place Single Separation ArtPro File in Single Separation:** Defines how to insert ArtPro files with only one separation. When this option is not selected, objects in this ArtPro file with 100% of the single separation are considered to be registration color and thus get 100% of every ink in the ArtPro file after insertion. When this option is selected, the file is inserted in one single separation instead.

### 1.4.3 ArtLink

ArtLink enables automatic generation of multiple variants of a template file based on database information (a .txt or .csv file). You can choose to create different variants as different files or add the variation as extra layers.

The template file needs to be made in ArtPro. You there select objects and link them to parameters in the database file or add automatic parameters based on job content. Please see to the [ArtPro user guide \(File menu > Parameters \(ArtLink\)\)](#) for a full description of the ArtLink module.

In the next pages we describe how an action list needs to be set up in order to automatically generate ArtLink versions with the ArtPro Action List Editor.

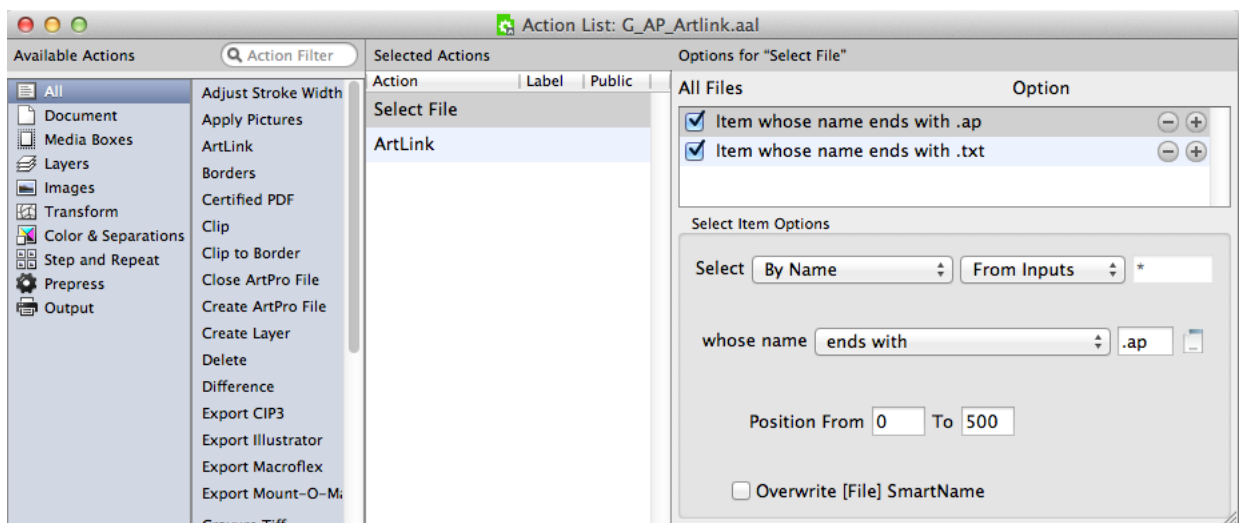


## Example of Using ArtLink in an Action List

In our example, an input folder contains an ArtPro template file "ice cream template.ap", a database file "ice cream.txt" and also an "images" folder with the various images that will be used for the versioning (strawberry, lemon, lime, orange, peach and tomato).

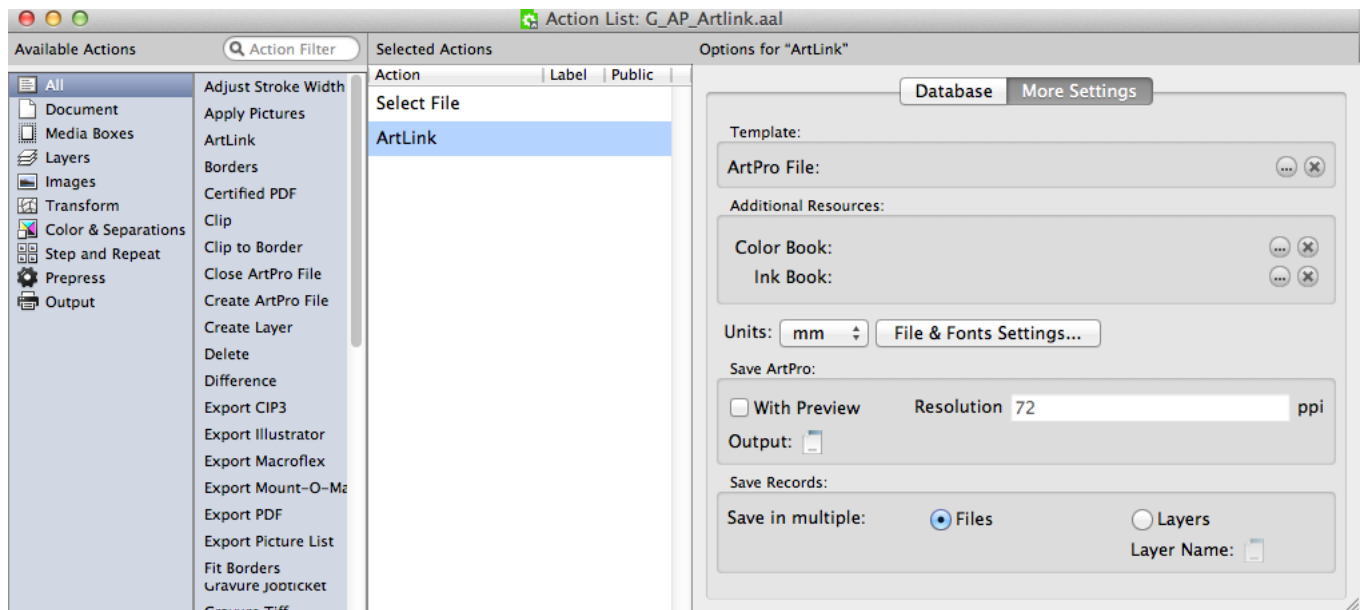
The action list should contain a [Select File](#) action and an **ArtLink** action. Be aware that the ArtLink action has an embedded Open and Save action, so there is no need to also add those to the list.

See how the Select File action selects both the .ap and the .txt file:



**Note:** When you do need to add an [Open ArtPro file](#) action (maybe in an [Update ArtLink](#) workflow), then make sure you *only* selected the .ap file in the preceding action.

## Setting the ArtLink Action



### (ArtPro) Template

In our example, we here do not need to select the ArtPro template because this was already done by the Select File action. You could however do this when the ArtPro File with the links is a fixed file.

### Additional Resources

Additional Resources allows to locate the Color and Ink Book that needs to be used, similar as you would load these in ArtPro when colors or inks need to be defined from a library (for example: PANTONE™ library).

### File & Fonts Settings...

Since the ArtPro template file may contain images (on the same or a different server) and fonts, this dialog enables working with root folders, folder mapping and font folders. The fonts are obviously necessary if variable text needs to be generated based on the database file. Learn more about the **File & Fonts Settings...** in the page on the [Open ArtPro File](#) action.

### Save ArtPro

Use the Template Editor in the **Output** button to define the name and place of the files generated by ArtLink.

Our example will generate six files, each with a variable extension: .Alnk\_1 to .Alnk\_6.

Choose if you also want a Preview and at what resolution.

### Save Records

You here define if the results of the different records should be saved as multiple ArtPro files ("**Files**") or as one single ArtPro file containing different Layers ("**Layers**"). In that case, use the Template Editor to define the name of these different layers.

### The Database File

Our example uses a this text file (exported from a database):

```
PANTONE;ice;barcode;pict
"300";"Blue Curacao Ice Cream";"54327719";":~images:strawberry"
"399";"Margharita Ice Cream";"54327627";":~images:lemon"
"370";"Caipirinha Ice Cream";"54327719";":~images:lime"
"orange";"Tequila Sunrise";"543277726";":~images:orange"
"1645";"Peché Mignon Ice Cream";"54327733";":~images:peach"
1797";"Bloody Mary Ice Cream";"54327740";":~images:tomato"
```

The first line describes what variables will be used. Each below line describes the values of these variables for one output file:

- **PANTONE**: the color entry in the color book to be used
- **ice**: a text string
- **barcode**: the value of a barcode to be used
- **pict**: an image to be used

**Note:** The images are described as `~images:xxx`. "`~`" describes the current position of the template file and "`images`" is a subfolder located relative to the current position of the template file. Images will also be searched through the Files & Folders settings, so the full exact path is not always necessary.

## The Results

After processing, our example will have generated six ArtPro files. They will vary in color, text string, bar code and the image.

The **Template Editor** allows the use of parameter values from the database records. The value of the SmartName [n-th Input file] can for example be used as a template key for the **Save ArtPro** file template.

### 1.4.4 Borders

The **Borders** action allows to modify the size of the current file. You can choose which page box you want to modify.

**Note:** When you want to modify multiple page boxes, you need to set multiple 'Borders' actions in the action list.

The square buttons in the window allow to set the direction of the size change versus the current file size.

It is also possible to calculate a difference to the current size of the page box selected in the option "**start from Box**". In this case the **Vertical / Horizontal Size** fields needs to be left to 0, while you enter the changes in the **Extra V/H Size** fields. These values can be positive or negative and serve to make the current box size larger or smaller, again with the direction depending on the selected square button.

For example: a file was imported from PostScript with the bleed of 3 mm contained in the file size. To change the borders to a correct Trim box (usable to start Step & Repeat or Imposition), choose **start from Trim box** and set both **Extra V/H Size** fields to `-3 mm`.

## 1.4.5 Certified PDF

**Note:** Check whether Automation Engine's (more recent) [PitStop PDF Preflight tasks](#) are a better option for you workflow.

This action allows to integrate the Certified PDF workflow functionality in these action lists. It allows to import Certified PDF, edit and export as Certified PDF with information about edits and changes to the document. Certified can be divided in three parts: Input, Output and Certified ArtPro sessions.

### Certified ArtPro Sessions

Automation Engine can work in Certified Mode, by selecting **Certified PDF enabled**.

User name, Short User Name, etc. provide the information about the person or application that is editing the PDF document. This information is stored in Certified PDF each time when a new session is started.

**Note:** When **Certified PDF enabled** is selected, the field "User name" is mandatory.

Working in Certified mode affects all following Open/Save actions. Whatever the Certified options are, Automation Engine is now recording the history of changes made to the file and saves them on-board the ArtPro file.

Learn more about versions and sessions in the [ArtPro User Guide \(ArtPro menu > Certified ArtPro\)](#).

## 1.4.6 Clip to Border

This action clips all the objects to the edge of the selected Border (page box).

Objects located completely out of the page box are removed. Objects located partially inside the selected page box are clipped to the page box.

Choose **All** to apply on all objects. Choose **Selections Only** to apply it to the selected objects only.

## 1.4.7 Close ArtPro File

This action closes the currently open ArtPro file and so removes it from the application's memory.



**Attention:** When you end your action list with a **Save ArtPro file**, it is no longer required to also add a **Close ArtPro file** action right after it (as was necessary in Nexus).

There is one case however where this is still required: when your action list re-opens a file that you just saved, you may create this sequence of actions: `save - select - open`. In such a case, you need to add a `close` action after the `save` action: `save - close - select - open`.

## 1.4.8 Create ArtPro File

This action creates a blank ArtPro file which can be used later to add pictures, insert other files, etc.

## 1.4.9 Create Layer

This action creates a new layer in the current ArtPro file. Further processing takes place in the newly created layer.

A typical example is a double burn workflow, where multiple files are imported (CMYK of first version, K of second version, K or third version, etc.). To make later editing easier, set a **Create Layer** action before each of the imports, so layering the final output file. Define the name of the layer in the Template Editor dialog.

**Move objects to this layer** enables to move the selection to the newly created layer.

In **Position**, choose to create the layer on top or at the bottom of the file's list of layers.

## 1.4.10 Delete

This action allows to delete **objects**, **separations** or **layers** from the current file.

- **Objects**

- **Delete objects.** Choose **All** or **Selection Only** to define what you want to delete. Deleting all objects could be used to delete the contents from a file but keep all its page boxes for another document (or picture) to be imported or placed. Learn more about selections in [Select Objects](#).

- **Delete Links.** Select this to (also) delete links in the file.

- **Separations**

- **Separations mode.** Select **Leave as is** to leave the separations untouched. Select **Remove** to define which separations to remove. Select **Only Include** to define which separations to keep. The **Delete Unused Separation** option is not influenced by this setting.
- **Technical / Varnish / Opaque.** Use these to define if such types of separations should be removed or included.

- **Separations** list. When the **Separations** mode is set to **Remove**, all separations defined in this list are deleted from the file. When the **Separations** mode is set to **Only Include**, only the here defined separations are kept and all others are removed.  
Use + and - to add or remove separations. Separation names can contain wildcards (\*).
- **Delete Unused Separations**. When selected, unused separations are deleted, regardless of the choice in the above Separation drop-down list.
- **Layers**
  - **Delete Layers**. When selected, all layers defined in the list are deleted from the file.  
Use + and - to add or remove layers. Layer names can contain wildcards (\*).
  - **Delete Unused Layers**. When selected, unused layers are deleted.
  - **Delete Non-Printing Layers**. When selected, non-printing layers are deleted.

**Note:** When the settings request to delete all layers, the first layer will still remain and a warning is shown.

### 1.4.11 Difference

This action is used to calculate the differences between two ArtPro files. This function is useful to verify that the graphics of two different language versions fit, to find out what changes a customer made to the new label, to verify that corrections on files have been executed, etc.

**Note:** Learn about more recent tools to compare files in the chapter [Quality Control tools](#).

**File & Font Settings....** Since this action actually opens two ArtPro files, in some cases it may be necessary to specify Root Folders, Folder Mapping and Fonts folders. Learn more in the action [Open ArtPro File](#) on page 46.

Learn more in [ArtPro User Guide \(File menu > Create Differences\)](#).

### 1.4.12 Export CIP3

This action creates a CIP3 file of the current file.

A CIP3 file is used to transfer data about a specific file through the production process. Besides a preview which can be used to extract ink key settings, a CIP3 file contains information about separations, ink coverage, file dimensions, etc.

You can choose the **Oversampling** and the **Resolution** of the preview that will be included in the CIP3 file.

### 1.4.13 Export Illustrator

This action exports the current ArtPro file to an Adobe Illustrator native file (v3, 5 or 7.0).

### About Transparencies and Flattening

Learn about this in the [ArtPro User Guide \(File menu > Export Illustrator\)](#).

### Compatibility and Restrictions

Learn about this in the [ArtPro User Guide \(File menu > Export Illustrator\)](#).

### Downsample Images

You can here choose to sample the images in the file 2, 4 or 8 times or not at all.

## 1.4.14 Export Macroflex

Learn more about this feature in the [ArtPro User Guide \(File menu > Export Macroflex\)](#).

## 1.4.15 Export Mount-O-Matic

Learn more about this feature in the [ArtPro User Guide \(File menu > Export Mount-O-Matic\)](#).

## 1.4.16 Export PDF

This action converts the active ArtPro file to a vector PDF file.

The **Export PDF** dialog box present settings grouped in pre-set **Flavours**: "For Press", "Normalized PDF", "For Viewing" and "JDF". Choose one and change any of its proposed settings. The chosen flavour and its settings also decide if the output file will be PDF 1.3, 1.4, 1.5 or JDF compliant.



**Attention:** About Placed Files (Step & Repeat): When outputting a PDF of a file containing placed EPS, this EPS is placed in the PDF file as a PDFX object. This works on certain RIPs that accept PDFX objects containing PostScript. Placed DCS works only with Separated PS Output and not when outputting PDF.

### About the flavour "Normalized PDF"

When choosing "Normalized PDF", output PDF files can be opened and edited 'natively' in PackEdge Automation Engine and FlexRip/Proof.

#### 1. Options with "Normalized PDF":

With this flavour, some specific functions are used and some general options are changed:

- a. **XMP** is added. XMP metadata info is added to any Normalized PDF.
- b. Including **Screening** info. The **Include Screening** option in the **Optimize** tab makes sure general screening info is included in a Normalized PDF. But because Normalized PDF does not support object specific screening, this option applies a default screening on objects that do not have any screening defined yet. See below item on restrictions for more detail.
- c. **Images:** Images are included as Esko links and are also embedded at a low resolution. This means image downsampling is set at 96 dpi, the **Link** option is set to "Esko" and the **Embed Images** option is on.

## 2. Restrictions with "Normalized PDF":

- a. **Screenings:** When no screening is defined on all or some objects, a default screening will be applied to these objects. These defaults are 120 LPI, dotshape round and angles C: 15, M: 75, Y: 0, B: 45 any other at 45.
- b. **PANTONE** inks not in Esko color books: These inks are saved as unregistered inks. Inks found in Esko ink books get the correct ink book reference. Ink type is kept (technical, opaque, varnish, normal).
- c. **Placed or repeated files:** Placed or repeated files (ArtPro, Normalized PDF) are expanded in PackEdge.
- d. No **barcode** information.
- e. No **font** file information.
- f. **Text:** All text is saved and the font is sub-setted and embedded. This results in real text in Esko applications. However, 2-byte fonts are always vectorized when exported to any PDF flavour in ArtPro.
- g. **Images:** Images keep their links if possible (most TIFF, JPEG and PSD files). This is also the case for mapped images. Some image formats such as DCS images, PSD with multiple alpha channels, TIFFs with extra channels (often generated by ArtPro PS/PDF import) are not supported or incompatible with the Esko applications. Depending on the settings, these images are embedded or generate a .CT file (supported in Esko applications).

## General Settings

### Generate Normalized PDF

See above section on **Normalized PDF**.

### Generate Separated PDF

When selected, the ArtPro document is exported as a separated PDF in which each page represents a separation of the ArtPro document. It can be combined with the **Add Composite on Page 1** option.

### Add Composite on Page 1

This option is available when **Generate Separated PDF** is on. When selected, the first page of a separated PDF will contain a composite version of the ArtPro document. All subsequent pages represent a separation of that ArtPro document.

### Add Notes

When selected, all ArtPro notes are included in the PDF file and will appear in Acrobat (Reader) as standard Acrobat notes.

### Add Non Printing Layers

When selected, the layers set to 'non printing' are also exported into the PDF file.

### Keep PDF 1.5 Layer Properties

PDF 1.5 and later allows the use of layers. When selected, the ArtPro layers are put in the PDF file as layers compliant to PDF 1.5. This allows to switch layers on/ off in Acrobat.

### Output Fully Transparent Objects

When not selected, fully transparent objects are ignored. When selected, fully transparent objects are output. This can be useful when using the Male / Female function in ArtPro (a function implemented to create a Die to be used for Braille fonts).

### Page Layout

- The **Orientation** defines the direction in which the file is put on film or on paper.



- When **Mirror** is selected, the file is mirrored before exporting, resulting in a wrong-reading output.
- **Distortion** is defined as a percentage of the file's original dimensions. This distortion is specifically important for flexo jobs. The original dimensions of the ArtPro file remain unchanged. Positive values make the file bigger and negative values make the file smaller. For example: Vertical distortion = -2.35% makes the vertical output 97.65%. You can also use these fields for general scaling: for example: entering -50% for both Vertical and Horizontal Distortion outputs the file at half of its original size.

### Add Thumbnail

When selected, a small preview is created that can for example be shown as a thumbnail in Acrobat. When not selected, the thumbnail in Acrobat is gray.

### Add Standard Preview

Preview can be defined by resolution (default 72 ppi) or by maximum size (in Kb). Setting a maximum size can be useful when creating a PDF of a large size Step & Repeat, of which the preview at 72 ppi would be several Mb.

### Add Separated Preview

When selected, this option adds a separated 72 ppi preview to the PDF file. This non-standard preview can only be used by other ArtPro related applications.

### Use Anti-Aliasing

When selected, this option uses anti-aliasing when creating the preview.

### Note About Previews & Page Boxes:

Thumbnails and Separated Previews are created using the Media box. The Standard Preview is based on the Art box, in order to be compatible with other applications. This implies that the Standard Preview does not show any bleed. For JDF output, these settings are used for all PDF files created.

### Marks

This option allows to add marks to the PDF file. These **Marks** and options work in exact the same way as in the [Generate Marks](#) action.

## Optimize Settings

### Use Picture Caching

Picture Caching makes the output faster by keeping all images that are put in the PDF file in the RAM, until the complete file is written. This keeps applications from having to read an image multiple times from the hard disk, if it is used multiple times in the file. The condition is that enough RAM is required on the machine. This is very useful if images are stored on a remote file server.

### Output Gradients as Images

When selected, all gradients are converted to images instead of including them in the PDF file as PDF Shadings.

### Compress Page Description

When selected, the PDF file is compressed.

### Optimize White Objects

When selected, all white objects that do not influence the final result will be removed. This is mostly useful when outputting separated PDF, however it can also be used for composite PDF files, especially if certain separations are disabled for output. Learn more below when describing the Color tab.

### Include Screening

When selected, (Nexus) Extended Screening and PostScript Screening information is saved in the PDF file. Nexus Screening is not included.

### Generate JDF Output

This option optimizes outputting Step & Repeat PDFs. When outputting a Step & Repeat to JDF, multiple files are generated. First of all, the one up file(s) are exported to PDF file(s). If the one up already was PDF, the file is just copied, unless the option **Copy File** is off. Second, one or more PDF files are generated containing all elements that are on the repetition: registration marks, test strips, extra information, etc. Items that are grouped are in the same file. Third, a JDF file is created, containing the positioning of all these PDF files.

### Copy PDF

When selected, the original PDF files in the Step & Repeat will be copied to the output folder of the JDF Output. When not selected, these single PDF files will not be copied, and the JDF will contain a link to their original location.

### Collect Marks

When selected, all PDF files containing registration marks, test strips, etc. will be collected in the JDF output folder.

### Target Size

This option can be used to ensure that the size of the PDF file does not exceed a certain size, for example when you want to e-mail them but the attachments must be under 5000 kb. With this option, images may have to be downsampled and/ or compressed more than set in the dialog. Do not use this for files that are sent to press!

### Split Long Paths At

Just like PS output, paths with many anchor points can be split up as parts. The more parts that need to be exported, the longer it takes. The default setting is 500.000 points.

## Text Settings

### Vectorise text

Before exporting, ArtPro converts all text to paths to avoid font problems at a later stage. When this option is not selected, the text is embedded in the PDF file as real text. Japanese 2-byte characters are always vectorised.

### Subset Embedded fonts...

Subset Fonts define if fonts should be embedded as a subset when only a part of the characters are used. How much of the font characters should be used before the font is embedded completely, can be set in this field. When set to 100%, a subset is created for every font that is not used completely.

## Color Settings

### Force Opaque Inks to knockout

When selected, overprints are first flattened, so a visually correct result is generated, but the resulting PDF is **not OK for printing!**

### Fail on Nonseparable Blend modes

When the file to be exported contains Nonseparable Blend modes (Hue, Saturation, Color, Luminosity), the action fails when this option is switched on. Nonseparable Blend modes operate on a 3 component color space. This means that to calculate the resulting color,

CMYK needs to be converted to 3 components, the blend needs to be calculated, and the result needs to be converted to CMYK again. However, no instructions are available on how this conversion from one color space to another should happen. This results in different behaviors and different color results in different applications and RIPs.

### **Exclude or Remap Separations**

Click **Options...** to add a separation that you want to remap to another or that you want to exclude in the output PDF (click + and define its name ; wildcards can be used). Select **Export only used separations** if this is what you want to do (registration colors are ignored).

### **Include Separations**

Use this option when you only want to export specific separations.

### **Color Management**

When a color profile was defined at the time of importing or opening the file in the action list, you can here override the settings for output (example: color profiles for proofers or separated output).

### **DotGain**

Use this to apply dot gain on the output file. Learn more about dot gain in the [ArtPro user Guide 9section on Screening](#)). The embedded dot gain curve is applied to the PDF as a transfer function in the Graphic state. The dot gain curve for placed files works without problems with placed ArtPro files and PDF files coming from ArtPro or an ArtPro Action List. Placed PDF files from other applications work fine, as long as they do not define their own dot gain curve inside the PDF, because the embedded curve has priority. When a placed PDF file coming from ArtPro or an ArtPro Action List already contains a dot gain curve, a warning is generated when outputting the PDF.

### **Always Generate CMYK Separations**

This option includes all CMYK separations to deviceN color spaces as soon as one of the CMYK separations is used. This option is only useful for customers that use a GMG color manager on their PDF files.

### **Process output separations using CMYK flags**

When selected, ArtPro uses the CMYK flags in the separations the same way as in PostScript output. This option is typically used by customers that have a GMG color proofer so CMYK ICC profiles can be used on spot colors. When a spot color is marked as Cyan, Yellow, Black or Cyan on the Separations palette, and this option is selected, the spot color will be sent to the plate of the specified process color (so the proofer can apply color management according to the CMYK ICC profile). This can only work if the specified process color is not in use in the document.

The option is only available for composite PDF flavors and is intended for use on one-ups and Step & Repeat files containing placed ArtPro files, not for S&R files containing placed PDFs.

### **Flattener**

The Flattener is used to translate transparencies and blends. This is necessary when outputting PDF 1.3 compliant.

The Flattener section, contains all settings to flatten blend modes and overprints. It can also be run as a separate action: [Flatten Transparencies](#). The Flattener replaces all blend modes by "normal" objects, maintaining the final result. This means that the blend is calculated to whatever is underneath at that time, and is adapted in a line-art object (if possible) or an image. Learn more in the [ArtPro User Guide](#).

## **Image Settings**

### Use Image Downsampling At

All images with a resolution higher than this value are resampled. This allows you to create smaller PDF files, for example for a proofing PDF.

### For Images Having at Least

When selected, only images with a resolution higher than the entered resolution are downsampled to the downsample resolution.

### Use Averaging When Downsampling

. When selected, image quality is better, but the output is slower. The difference with PostScript output is that CCITT images are averaged too when outputting to PDF.

### Image Compression

Choose the wanted type of image compression. 'None' means that all compression is taken off. Compressed images are then decompressed in the PDF file. A 'lossless' compression means that the file will still be complete after decompression. There is no loss of quality. In the three other cases, the files are compressed with a JPEG compression. A higher compression means smaller files, but worse quality and vice versa.

### Include RGB preview of images

This adds a low-res 72 ppi preview of the large images inside the PDF. These previews are used by some Acrobat plug-ins, to speed up previewing files.

### Image Clipping

This option allows to force clip images to the smallest size inside the clipping path. It also allows to include the full picture when clipping does not give any benefit, that is, when the sum of the image parts is close to or bigger than the size of the full image. A full image is only included once in the PDF file, even if it is placed multiple times.

### Links

This option allows to include OPI comments into the PDF file. Choose between None (no links), OPI links or Esko links. The option Embed Images allows to define if images with OPI comments should be embedded as well. OPI comments can not be used in, for example, Illustrator, unless the InPDF plug-in is used.

### File & Fonts settings

This option allows to open the Root Folder, Folder Mapping, Fonts Folder and Color Management settings. These are the same as when opening an ArtPro file.

## Certified PDF

Learn more about Certified workflow in the [ArtPro User Guide, section 'ArtPro Menu - Certified ArtPro'](#).

When **Enable Certified Export** is not selected, a regular non-certified PDF file is saved and no new session is started.

The option **Incremental save** only works when the last Certified PDF (that is, the imported Certified PDF or the last Exported PDF) is still available. The option means that the previous Certified PDF file's contents are merged with the exported PDF, so that "rollback" the PDF document to the previous session is possible. Using this option can result in a large PDF file.

To keep both the PDF as the ArtPro file in a certified ("green") state, it is necessary to save the ArtPro file after the Certified PDF Export.

### 1.4.17 Export Picture List

This action exports an ASCII text file with information about the name, position and size of the bounding box, the picture center and page box of placed pictures. You can use a Picture List file in the action [Import Picture List](#).

Choose whether you want to add mapped pictures in this file.

### 1.4.18 Fit Borders

This action adjusts the document size and the selected page boxes to all the objects present in that file.

Note that when **All** is selected, all page boxes will be set to the same size.

### 1.4.19 Fit to Border

This action fits all or the selected objects to the edge of the selected page box.

When **Scale Proportionally** is selected, all objects are scaled proportionally, until the bounding box of the selected object reaches the selected border, either in vertical or in horizontal direction.

When **Scale Proportionally** is not selected, the selection is scaled to fit the borders both vertically and horizontally. This is sometimes used when creating flexo sleeves.

The scale factor can be rounded off using the **Scale round to** value. For example, when set to 5, the scale is rounded down to the closest multiple of 5. When set to 0, no rounding is applied. The up-scaling can be limited using the **Limit scale to** field.

Select **Notes** to also transform notes along with the rest of the file, so that the positioning of the notes inside the file remains the same.

### 1.4.20 Fit to Paper

This action fits the file to the most appropriate paper size from a list of paper (or plate) sizes.

Click **+** to add paper sizes.

In **Box**, define which page box is to be used to determine the optimal paper size.

In **Layout**, define how to position the file versus the selected page box. **Fit To Page** also scales the file to the optimal to fit on the optimal paper size.

**Rotate to fit** allows to rotate the file when searching for the optimal paper size.

### 1.4.21 Flatten Transparencies

This action serves to flatten blend modes and overprints. It can also be found as a section on board the actions 'Export PDF' and 'Print' .

This technology replaces all blend modes by "normal" objects and still maintains the final result. The blend is calculated to whatever is underneath at that time and is adapted in a line-art object (if possible) or an image.

Learn more in the [ArtPro User Guide \(Prepress menu > Flatten transparencies, and also in the ArtPro menu > Preferences > General: Flatten\)](#) .

**Ignore Overprints On Placed Art:** This option allows to ignore overprints on top of placed art. When this option is not selected, overprints on top of placed art (example: a Step & Repeat) results in a failed action.

### 1.4.22 Full Step and Repeat

The Full Step and Repeat action is based on ArtPro's Interactive Step And Repeat. This functionality allows you to create a repetition of one single file at a time, based on either count or fill size.

#### General

Learn more in the [ArtPro User Guide \(Prepress menu > Step and Repeat Interactive\)](#).

**Cut Marks.** When selected, cut marks are automatically generated around the repeat block, based on the used box size. When bleed is applied in between labels, double cut marks automatically appear. The cut marks are filled with registration color.

#### Pattern

This option is used to make nested Step and Repeat: the second row or column is shifted each time and the step distance can be decreased so the labels fit into one another.

Learn more in the [ArtPro User Guide \(Prepress menu > Step and Repeat Interactive\)](#).

#### Advanced

##### Page Box

Choose which page box needs to be used to step and repeat. By default, this is the **Trim Box**.

##### Place Single-Separation ArtPro File in Single Separation

This option defines how to handle repeating ArtPro files with only one separation. When this option is not selected, objects in the ArtPro file with 100% of the single separation are considered to be registration color, and thus get 100% of every ink in the ArtPro file after repetition. When this option is selected, the file is placed in one single separation.

##### File & Font Settings

Provides access to the root folders, folder mapping and fonts folders when the file to be stepped is an ArtPro file. Learn more in [Open ArtPro File](#).

### 1.4.23 Generate Marks

This action adds marks to the file, based on the dimensions of the chosen page box.

Learn more in the [ArtPro User Guide \(Prepress menu > Marks\)](#).

### 1.4.24 Generate Strokes

This action creates strokes around all (selected) objects.

#### **Separation Name / Ink book**

Strokes generated by this action get 100% coloring of the separation name entered here and overprint for all other separations. When the separation does not exist yet, it is created, in which case the specifications for the ink are searched in the defined Ink book.

#### **Apply on All / Selections**

Choose whether strokes should be applied on all objects or only on the [selected objects](#).

#### **Add Stroke to Crop / Trim / Bleed Box**

Allows to add a stroke on the selected page box.

Learn more in the [ArtPro User Guide \(Window Menu > Stroke\)](#).

### 1.4.25 Gravure Job Ticket

This action export files for gravure systems from [Hell Gravure](#).

When the parameters can not be retrieved from the job ticket, you can here define the **Resolution** and **Oversampling** rate. Each job ticket and thus every separation can have a different value.

For separations with a resolution above 600 ppi and without oversampling, you can select **PackBits Compression for HiRes**. Otherwise, you can **Compress the TIFF** using LZW, or leave the separation uncompressed (if you did not select **Compress TIFF**). PackBits compression results in lower compression rate, but will be calculated much faster than LZW compression, so it is the best solution for high resolution files.

When selecting **Separation Count in ArtPro File and Ticket Folder must match**, the gravure job ticket will check if the separation count in the ArtPro file matches with the ticket count in the folder.

When the size of the ArtPro file and the job ticket size don't match, this action can generate a warning or error:

- Select **Error when ArtPro job and job ticket size don't match** to get an error. Also, no file will be generated.
- Deselect **Error when ArtPro job and job ticket size don't match** to get a warning instead and still have a Gravure Job Ticket output file generated.

For more specific information, please contact [Hell Gravure](#).

### 1.4.26 Gravure Tiff

This action outputs ArtPro files directly as TIFF data for gravure printing. It creates one TIFF file per separation.

Learn more in the [ArtPro User Guide \(File menu > Export Gravure TIFF\)](#).

### 1.4.27 Grid Step and Repeat

This action allows to create a repetition of different ArtPro (or other supported) files that have the same size and that are all placed in the same folder.

In the action list, first the one-up files are defined using a [Select File](#) action, after which you use this **Grid Step and Repeat** action.


This repetition can be executed by starting it on a layout file, a comma separated text file that contains the positioning of the different files).

Learn more in the [ArtPro User Guide \(Prepress menu > Step and Repeat Grid\)](#).

### 1.4.28 Gridwarp

This action allows to calculate complex warping of documents based on a source grid and a destination grid. It can handle the warping of all object types including gradations and images. It is typically used to warp the graphics of conic cups, metal containers, etc.

Grid Warp requires two files, an ArtPro file and a grid file. This action is therefore similar to the [ArtLink](#) action where two files are first selected by the [Select File](#) action.

Click  to select a **Grid** file. When no grid file is available, the grid defined in the ArtPro file itself will be used (when available). This allows to set up grid warp in ArtPro, and let Automation Engine do the calculation.

### 1.4.29 Import Picture List

This action enables to import an ASCII text file that contains information on name, position and size of the bounding box of placed pictures.

Learn more in the [ArtPro User Guide \(File menu > Import Picture List\)](#).

### 1.4.30 Importing

This important action allows to Import PostScript 3 and PDF files in to the native ArtPro file format (with full preflight and correction capabilities).

When a file is imported, typically all elements are made editable and all paths in the PostScript or PDF document are converted to internal ArtPro paths.



This allows for imported documents to be edited with the Edit or ArtPro application. However, text in the PS or PDF documents, in some cases will be converted to outlines (depending on the settings in the **Font Settings** dialog box and depending on Creator of the PS or PDF file). This means that although text can be added in Edit or ArtPro, text from the original document cannot always be modified using the text editing functionality.

### Importing Screening

#### 1. Detecting Esko screening

When importing a PS/ PDF file containing Esko screenings, these screenings are recognized and automatically converted to a PostScript screening with the correct Esko dot shape.

#### 2. Different rulings / dot shape per separation

In ArtPro files, it is not possible to have screenings with different rulings or dot shapes per separation. However, in Esko software these screenings can be defined. When importing such a file, these screenings are split up into different ArtPro screenings. The objects using this screening are split up accordingly and put on top of each other in overprint.

### Importing Normalized PDF

Normalized PDF files can be imported just like any other PDF. Keep in mind that in Normalized PDF, image links are included as EskoLinks.

#### 1. Normalized PDF Restrictions

#### 2. No support for Esko .ct file links

If you want to import normalized PDF back in Artpro, make sure the .ct files are embedded before generating the PDF file in the Esko Software.

### Page Settings

When opening the **Import PostScript/PDF** dialog box, the **Page** button is selected.

#### 1. Import Page

If a multiple page PS or PDF document has to be imported, this setting defines what pages should be imported. If Import Page is inactive, all pages of the PS or PDF file will be imported. This function would typically be inactive, while the page range to be imported would be determined by the Select Page action. This would actually invoke the importing action multiple times (creating a document for every page).

If the Select Page action was not used for multipage documents, all pages would be imported in one document. The positioning of the individual pages depend on the setting of the Multiple Page offset option (see below).

If Import Page is active, only one page out of the multipage document will be imported. The page that has to be imported can be entered in the Import Page field. The Import Page field can take a string input (a page label) as well as a numeric input (a page number).

For PS files, the PS import has to jump to the right page of the file before starting import. (Selected Only). However, some application define crucial information at the beginning of the PS file, on page 1 (example: Quark defines all fonts on page 1). Therefore, we have to interpret page 1 as well (without generating output) before importing the selected page (First and Selected). In some poorly constructed PS files, it is possible that the information needed for the selected page is scattered over the pages in front of it. In that case, the option **Until Selected** should be used.

#### 2. Ruler at top left

By default a PostScript or PDF file will be imported placing the PostScript origin (= 0,0) on the center of the ruler. If you switch the option Ruler at top left on, the top left of the page will be placed in the center of the ruler, placing the file in the lower right section. The origin in the PS file is in most cases the bottom-left corner of the page, although this is not a general rule. Example: In EPS files from Adobe Illustrator, the PS origin is the same as the origin of the ruler in the Illustrator file.

### 3. Multiple Page Offset

When importing a multipage PostScript or PDF file without a **Select Page** action in front, ArtPro puts all pages with the 0,0 point in the center of the ruler. This results in multipage documents being placed on top of each other. If you use the **Multiple Page Offset**, all pages are put next to each other.

### 4. Import Separated File as Multipage

This option should be switched off in an action list. It relates to importing a separated file, for example files using the %PLATECOLOR command to identify the separation name or older separated PostScript files.

With the Import Separation File as Multipage on, all the elements of a separated file will come in as grayscale, and the different separations will be treated as individual pages, so they will be placed on top of each other, unless the Multiple Page Offset is on.

When importing a separated file with the Import Separated File as Multipage option off, the Separated PostScript file converted to one (composite) ArtPro file with all the separations.

The individual paths coming from the different separations, will be merged together into a path with the combined color information, based on the Merge Equal Paths option (see later). Images will be recombined into one mapped picture.

## Font Settings

### 1. Use Replacement Font instead of included Fonts

If this option is disabled the system uses the fonts in the file (if embedded). If they are not embedded the system uses the fonts in the Fonts Folder. If this option is enabled the system uses the fonts in the Fonts Folder first and uses the embedded fonts when the fonts are not available in the Fonts folder.

### 2. Fail if Missing Font

When this option is enabled and fonts are not available in the Fonts Folders or embedded in the PS or PDF file, an error appears on the **Importing** action when executing the action list, regardless of the Preflight Settings (Cruise Controls). Use this option when no Cruise Controls are in use.

### 3. Fail if Courier

Similar to **Fail if Missing Font**, an error appears if there is a Courier font being used in the document, regardless if it is a missing font or no missing font.

### 4. Convert to real text

When this option is enabled, the system attempts to convert the text in the document to real editable text which can be modified in Edit or ArtPro. To do so, the font must be present on the Edit or ArtPro system. Note that this option works only for files coming from certain applications. Also note that only roman characters can be converted to real text. All other characters (special, accented...) can not be kept, and will be vectorized.

### 5. Font Folders...

It is possible to select multiple Font folders, in which system looks for fonts that are not installed nor embedded in the PS file.

This allows importing a file with the fonts in a separate folder, without activating the fonts. Keep in mind that these fonts are treated the same way as fonts embedded in the PS file, so all text are converted to outlines. The font folder can be used for Type 1 fonts and Truetype.

To add font folders, go to the **Font Folder...**, click the **+** button. A dialog box appears to select a folder. Click on the correct folder and click **Choose**. The font folder is added immediately and system searches the folder and all subfolders for printer fonts.

A font folder is shown with its complete path. To stop using a font folder, simply select it from the list and click the **-** button. The **Reset** button deletes all the font folders from the list.

The PS default fonts toggle makes system use a set of default fonts, like Helvetica, Courier, Times, Symbol... They are stored in a folder called PS Fonts. On Windows, this folder should be on your hard disk alongside the application file. On Mac OS, this folder should be inside the bundle of the ArtPro Action List Editor.

This set cannot be modified. The system tries to use the embedded fonts first and then the font folders.

You can open a **File Naming Template** dialog box allowing to define the name for the font folder based on the job name, user name...

### Color Settings

The **Color Settings** contain all separation related settings and determine how the custom colors or CMYK separations are handled in the file. All functionality is available to either keep separations as they are defined in the PostScript or PDF file, to convert them to CMYK or to merge them with another separation. This can be done either in an automated way (example: Convert All Custom Colors to CMYK) or for specific separations only which are known to be in the files that are processed.

This is discussed in the **Custom Colors** section. The list of the custom colors can be seen by clicking the **Custom Colors...** button.

#### 1. Single Separation

This option allows to import a single separation from a PS file or a PDF file. The name of the separation is to be filled in the text field, example: "Black" or the name of any of the other separations in the file to be processed. A typical example of the use of this functionality is double burn or versioning, example: language changes, packaging versions, etc....

To summarize an action list like this would handle folders containing two or more files, preferably with a naming convention which identifies each version. For example, the English version of a document could have the extension "\_eng", the Spanish version of a document could have the extension "\_esp".

To simulate a plate change of black only on the press and allow for the merging of the black plate of the Spanish version with the color plates of the English version following actions would be defined:

- a. Select file: English version.
- b. Importing: CMYK of English version.
- c. Save ArtPro file: English version.
- d. Export PDF: English version.
- e. Select file: Spanish version.
- f. Importing: Black Plate only of Spanish version, the Remove Separation option will ensure all Black from the English version is made transparent.
- g. Save ArtPro File: English CMY with Spanish K.

- h. Export PDF: English CMY with Spanish K. (for example for proofing)
- i. Close File: remove the file from memory.

This allows to actually proof the merged files exactly the way they would be put on press. Since this merging takes place at the single file level, it is possible to identify potential problems (example: moved graphics or images, text running through images, etc....) early in the process and physically correct them in ArtPro, even if the original documents are not available.

Double burn action lists are supported for single page as well as multipage documents, while more than two versions are equally supported.

## 2. Remove Separation

When **Single Separation** is active, **Remove Separation** makes the original separation transparent while the new separation from the file is being imported.

## 3. Force Black Overprint

When **Force Black Overprint** is checked, 100% black in the PS or PDF file is converted to all transparent + 100% black in the ArtPro file. If **Force Black Overprint** is not checked (default), all 100% Black in the PostScript or PDF file is treated as any other color, meaning that the result depends on the **Ignore all Overprints** flag.

## 4. Ignore All Overprints

When **Ignore All Overprint** is not checked (default), overprint in the PostScript or PDF file is converted to transparent in the ArtPro file. If **Ignore All Overprint** is checked, overprint in the PostScript or PDF file is translated to 0% in the ArtPro file. This option can be used to take out the trapping. Note that this option is not removing the transparent strokes, but only taking off overprints. If both **Force Black Overprint** and **Ignore All Overprints** are switched off, the file is not changed and can still be modified later.

## 5. Keep Screenings

This option keeps the screening definitions, if they were available, in the PostScript file or PDF file.

## 6. Fail on Nonseparable Blendmodes

A file to be imported can be set to fail if it contains Nonseparable Blendmodes (Hue, Saturation, Color, Luminosity). These Nonseparable Blendmodes operate on a 3 component color space. This means that to calculate the resulting color, CMYK needs to be converted to 3 components, the Blend needs to be calculated and the result needs to be converted to CMYK again. However, instructions on how these conversion from one color space to another should happen cannot be given. This results in different behaviors and different color results in different applications / RIPs.

## 7. Fail if Transparencies in Incompatible Colorspace

If the file to be imported contains Transparencies (Blendmodes) on objects in incompatible Colorspaces (example: RGB), the file fails when this option is switched on.

## 8. Fail if Transparencies imported on Existing Job

If PDF 1.4 transparencies are imported on top of a job containing any objects, this option causes the job to fail.

## 9. Remove unused separations

This option automatically removes all separations that are defined in the file but which are not used.

## 10. Convert C/CV/CVC/CVU/CVP to...

All the separations in the custom color list, that have a different extension only are automatically converted to the one extension defined in this menu. So if there is a

PANTONE 300 CVU, PANTONE 300 CVC and PANTONE 300 CV, they all can be converted to example: PANTONE 300 CVC, automatically.

#### 11. Convert CMYK to Hexachrome CMYK

This option allows to replace CMYK by Hexachrome CMYK and thus allowing a smoother integration with Hexachrome compatibility.

#### 12. Convert all custom colors / Others

With this option checked, all separations in the file are converted to process colors, example CMYK, based on the CMYK values for the separations as they are defined in the PS or PDF file. The **Others** option is used for separations that are available in the file but not described in the header. This should typically not be the case in a well constructed PS or PDF file, but does sometimes happen. This option equally makes sure that these colors, if they appear, are converted to process colors as well.

#### 13. Custom Colors

The **Custom Colors** button enlarges the **Color Settings** menu with additional fields and a color list which allows to merge PANTONE™ colors or selectively convert PANTONE™ colors to CMYK without having to convert them all.

The additional fields that become available show a color list, a **From** and **To** field and an **Add**, **Delete** and **Reset** button. In the example, some entries has been made in the color list: Blue is merged into Reflex Blue. This is used if there are, for example, two special blue colors in a file which need to merge together in one color. It is obvious that the names of the separations have to be known before this action list is executed. If the **Convert To** color does not exist in the file, it is automatically created.

To make an entry, type the name of the “From” separation in the left field (for example Warm Red), and the name of the “To” separation in right field (example: PANTONE™ Red) and click Add. Note that this first will leave the color (indicated by the color swatch in front of the entry in the list) by default black. To change this, click on the swatch and set the desired colors as CMYK values, these values will be used for display (for example when using ArtPro) and for proofing to a CMYK device.

If a separation needs to be converted to CMYK, simply check the **Convert** button. Set **Exclude** to keep the specified separation, even if **Convert All Custom Colors** is used.

To delete an entry from the list, select the entry and click **Delete** button. A **Color** list can be saved to an external file, and loaded.

#### 14. Color Management

Define different profiles for importing CMYK, RGB or grayscale files through Import PS. Click the **Color Management** button to open the **Import** tab in the **Color Management** dialog box.

#### 15. Color Book

The **Color Book** for import is the same (and uses the same UI) as the ArtPro color book. Custom colors can be defined in import to be converted into the color book inks. This means, for example, convert them into hexachrome values, if a hexachrome color book was selected. The selected Color book is shown next to the **Color Book** button and an option is provided to turn it on or off.

### Blends, Shadings and Gradations

Use this to define how gradients, blends and shadings should be handled on PS or PDF import. It is advised to switch **Recognize Gradations** and **Convert Shadings into gradations** on, to recognize gradations from most popular applications.

#### 1. Recognize gradations (PS Only)

In a PostScript file, gradations can be described by a large number of paths or by a TIFF. In most cases, these can be recognized and replaced by ArtPro gradations, if the option is checked (default).

With this option, gradations from Freehand and Illustrator are automatically converted into ArtPro gradations or multistep gradations. Freehand and Illustrator vignettes which are not linear are converted into multistep vignettes with midpoints. Gradations from QuarkXPress are converted into ArtPro linear or multistep gradations.

If the option is not checked, depending on how the gradation was defined in the PostScript file, it is imported as a series of paths, or it is converted to a TIFF image.

## 2. Convert Shadings into Gradations

PostScript Level 3 and PDF 1.3 and above often use the shading command to define gradations. With this option, most shadings are converted into AP gradations or Multistep gradations. If this option is switched off, an image is generated.

## 3. Convert blends into CT at

When blends are used in a document, they normally come in as a series of paths, with changing paint styles. These blends are very difficult to select, modify,... Especially trapping becomes very difficult. Therefore, usually blends are flattened into images, with one single path and one single paint style.

With this option on, blends are even converted to internal ArtPro CT's automatically. This means the pictures are embedded in the ArtPro document in a '.ct' file. The resolution for these images can be set and the unit can be changed from pixels per inch to pixels per cm.

## 4. Resolution for Shadings

This option is for shadings that cannot be converted to ArtPro gradations (example: mesh gradations). All these gradations are automatically converted and extracted as a TIFF image on disk. The resolution for those TIFFs can be set here. Shading conversion to images is a very time consuming calculation. Therefore, the default resolution is set to 50ppi, but a higher resolution is recommended in some cases, depending on the shape of the object. Check the objects carefully.

Images generated during PS/PDF import always generate a mapped image.

## 5. Interpolate Shadings to 300ppi minimum

When working on certified or using **Cruise Controls**, it is very likely that lowres images generate a warning or error. This would also happen for images generated when converting a shading.

To avoid this, the Resolution for Shadings can be set to a higher resolution (300ppi), but the sampling of shadings at a high resolution is very slow and time consuming.

The option **Interpolate Shadings to 300ppi minimum** samples at a low resolution and creates a higher resolution image from it. The lowres images are interpolated to a resolution higher than 300ppi. The resolution is a multiple of the sample resolution, example: if the sample resolution is 70ppi, the image after interpolation is  $70 \times 5 = 350$  ppi. This results in a high resolution image, generated at higher speed.

## Links

This determines how links are handled upon import. With links we refer to either OPI links (%ALDImage commands) in PS or PDF files or references to EPS images in PS documents or EskoLinks.

- Placing or importing



The different pictures that could be used in the original document are TIFF (with or without clipping path), DCS, JPEG, PDF, EPS lineart, regular EPS image (with or without clipping path), EPS duotone, tritones..., LoRes or HiRes images from OPI systems...

Most of these images can be brought into the ArtPro file in different ways:

Most of them can either be placed or imported, depending on the kind of image and the desired result. Example: When EPS images are imported, EPS is converted into a TIFF on disk and the TIFF is placed in the ArtPro file. The big advantage is that the TIFF image can be mapped, which gives us benefit for trapping, previewing, ink swapping, ink coverage... Therefore in ArtPro it is recommended to work with mapped images (TIFF, JPG, Photoshop PSD and DCS) all the time.

Because of functionality, it is always recommended to map images upon import except for specific cases like copydot images, PDF images, etc. When images are placed and not mapped, they remain as they are (example: compression, content, etc.) and appear identically in the output as they have been placed. This method is typically recommended for copydot images. Note that only TIFF images, JPG images, PhotoShop PSD and PhotoShop DCS (without vector data) files can be mapped, hence EPS images (any type, also DCS) can ONLY be mapped if they have been imported and thus converted to a TIFF image on disk. Copydot images can equally be imported, (example: DCS copydot – 1 bit data) but this is not recommended since the image would be decompressed while writing to a TIFF file hence produce extremely large files.

**Note:**

TIFF images are not imported but only placed (and possibly mapped). Importing is only relevant for PostScript images (for example: EPS images) which are then processed through the Import action separately if "importing" has been set.

Summarized:

**TIFF:** A TIFF image can only be placed, not imported. A placed TIFF file can be mapped and thus trapped automatically.

**EPS image:** An EPS image can be placed or imported. A placed EPS can not be mapped. When it is imported, the pixels are converted to TIFF data. If the image has a clipping path, it can be converted to an internal path with the image inside.

**EPS graphics:** If an EPS graphics file, example: a logo or chart, is placed, it can be transformed (rotated, scaled,...) but not edited (it is treated as one object). By importing that same logo, all the vectors are converted into internal paths which can be edited and trapped.

**EPS duotones (+ monotones, tritones and quadtones):** Can be placed or imported. An imported duotone is correctly converted to a mapped picture. The condition here is that they should be created with Adobe Photoshop 5 or later. Duotones from older versions of Photoshop are extracted as CMYK images when imported, so these should be placed instead.

**DCS:** A DCS image is in fact a pre-separated EPS. So the same rules apply. Importing makes it a TIFF, which allows us to map, preview, trap,... But a DCS cannot be imported directly (example: dropped in a hot folder to be imported), it has to be used in a PS or PDF file. In other words, if the DCS image is placed in a (Illustrator, XPress,...) document that is saved out as a PS or PDF it can be imported and mapped correctly.

**OPI images (Open Prepress Interface):** When OPI low resolution EPS sample images are used in a document that needs to be imported, the images always have to be placed, if they are not automatically replaced by their high resolution version upon import (see the OPI section). If they are imported, completely new (low resolution) TIFF images which is not recognized and replaced by the OPI server are created, resulting in a low resolution output. If low resolution

TIFF images are used, they can typically (for most OPI servers) mapped and further worked with (example: for trapping).

- Omit/ Embed

There are three ways to put an image in a PS or PDF file.

- 'OPI': The image is omitted (TIFF, EPS, DCS,...). This means the original picture is not included in the PS file, only the link is available. The link is a path, indicating the place where the image can be found on the hard disk or anywhere else in the network (example: on the file server). These PS/PDF files are obviously very small. They are quick to write and copy.

In the **Links** tab of PS/PDF Import, they respond to the settings under Omit. In the picture list, under display links, these images have **OPI:** in front of the name.

- 'EPS': The image is embedded. The complete original picture as well as the link is included in the PS file. This means in ArtPro we can choose which to use. These are usually EPS. They respond to the settings under Embed. These images can be recognized in the picture list, by the 'EPS:' in front of the name. These PS/PDF files are larger.
- The image can be completely embedded without the link. This is usually with TIFF images. (Freehand is an exception. All TIFFs are always embedded in the PS files, with the link). Because no link or name is available, ArtPro can not display these images in the picture list. No link settings can be defined. These images are extracted to TIFFs on disk during import.
- EskoLink: These are linked images in a Normalized PDF. These act in the same way as OPI links but use a different syntax. EskoLinks allow to define different density per separation and allows the definition of separation remapping.

How to handle links on Import:

### 1. Use Link and Place All

The original file referred to by the link is searched and this file is placed. The embedded information (if present) is ignored. The file is searched at its original location, unless the link is re-routed in the **Display links...** part of the dialog box or if rerouting is defined in the OPI settings. If the image is not found, the embedded information is used. If it is not available, the result is an empty path.

This setting is mostly used for TIFFs and JPEGs, omitted from the file, lores OPI images, single file DCS or duotones from Photoshop (version 5 or below).

### 2. Use Link and Import EPS

The file referred to by the link is searched and this file is used. The embedded information (if present) is ignored. If the file referred to is an EPS/DCS, it is imported, converting lineart to ArtPro native lineart and extracting images to disk according to the settings in the Images settings. If the file referred to is not an EPS or DCS (example: TIFF), it is placed.

The file is searched at its original location, unless re-routing is defined in the OPI settings. If the image is not found, the embedded information is used. If it is not available, the result is an empty path.

This setting has to be used for DCS and duotones (if you want them converted to mapped TIFFs). It is also used if there is an OPI swap. In general, most OPI images have the same format (example: EPS). ArtPro is rerouted to the hires. If that hires is an EPS.duotone/ DCS it is imported and converted to a TIFF. In all other cases it is placed. This option is used for EPS, when they are either omitted from the PS file or embedded and the original has been modified since.

### 3. Ignore All Links



The link is ignored and only the embedded information (if present) is used. This embedded information is imported, converting lineart to ArtPro native lineart and extracting images to disk according to the settings in the Image settings.

This setting is used for embedded (hires) EPS and TIFFs. There is no difference in result whether you apply use link and import or Ignore all links. However, if the links are ignored, we need not worry about ArtPro finding the original on disk (is the link correct?, does it need re-routing?,...).

When importing a PS/PDF file, 1, 2 or 3 needs to be chosen for all 'omitted' images (the ones in the list with OPI in front of the name) and also for all the embedded images (the ones with EPS).

#### 4. Extensions

It is possible to override the above option settings with the **Extensions** fields. Consider the example where all EPS images are linked and imported. Depending on the types of EPS pictures, it may be considered to make an exception to this setting, example: one would not want to equally import copydot EPS pictures. To avoid this, but still allow for other EPS pictures to be imported and hence trapped, it is possible to work with an extension for the copydot images. If the copydot images would be defined as ".cpd" (as an example), then typing ".cpd" in the **Extensions** field next to **Use Link and Place All** would place ONLY the images with a .cpd extension, while importing the others.

It is equally possible to add multiple entries in the **Extensions** fields separated by a space, example: ".cpd .main .duotone" etc....

#### 5. Into Opacity: B/W, Gray, 5th Channel, Invert

With the Into Opacity options, you can define that linked TIFFs in the PostScript file should be put into the opacity channel, and thus be made transparent.

##### 1. B/W

If the **B/W** option is checked, all black&white bitmaps referred to by link are put into opacity with a solid black image channel. So, all black pixels remain black and all white pixels become transparent.

##### 2. Gray

If the **Gray** option is on, all grayscales, referred to by link, will be put into opacity, with a solid black image channel. The resulting CT will be black for the percentage of the grayscale, and transparent for the remaining percentage.

##### 3. 5th Channel

If this option is checked, a 5 channel TIFF referred to by link, results in a four channel internal CT and the 5th channel is used as opacity channel. The areas of the Photoshop alpha channel that were 100% masked, result in 100% image in ArtPro. The areas that were 0% masked, become completely transparent. Any value in between (example: soft edges on the mask) result in a partial transparency (see pictures). If the option **Invert** is on, the opacity channel is inverted, using the **Invert** button in the Mapped Picture paint style. This way, the alpha channel can be made up in two ways, positive or negative. With **Into Opacity** it is also possible to work with extensions (see above): Example: B/W is off, gray is on, extension = .gr This means all B/W is not affected and all grayscales with an extension .gr is put into opacity. All other grayscales are not affected.

## OPI

This is used for rerouting linked images. The rerouting could happen based on the name of the image or based on the path of the images. There are mainly two reasons why rerouting may need to take place:

- Low resolution images need to be replaced by (rerouted to) high resolution images.
- Missing images need to be rerouted to their correct (current) location.

**Note:** Re-routing can only be done when OPI links are available for the images and the **Use Link and Place All** or **Use Link and Import EPS** options are set.

### 1. Perform OPI swap

This option enables the rerouting as defined in this menu. If the option has not been set, all settings are ignored and no rerouting takes place when OPI links are used by the system.

### 2. Sample Extension / Hires Extension

The **Sample Extension** and **Hires Extension** fields are used to swap the extension of the image that is linked. This is typically used for OPI servers which are set to add an extension to or replace an existing extension with another when low resolution images are generated from high resolution images.

Every extension that is entered in the **Sample Extension** field is cut off from the linked file before it is actually searched, while every extension that is entered in the **Hires Extension** field is added to the linked file before it is actually searched.

If the **Sample Extension** field contains ".lay" and the **Hires Extension** field is empty and the image that is linked is "image.lay", then the system actually searches for "image", the ".lay" extension is cut off.

If the **Sample Extension** field contains ".lr" and the **Hires Extension** field contains ".hr", and the image that is linked is "image.lr", then the system actually searches for "image.hr", the ".lr" extension is cut off and the ".hr" extension is added.

It is equally possible to enter multiple extensions in the fields, separated by spaces. If the extensions of the file referred to in the link matches an extension entered in the **Sample Extension** field, the extension is cut off and when present, it is replaced by the extension in the **Hires Extension** field at the same position. Extensions that only need to be cut off and not replaced should be at the end of the list.

Example:

- Sample Ext. field: ".lr .low .lay"
- Hires Ext. field: ".hr .high"

The result of this operation is:

- ".lr" is replaced by ".hr"
- ".low" is replace by ".high"
- ".lay" is cut off

### 3. Sample Folder / Hires Folder

Similar to the **Sample Extension** and **Hires Extension** fields, the **Sample Folder** and **Hires Folder** fields are used to reroute the system to search for an image in a folder different from the folder determined in the path of the OPI link. In OPI swapping environments, this is typically used for OPI systems that are set to generate low resolution images of high resolution images with the same name but in a different folder.

Suppose all low resolution images are stored in a folder "ForLayoutUse" and all high resolution images are stored in the folder "Originals", both under the same subdirectory, then "ForLayoutUse" would be filled in the **Sample Folder** field, while "Originals" would be filled in the **Hires Folder** field.

When the OPI link in the file is then: E:/CustomerX/Images/ForLayoutUse/Image, the system will actually search for and use: E:/CustomerX/Images/Originals/Image

It is also possible that one path is changed twice, for example: by putting multiple entries in the **Sample Folder** or **Hires Folder** fields separated by spaces. This implies that there should be no spaces in folder names that need to be replaced.

For example, if the **Sample Folder** contains "LR Customer" and the **Hires Folder** contains "HR", then the OPI path E:/JOBNR/ImagesCustomer/LR/Image is replaced by E:/JOBNR/Images/HR/Image.

In the above examples, it is clear that all OPI paths have been generated by a system on Windows. The above would work for cases where the front-end station creating the PostScript or PDF file with OPI links is based on Windows and has the same mount point and drive letter for the image server as the Automation Engine. As in the first example, for both Automation Engine and the front-end Windows machine, E:/ is the network drive for the image server entered at the mount point where the CustomerX folder is the first available subfolder.

It is clear that in a day to day production environment, the above situation is mostly hypothetical. Indeed, mostly Macs are being used as the front-end, while if even Windows machines would be used, they would often have a different mount point to the image server than Automation Engine.

In these cases, the Folder Mapping mechanism can be used to remap the drives for the OPI paths.

An example clearly illustrates this. Suppose the Image Server has following structure for the images that are made available to the network: E:/Server/Images/...

Suppose that the Images folder has been made available to the Mac environment as Image Server and this volume gives access to the content of the Images folder.

Suppose that the Server folder has been made available to Automation Engine and this folder is mounted as a network drive under G:/, hence this G:/ gives access to the contents of the Server directory.

If now an OPI link on the Mac is defined as: ImageServer:image then Automation Engine actually needs to find: G:/Images/image To achieve this, we would enter "Image Server:" in the **Client** field, while entering "G:/Images/" in the **Server** field. Clicking **Add** appends this definition to the list. It is possible to have multiple OPI folder mappings active at the same time. The system equally automatically converts between Macintosh notation of subfolders and Windows notation of subfolders (: and /).

#### 4. Root Folder

If a linked file cannot be found at its original location or at the location it is supposed to be found after re-routing, the file will be searched for in the folder or volume that is defined as Root folder. Nexus will not only search in the Root Folder but equally in all subfolders. When a Root Folder has been defined, it is displayed underneath the Root Folder button. To remove the Root Folder setting, click on the Root Folder button while holding the SHIFT key.

Note that Nexus will use the first instance of the file that it finds, which may be potentially dangerous in production environments. Suppose the image to be found is called "logo.TIFF" and the logo is not found at its location, Nexus checks the Root Folder and its subfolders.

Suppose in the production environment, two customer directories have been set underneath the root folder directory: RootFolder/CustomerA/Images/logo.TIFF and RootFolder/CustomerB/Images/logo.TIFF.

Even if the CustomerB logo needs to be used, the system always picks the first instance of the name that it finds, in this case the logo of CustomerA! It is also not advisable (for speed reasons) to select a complete disk or a very big image tree as root folder.

#### 5. Exclude Folders from Search

When searching through the Root Folder, folders names entered in this field are not searched. This can be used when all images can be found on the same volume, with the possibility to exclude all folders containing low resolution files, example: all low resolution files may always be put in folders called ForLayoutUse.

## Image Settings

### 1. Vectorise Bitmaps: Always/ Most/ Never

When importing a PostScript or PDF file containing 1-bit images or a 1-bit image is detected via OPI, this setting defines how to handle those.

When set to **Never**, the 1-bit images are placed as images. When set to **Always**, 1-bit images are always vectorised. When set to **Most**, the 1-bit images containing more than 5mio pixels are placed, images smaller than 5mio pixels are vectorised. For example: This option can be used to vectorise small logos but leave large scans such as copydot files, unmodified.

When vectorizing a Bitmap, the **Precision** can be set to **Exact** (no reduction factor and straighten margin is applied), **Fine**, **Normal** and **Coarse**. For more information, refer the ArtPro Manual.

If a bitmap is placed as an image, the bitmap is converted into a Mapped TIFF with image channels and an opacity channel. The image pixels constitute the image and the white ones are transparent to the background.

Both a vectorised TIFF and a bitmap mapped TIFF are colored exactly like in the original document. When importing a PDF file, the result is always a grayscale TIFF. In most cases a vectorised bitmap is smaller and quicker to handle than a mapped TIFF.

### 2. Make Images Internal

After importing, all TIFF and JPG pictures (placed in the PostScript or PDF file or extracted by Automation Engine) can be automatically converted into Internal Images in ArtPro, by activating the option **Make Images Internal**. It is only used in exceptional cases. For more information on internal images, see Chapter 5: Contone of the ArtPro Manual.

### 3. Extract included images

If an image has to be extracted on disk during PS/PDF import (see also Links), a file is saved to disk. During Import, identical images are detected and deleted. This means that, if Automation Engine extracts images from the PS or PDF file and writes them to disk, these images are compared and if the same image is used several times, only one of them is kept. The comparison is done after writing the TIFFs and before making them internal (if necessary). This comparing can take some time but results in faster editing and smaller file sizes.

The **File Name** field in this dialog box is set to define how the extracted images of the PS or PDF file is named and to what location they are saved. The path name in this case determines where they are saved. If empty they are saved to the current job folder. It is advisable to use the document page number in the Template, as otherwise some files can be overwritten with multipage PS import and Select Page Action.

### 4. Resolution / Detect Image Resolutions

When images are extracted during the import of a PDF or PS file and the **Detect Image Resolutions** in PostScript / PDF Import option is on, Automation Engine checks the internal resolution of the image.

If this resolution is an integer (example: 360 ppi), the image saved uses this resolution and is placed in the ArtPro file at 100% scaling. If the resolution is not an integer (example: 243,6 ppi), or if the **Detect Image Resolutions** in PostScript / PDF Import option is off, the

resolution as defined in the Import PS/PDF dialog is used and the scaling is adjusted (in this case, the 300 ppi image is placed at a scaling of 123.56%).

#### 5. Use Original Name

When the original name of an image is known, the extracted file is saved with the original name if this option is checked. If this option is off or the original name is not known, the user is prompted for a name but by default the name of the PostScript file followed by .# and a number is used.

#### 6. Use Photoshop clipping path

If a PS file is imported, in which Photoshop TIFF files are placed, containing a clipping path, this clipping path can be converted to ArtPro line art, with the TIFF file placed inside it's path. This option only affects TIFF files coming in with OPI. Clipping paths on EPS images are always used. Another difference is that during Import PS, all paths are imported as straight line vectors, while when using the **Use external clipping path** option when placing a picture, the curves are kept as curves.

#### 7. Recognize TIFF Channels

When OPI linked pictures have to be placed, Automation Engine tries to recognize any spot colors when placing a TIFF file and if the **Recognize TIFF Channels** is switched on.

A TIFF file can contain channels indicating masked areas (type1), channels indicating selected areas (type2) and channels indicating spot colors (type3).

Channels of type 1 and 2 are treated as alpha channels, thus put into the opacity channel. If the TIFF contains more than one alpha channel, only the first is used and all others are ignored, though the separation are generated based on the channel names present in the TIFF. These separations have CMYK value 0, 0, 0, 100 and only reflect the number of channels in the TIFF.

If spot color channels are found, a separation is created with the same name as the TIFF file channel.

The color definition (CMYK representation) for this spot color is first searched in the ink book. If not found there, the color information from the TIFF file is used.

If ArtPro encounters an unknown color space, a new separation is created with the channel name and with CMYK representation 0, 0, 0, 100.

## General Settings

#### 1. Clip Text

Text that was clipped in another application is clipped in ArtPro as well after Import PostScript/PDF. In order to make this possible, though, clipped text is vectorised in ArtPro and thus no longer available as real text. Normal text (not clipped) is not affected by this option, which is checked by default.

#### 2. Merge Equal Paths

If **Merge Equal Paths** is unchecked, all paths are converted to ArtPro in the normal way. If checked, two or more identical paths on top of each other are merged into one single path with the combined color information. This option is automatically enabled for separated files.

#### 3. Recognize Illustrator Layers / Merge Equal Layers

When checked, all the original layers from imported Illustrator (<9) EPS files are recreated in Automation Engine and all the elements are put back on the correct layers. All PDF files containing PDF 1.5 layer information, also generate the correct layers in Automation Engine.

Make sure to generate PDF 1.5 output from certain applications (example: Illustrator CS) to include all layer information.

If unchecked, all vectors are put on one single layer called PostScript Import. This option can be used with or without **Merge Equal Layers**. If Automation Engine finds multiple layers with the same name, those layers are merged into one (example: An EPS with a 'Dielines' layer is imported on an ArtPro template with 'Dielines' in it). It is possible in Automation Engine to have several layers with the same name.

#### 4. Ignore Page Commands

In a normal PostScript file, the document size is defined at two places: the bounding box, in the header of the file and page commands, later in the PostScript. In most cases, the Page Commands are more exact than the bounding box. For files coming from certain versions of Barco systems, the Page Commands are rounded off, while the bounding box is exact. In those cases, you can choose to **Ignore Page Commands** and use the PS bounding box instead.

#### 5. Keep Strokes

When checked, all strokes found in the PostScript or PDF file are imported as ArtPro Strokes. If the option is unchecked, the strokes are converted to regular ArtPro paths.

#### 6. Memory

This parameter indicates how much Virtual Memory is allocated to the Import function, in order to store its variables, key words, dictionaries, etc. Generally, 20000 kB (default) is sufficient to perform the function. However, when the error message VMError appears, the value should be increased.

### Certified PDF

When importing any file type other than PDF, the Sessions log indicates that no input profile was applied and the session begins AFTER the import.

- Importing non-Certified PDF

When importing a non-Certified PDF file and Certified Import is enabled, Automation Engine Certifies the PDF file and import the Certified PDF instead of the original. Unless **Overwrite input file on re-preflight** is checked, a new certified PDF is saved (according to the Template settings) and this certified PDF is imported. This is saved as a separate session.

- Importing Certified PDF

#### 1. Re-Preflight if profile does not match: Selected

The job is re-preflighted if the input profile and the embedded profile do not match. If they match, the session log indicates that both profiles are identical. When comparing two profiles, their content is checked and not just the name.

#### 2. Re-Preflight if profile does not match: Unselected

The Certified PDF is imported without re-preflighting it. The Session window indicates the profile it was originally certified by.

- Re-preflight

When Re-preflighting, Automation Engine creates a new session, preflight the file and close the session. The file is saved according to the File Naming Template settings.

#### 1. Overwrite input file on re-preflight

When checked, there is no new PDF file created by Automation Engine. Instead, it replaces the original PDF file.

## 2. Get all bounding boxes for preflight report

When checked, this option forces Automation Engine to obtain bounding boxes for the last preflight report. If activated, it gets full information for every report item along with bounding box of the area where the error/ warning occurred. This causes an additional preflight of the input document and consume additional time.

### Cruise Controls (Preflight Settings)

This dialog box is used to set a preflight profile.

Several controls are available which are split up in four categories: Lineart Color Controls, Image Controls, Object Controls and Text Controls. These controls are found in the left pane. Clicking the triangle in front of each of the controls will show the available controls for that category.

In the right window the selected controls, for example preflight settings, are shown, each with an either green, orange or red circle in front. The color determines the severity of the control: red refers to error level, orange to warning level and green to note level.

To change the severity level for a preflight item, click on the preflight item and select the appropriate severity level from the drop-down menu. To add a preflight item to the list, double-click on the control in the left window.

To remove a preflight item from the list, select "Delete Control" from the contextual menu, or select it and press Cmd - Backspace.

The **Save Controls**, **Clear Controls** and **Load Controls** buttons allow to respectively save all the selected controls with their severity level to a file, clear the list or load controls and their severity level from a previously saved file.

Note that a job is not held based on preflight, in the case of a warning level or error level there is only an exclamation mark in front of the job in the Job list indicating that the error button should be clicked to verify the error log information for that specific job. However, even if there was a preflight error, the job still continues to run until completed!

When preflight has been performed for a file and the file has been saved it contains a complete Cruise Report (preflight report). Using ArtPro it is possible to view this report and actually use it to navigate to the appropriate object in the file that triggered that specific entry in the Cruise Report.

By switching on the **Save Report** option, a preflight report can be saved in PDF format to the location specified in the Template. Using an E-mail action, this report can be emailed as an attachment, using a Select File action to select the PDF file only.

Following are the different **Cruise Controls** or preflight settings which are available:

#### 1. Info

With these settings, information about the imported file can be found:

Filename: The original name of the imported file

Format: What file format the imported file has (as found in the header of the file)

Title: Title of the document of which the imported file was created

Creator: Application in which the imported file was created

Date: Date on which the imported file was created

Type: What type of file was imported (Comp. / Separated)

#### 2. Lineart Color



\* Overprint: Overprint defined in the imported file is detected. Overprints in a document could indicate that the file may already contain some trapping.

\* Custom Colors: Using this control, get notified when and where a custom color is used in the imported file.

\* Ink Coverage: Ink coverage can be checked not to exceed a given percentage, example: 300%. This is used to find a common error, like the use of registration color, where simple black was needed.

### 3. Image

This category contains all controls to avoid most common errors in images.

\* Resolution: if the resolution of all images used in the imported file is bigger or smaller than 72, 300, 1000 ppi or a freely entered value, a warning is generated. This can point out low resolution images or images with an excessive resolution. Very important to know here is that ArtPro takes the scale factor of an image into account. The real resolution is the scan resolution divided by the scale factor in % and multiplied by 100. The real resolution of a 300 ppi image scaled to 200% is 150ppi. The real resolution of a 72 ppi image scaled to 20% is 360ppi.

\* Color: Images in the specified color space (RGB, CMYK, LAB, Separated or grayscales) can be found. This could also be very useful because ArtPro does not support any RGB images.

\* Links: With the Link settings, OPI or EPS comments can be checked:

OPI Comments: indicates if OPI comments were encountered in the imported file.

OPI Recognized: indicates if the found OPI comments were used.

EPS Linked: indicates if linked EPS files were encountered in the imported file.

EPS Imported: indicates if these found EPS files were imported (instead of being placed).

### 4. Object Kind

Object controls offer the possibility to point out objects smaller or bigger than a given value. For example, to avoid hair lines or small text printed in flexography.

\* Text: text smaller or bigger than 12pt, 6pt or any entered value can be looked up and reported.

\* Strokes: strokes can be checked for size to be bigger or smaller than 2 mm, 1 mm, 0.5 mm or a user defined value.

### 5. Text

Text controls contains three criteria for font control:

\* Font Missing: A criteria can be set to search for missing fonts during import. ArtPro reports if no font information was found at all, meaning the printer as well as screen fonts were missing.

\* Font Name: If a font, used in the imported PS or PDF file matches the name entered here, a warning is displayed. This way, the system can notify the operator when for example, a courier is used in a file, for this is often a replacement font.

In the definition of the font name, a wild card can be used. If you enter `Cour*`, all font names starting with "cour" are found, including courier bold, courier italic, etc. The name is not case sensitive.

To add controls to the list, double click on the control or select it and click on the button with the arrow to the right. To remove controls from the list, select it and click on the button with the arrow to the left.



\* TrueType: checks if TrueType fonts were used in the imported file.

#### 6. Transparency

Transparency controls contains three criteria:

\* Blend Modes: A criteria can be set to search for used blend modes.

\* Opacity: If an opacity higher, lower or equal to the entered value is encountered. If set to "Lower than 100%" is set, all objects with an opacity other than 100% trigger the control.

\* Opacity Masks: checks if Opacity Masks were used in the imported file.

#### 7. Preflight Report

The **Preflight Report** allow to get information from the PDF Preflight Reports. This of course only applies on importing PDF files that were preflighted. The Cruise Controls that can be used are the three levels of Preflight report: fixes, warnings and errors.

Please note that Bounding Boxes for preflight entries are only available if the file was preflighted or re-preflighted during import, with the **Get all bounding boxes for preflight report** option selected (see above).

### 1.4.31 Ink Coverage

This action calculates the file's ink coverage and provides it in a text file (use the Template Editor to specify its name and location).

Per separation in the file, a value is given as a percentage and as a surface coverage (for example in square mm). A total surface value is also mentioned.

The accuracy of the calculation is determined in **samples per inch**.

**Note:** In the case of pictures, ink coverage only works when these are mapped pictures or when placed ArtPro pictures contain a separated preview. In other cases an average value is used. On board ArtPro, this average value can be adapted in the paint style.

### 1.4.32 Ink Coverage Check

This action verifies if the amount of ink does not exceed the **Ink Limit**.

You can specify the area (page box) and resolution at which that area of the file needs to be rasterized for checking. You can exclude special separations such as opaque, die or transparent ones.

### 1.4.33 Insert ArtPro file

This action inserts an ArtPro file or picture into the file that is currently being processed.

The inserted file can either be

- a fixed file (which name is selected in the **Select ArtPro File** dialog)
- a file specified by a preceding **Select File** action).
- a file that was generated earlier in the action list. For example the result of a **Difference** action that needs to be inserted in a new ArtPro file (placed as picture).

The insertion is done on the bottom right quadrant of the current position of the ruler, determined by the position of the ruler in the **Importing** action, the position of the ruler in an opened ArtPro file or the position of the ruler after the **Move Ruler** action.

### File:

Click  to specify a file or specify it in a preceding **Select File** action in the action list.

### Overwrite separation angles and frequency

When inserting an ArtPro file, new separations are added. When there are identical separations, this option overwrites the angles and frequency of the current separations with those of the file that is being inserted.

### Merge Layers with Same Name

When selected, the content of layers in the inserted ArtPro file is merged with content of layers in the current file that have the same name.

### Ignore Screening Errors

Because Extended Screenings are stored differently in newer versions, opening a file from an old version may result in a conversion of the screening. If this conversion fails, the action fails, unless the **Ignore Screening Errors** option is selected. Because a conversion error means that the screening settings have changed, we advise to use this option only for action lists that do not have any screened output or when other screening settings are defined in the action list itself.

### Place as picture using

This is used to place image files or to treat an ArtPro file as a picture (which could be done when the content of the ArtPro file is not available, for example for trapping or internal modifications).

These picture types are supported: EPS, DCS, TIFF, PSD, ArtPro, PS, PDF and TIFF/IT.

When this option is selected, choose the page box from the list. At the time of inserting, a rectangle is created of the same size as the border of the chosen page box, in which the file is placed as a picture. Use the option **Align picture on** to define on what page box the placed file should be positioned. The top left corner of the selected page box is placed in the center of the ruler.

For example: combining both options allows you to place the inserted file positioned on its trim box (top left corner of the trim box in the center of the ruler), but placing it inside its bleed box.

### Place Single-Separation ArtPro File in Single Separation

This option defines how to handle inserting ArtPro files with only one separation. If this option is not selected, objects in the ArtPro file with 100% of the single separation are considered to be registration color. Thus they get 100% of every ink in the ArtPro file after insertion. If this option is selected, the file is inserted in one single separation instead.

### Recognize TIFF Channels

This option allows to recognize TIFF channels when inserting a TIFF File.

This option is also part of the Import action. Learn more in the [ArtPro User Guide \(File menu > Importing PS/PDF > Image settings\)](#).

### 1.4.34 Layer Versioning

This action allows to create multiple ArtPro files from a single file, based on its layers. The **Base Layers** re-appear in every output file. **Version Layers** only appear in one specific output file. This can be used, for example, to split up a file with layers "Base graphic", "Base Text" "English" "French" "German", into 3 files: everyone having the Base layers and one with the French, one with the German and one with the English layer.

#### Base Layers

Click + or - to add or remove selected layers. Specify their name after double clicking the default name. You can use wildcards (\*).

When you **Select by Range**, you can, for example, define that layer 1 – 3 are base layers.

#### Version Layers

**Version Layers** can be defined by a user or you can choose to use **All Non Base Layers**.

Each version layer entry will create an output version. Use the **Template Editor (Output button)** to define their names. For every version, you can define what layers need to be used.

The option **Ignore Case In Layer Names** defines whether the matching of the layer names is case sensitive or not.

Select **Fail if extra Layers found** if you want the action to fail when layers are found other than the ones defined in the versions and base layers.

You can define if the output ArtPro file needs to be saved with a preview and if the Certified PDF information should be included.

### 1.4.35 Make Thumbnail

This action creates a TIFF or JPEG thumbnail version of an ArtPro file.

The maximum resolution you can set is 120 ppi. You can add **Noise for Gradation**. There is no oversampling. Choose the preferred **Compression**.

### 1.4.36 Modify Layers

This action allows to change the settings of layers. Add any number of layers, specified by name. You can use wildcards (\*).

When **Matching** is selected, all layers matching the entered string are affected. When it not selected, all layers *not* matching that string are affected. This for example allows to select all layers except "varnish\*".

Use the check boxes to set layer(s) to (in)visible, (un)locked or (non-)printing.

When a layer name is not found, the line is ignored. However, when the **Abandon** option is selected, the rest of the action list is abandoned.

Layers with hidden, locked or non-printing checks stay like that until other **Modify Layers** actions remove the check or until the action list closes the ArtPro file.

### 1.4.37 Modify Paint

This action allows to modify the paint (in percentage of a given separation) of all or selected objects, change its overprint, or modify the start and end color of gradations.

### 1.4.38 Modify Screen

This action applies user defined screening parameters to all or selected objects.

**Use a Screening set** allows to select a screening set as saved in ArtPro, based on the name in the **Screen** field. The file can be selected using the **Browse** button. Learn more in the [ArtPro User Guide](#).

These screening parameters are PostScript based. Use the **Dot Code** field to enter a PostScript string to set your own personalized screening.

### 1.4.39 Modify Separations

This action allows to change settings for separations.

#### Rename C/U/CV/ CVC/CVU/CVP to

This allows to rename different CVC flavours to having a same extension.

#### Delete CMYK Flags

CMYK flags indicate what separations should be handled as CMYK (for placing pictures, importing PS files, etc.) even if they are replaced by spot colors. Select this to delete them.

#### Separation list

Click + or - to add or remove specific separations and a specific action to apply on those. You can use wildcards, for example: "Die\*".

#### Rename

Enter the original and the **Set to** (target) name and select the option **Rename**.



**Attention:** Renaming is *not* the same as remapping (see below).

#### Create

Enter a name and select the option **Create**.

#### Set to

- **Remapping**

To remap a separation, enter its **Name** and the name of the target separation in **Set to** (and make sure you do not select 'rename'). When the target separation does not exist, the action will fail.

- **Convert to CMYK**

To convert a separation to CMYK, enter its **Name** and enter CMYK in **Set to**.

- **0 / Trans**

A separation is set to knockout when you enter "0" in **Set to**. All objects containing "trans" for that separation are then changed to "0".

When you enter "trans" in **Set to**, the separation is set to overprint, changing all "0" values to "trans". The **Apply on Selections Only** can be used to set the desired separation to 0% or Trans only for the selected objects.

- **Opaque / Technical / Varnish**

Sets the attribute of that separation to either opaque, technical or varnish (transparent).

This attribute is used in JDF export and in the action [Vector Trapping](#).

## 1.4.40 Move Ruler

The ruler position of a file depends on how the ruler position was set when importing or opening that file.

The **Move Ruler** action moves the ruler within the current file to a new position based on an offset versus the current position or versus a chosen page box.

This is very useful when pictures or other files need to be added to the current file at an offset.

## 1.4.41 Nested Step and Repeat

This action is based on ArtPro's module PowerStepper. It is used to step and repeat based on a multi-step CAD file: MFG (ArtiosCAD), CFF2 or a DDES file. These files decide the position of the stations, their rotation and any possible nesting. Learn more in the [ArtPro User Guide \(Prepress menu > Step and Repeat Nested\)](#).

The action typically needs two files as input: the CAD file and the ArtPro file. The CAD file can also be specified within this action.

### Nested Layout File Format

Instead of selecting an ArtPro file, you can also select a 'layout' file: a file describing the names of the station files and where to place them.

Layout files are tab-separated text files with a small header. An example:

```
ArtPro Nested S&R Layout V1.0
```

```
JokerBoxBerries.aw 1-3 5
```

```
JokerGreen3.aw 4 6-7
```

The first line identifies the file as a 'layout' file that can be used for Nested S&R. It is followed by an empty line. Each next line contains the file name of a station and the station numbers at which it should be placed. In above example, the file 'JokerBoxBerries.aw' is placed at station numbers 1 through 3 and 5 and the file 'JokerGreen3.aw' is placed at station numbers 4 and 6 through 7.

When using a layout file, you can provide the station files using a **Select File** action before this action and then deselect the option **Filenames in Layout File must match**.

## 1.4.42 Open ArtPro File

When this action is the first one in an action list, it opens the input file of the task. When this action is preceded by a **Select File** action, it opens the selected one.

An ArtPro file can contain, next to its line art content, also a CT portion (internal images). Alternatively, an ArtPro file can contain linked images (not embedded).

This action offers functionality related to used images, used fonts and color management.

### Root Folders

When images were used that reside on a Mac workstation or on a server which can not be made accessible to Automation Engine, the Root Folders functionality can be used to define where these images are.

An example: a root folder was defined as: `E:/AE/AP_files`. When an ArtPro file is opened that contains linked images which were previously stored on a local Mac, they first need to be copied to this folder or a subfolder of this folder.

When you define multiple root folders, the action then searches through all these folders and their subfolders until the image is located. You can drag and drop lines to re-arrange their order.

**Note:** When you defined one, click on the folder icon on the right to open the Template Editor and add SmartNames to your definition.



**Attention:** The folders that the Automation Engine server needs to access do not have to be (part of) Containers. However, they have to be accessible for Automation Engine's system user (which is by default "BGSystem").

### Folder Mapping

**Folder Mapping** can be used when images reside on a server that can be mounted by Automation Engine (also see above note on AE's system user).

An example: In an ArtPro file, the path of an externally linked image is defined as:

`Intel_Mac:images:image1.`

On the Automation Engine server, this file server will be mounted at a different mount point with a different name. Typically the image server would be mounted to a drive letter, for example `G:`.

To allow Automation Engine to automatically locate images on the Image Server, you can use **Folder Mapping** to substitute a portion of the path name used in the ArtPro file with another name. In our example, `Intel_Mac` would be substituted with `G:/`, which would instruct Automation Engine to find above image as `G:/images/image1.`

To define a **Folder Mapping**, enter the respective **On Client** field (how the local Mac sees the file server) and its respective **On Server** field (how Automation Engine sees the file server) and click **Add**.

### Fonts Folders...

When the ArtPro file contains live text, you can use **Fonts Folders** to allow Automation Engine to extract the outline information from the Mac fonts for trapping, printing, exporting, ArtLink functionality, etc. Please note this is only valid for Type 1 fonts and TrueType fonts.

Although the ArtPro file format contains all the outline information for its live text, the font is still important for special functionality like ArtLink, Regmarks, etc. Click on the folder icon next to a font folder to open the Template Editor and add SmartNames to your path.

### Color Management

When enabling color management, you can select a color management settings file that was previously saved by ArtPro. This file contains all ICC profiles and settings to determine how color has to be treated throughout the rest of the action list, including ICC profiles for proofing, printing, etc.

When the option **Stop when working space profiles are different** is selected, the action stops when the ArtPro file itself contains a working space different from the one defined in the Color settings file.

### Map Pictures

When selected, images are converted to mapped pictures when possible. Learn more in the [ArtPro User Guide \(Window menu > Paint Style > Mapped Picture\)](#).

### Ignore Screening Errors

Learn more in [Insert ArtPro File](#).

### Make image names SMB Compatible

Select this option to replace all a hash tags ( # ) in names of linked images by an underscore ( \_ ). This will make them compatible with a Windows file server. When you do this, the ArtPro file should be saved to make its image links point to the renamed images.

## 1.4.43 OPI Generation

This action generates low resolution images from high resolution images. This is typical in a page imposition workflow.

When a file is printed with **Omit Images**, the **Importing** action can then recognize the OPI comments in the PostScript or PDF file and reroute back to the high resolution images.

## 1.4.44 Optimizing

This action deletes (parts of) the contours that are not needed to produce correct print output. The function is used to clean or flatten a document, removing all the superfluous and unnecessary paths. For each path the action checks all the contours on top of it and decides which objects should be cut, united or left untouched to maintain the same structure in the file.

Optimizing is especially useful to eliminate unnecessary contours from an imported PostScript file, to perform faster trapping, faster printing, etc.



**Attention:** Keep in mind that objects are typically less editable after optimization. We therefore only recommend to use this action for complicated graphics.

### 1.4.45 PowerTrapper

The **PowerTrapper** action offers these main options:

1. Choose your trapping settings in the tabs **Distance & Direction**, **Color & Shape** and **Processing**.
2. Optionally, click **Add Rule** to add trapping rules.
3. **Save** your trapping settings as a **Trap Preset** to easily reuse them on another file.

Learn more in the [ArtPro User Guide \(Prepress menu > PowerTrapper\)](#).

### 1.4.46 Print to File

This action converts the ArtPro native file format to a composite or separated EPS file, depending on the **Device Type** that has been chosen.

In an action list, the **Print to File** action can be simply followed by a **Close File** action, or the Automation Engine task that launches this action can continue with an FTP or a Copy task that then sends the output file to a device. .

#### General Concepts

Learn more in the [ArtPro User Guide \(File menu > Print : General Settings > General Concepts\)](#).

#### Device Type

Learn more in the [ArtPro User Guide \(File menu > Print : Device Types\)](#).

#### Other Settings and 'More Settings'

Learn more about all other options in the [ArtPro User Guide \(File menu > Print : General Settings - Settings\)](#).

**Note:** Some paragraphs in the ArtPro User Guide refer to options in ArtPro Action Lists as 'Nexus' options.

### 1.4.47 PrintCheck

This action creates an image of the complete file. This image serves print control systems.

You can choose the resolution (no maximum) and set a noise level for gradations. You can choose the format, compression and the page box to be converted.

### 1.4.48 Regmarks

The action allows to select a 'marks' file you made earlier and add these marks to the current file. This marks file is a blank ArtPro file containing only marks. Its job size is not relevant.



The marks will automatically adapt to the job size of the current file and the inks will also be adapted.

You can select a fixed file by using the **Select File** button in this action, or you can select a variable marks file by using the **Select File** action before this one.

Learn more about building a marks file in the [ArtPro User Guide \(File menu > Import marks'\)](#).

Choose on what page **Box** the marks need to be applied or choose to use the bounding box of prior made selections.

When **Merge Layers** is selected, layers in the marks file and in the current file with the same name will be merged together.

### 1.4.49 Reorder Layers

This action allows to change the order of layers.

Layers with a name that matches one of the entries are placed in the specified order. Other layers are placed underneath in their original order.

Use the + and - buttons to add or remove layer names. A name can contain a wildcard (\*).

When two different layers match the same entry, their relative order depends on the original order.

When a layer name matches different entries, the best match is chosen. For example: a layer name "Trap layer" matches more with "Trap\*" than with "\*".

Select **Ignore Case** when the matching should ignore any case difference in the names.

### 1.4.50 Reorder Separations

This action allows to change the order of the separations in the file's **Separations** list.

Separations with a name that matches one of the entries are placed in that specified order. Others are placed underneath, in their original order.

Use the + and - buttons to enter names. A name can contain a wildcard (\*).

When a separation matches two different entries, it is placed at the topmost position. When two different separations match the same entry, their relative order depends on the original order.

**Reverse order** is useful for some special printing processes like dry offset. When selected, no other re-ordering can be done.

### 1.4.51 Save ArtPro File

This action saves the currently processed file as an ArtPro file.

#### **Output**

Use the Template Editor to set a (smart) location and name.

### Compatibility

Choose the file's compatibility. Saving as an older file format may trigger a conversion of object types that did not exist yet in that older format. For example: a v9.0 file saved as v7.5 will not contain blend modes ; that file will be *flattened* before saving.

### Include Preview

Select **With Preview** to get a (separated) preview included in the ArtPro file. This preview is useful when making Step & Repeating this file in ArtPro. The default **Resolution** is 72 ppi.

### Save Hidden Layers

When this option is not selected, layers with a "hidden" state will not be included in the saved file.

### Profiles

**Embed entire profile in ArtPro files** allows to include the used **Color Management** profile in the ArtPro file. This is useful when moving files to another system. The option **Don't embed profiles for imported pictures with embedded profiles** disables embedding profiles that are already embedded in the pictures.

### Flattener Options

When saving the file as v7.5 or older, the file will be flattened with the settings in **Flattening Options**. When the flattener generates images, their location and name is defined by the **Template Editor**. Learn more in the [ArtPro User Guide \(in Prepress menu > Flatten transparencies, and also in ArtPro menu > Preferences > General: Flatten\)](#).

### Certified PDF sessions information

Select **Include Certified PDF information** to include Certified PDF information in the ArtPro file. This also happens when saving as ArtPro 7.5 file, but that information is ignored when opening that ArtPro 7.5 file.

Select **Save Certified PDF Information** to save the Certified PDF information in a separate XML file. Use the **Template Editor** to define its name and location.

## 1.4.52 Select File

This action is used in an action list to define a selection of file(s) which should be used as input for the next action in the list.

### Select Options

**Select Options** show the list of criteria that you created. Use + and - to add or remove criteria. The name automatically summarizes its main settings (as shown below in **Select Item Options**).

### From Inputs / From Actions

- **From Inputs:** the files you select are searched from the inputs files of the ArtPro Action List task that this action is part of.
- **From Actions:** the files you select are searched from the output files of all or a specified action in this action list. You can specify that action by typing in the **Label** that you gave it.

### Select By Name

- **whose name**

The system selects a file based on its name. Choose a selection parameter from the list. You can also use **Regular Expressions** in this input field. The **Template Editor** allows to specify smart names.

- **Position From... To... 0 To 500**

This field work in combination with the option **Whose name contains....** Using the position fields, you can specify what character positions of the file name will be checked. For example: With **Whose name contains** as "APR" from position 2 to 4, files which have APR on character position 2 to 4 are searched and selected. Mind that the first character is seen as on position 0, so in this case the 3rd, 4th and 5th characters are searched.

### Select By Documenttype

- File Type

An ArtPro, PDF or PS file that also matches the other criteria.

- Number of Separations

Specify the **Number of Separations** that the selected file should have.

- Number of Pages

Specify the **Number of Pages** that the selected file should have.

- Page Box

Specify a size of a chosen page box that the selected file should have.

- Orientation

Specify the page orientation that the selected page box of the selected file should have.

## 1.4.53 Select Objects

This action allows to select and deselect objects.

### First

Choose what should be done prior to the selection:

- **Do nothing** means leaving the current selection as is. This is useful when combining multiple **Select Objects** actions.
- **Invert Selections** inverts the current selection prior to applying the one in this (new) select action.
- **Select All** or **Deselect All** allows to start from scratch with either everything selected or everything deselected.

### (De-)Selecting

The radio buttons at the bottom define whether the criteria you enabled means that you want to select or deselect these objects.

- Using **Within Selections** in combination with **Select** will search for objects that match the defined criteria inside the current selection. Objects that do not match these criteria are deselected.
- Using **Within Selections** in combination with **Deselect** will search for objects inside the selection that match the defined criteria. Objects that do not match these criteria remain selected.

Use **Fail if Number of Selections...** to have the action fail if the number of selections is higher than, lower than or equal to the entered value. Use this for example to have the action fail if any selected text is smaller than 7 pt..

### Paint Style

- **Flat Paints.** Allows to (de)select **Flat Paints**. Specify which ones in the option **Matching** (see below).
- **Gradients.** Allows to (de)select **Linear, Circular** or **Multistep gradients**. This can be used in combination with the **Matching** option (see below).
- **Matching.** The **Matching** panel allows to specify objects with a **Flat Paint** or a **Gradient** within the defined percentage range. Separation names can contain wildcards. Enable **Overprint** to specify objects that are transparent for that specific separation.
- **Pictures.** Allows to (de)select placed, mapped or pattern pictures.
- **Images Type.** (De)selects all placed files of the chosen file type.
- **Images Color.** (De)selects all placed files of the chosen color type

### Transparency

- **Blend Mode.** (De)selects all objects with the specified **Blend Mode**. Choose **All** to (de)select all objects containing any blend mode.
- **Opacity.** (De)selects all objects with the specified opacity.
- **Opacity Masks.** (De)selects all objects containing a soft mask.
- **Objects / Groups with Transparency.** (De)selects all objects or groups containing any transparency.
- **Overprint.** (De)selects all objects containing overprint.

### Objects

- **Text.** (De)selects all text with the specified point size. **Vectorized Text** also (de)selects text that was converted to outlines during import or by using the action **Text to paths**.
- **Font Name.** (De)selects all text items or text blocks containing the specified font. A text item containing more than one font, is selected completely if the specified font is used.
- **Screen Name.** (De)selects all items using the specified screen settings.
- **Object Name.** (De)selects objects with that name. For example a layer from an imported MFG file that was imported as a sub-layer in ArtPro.
- **Strokes.** (De)selects the strokes as specified.
- **Traps.** (De)selects all traps created by automatic trapping. A trap that was edited is no longer recognized as a trap and thus not (de)selected.

- **Barcodes.** (De)selects all barcodes containing barcode information. Mind that some transformations make barcodes invalid (un-proportional scaling for example). A warning is given when transforming and when the bar code is no longer selected with this function.
- **Thin Part Fixes.** (De)selects the thin part fixes done in ArtPro.
- **Slices.** (De)selects all slices (used for rid Warping).
- **Open Paths.** (De)selects all paths that are open.
- **Blends.** (De)selects all blends.
- **Link.** (De)selects all objects containing a link for [ArtLink](#).
- **Objects Inside / Outside bounding box.** (De)selects objects inside or outside the specified pagebox.
- **Layers.** (De)selects objects that are in a layer that (does not) match the entered name. The layer name can contain wildcards.

### 1.4.54 Separate

This action separates the file into its separations and places them under and next to each other in a single ArtPro file.

You can define the **V / H Gap** to be left in between the separations. The number of **Columns** defines how many separations you want to place next to each other.

**Note:** When you want to print this kind of “separated” file, make sure you select the option **All Separated Pages on Same Film** (in the **More Settings** of the **Print to File** action).

### 1.4.55 Set Station Numbers

This action allows to set station numbers onto an step and repeat file. It is based on the **Station Number** part of the [Nested Step And Repeat](#) action.

Use the square buttons to define the origin for the **Offset**. By default, the station numbers are centered on the bounding box of a station.

Use the **Template Editor** to define a smart text for the station numbers.

Learn more about station numbers in the [ArtPro User Guide \(Prepress menu > Step and Repeat nested > Station Numbers\)](#).

### 1.4.56 Spread

This action allows to apply a spread on all or selected objects. It is based on the **Interactive Trapping** function in ArtPro. Learn more in the [ArtPro User Guide \(Prepress menu > Interactive Trapping\)](#).

When a **Spread** is applied:

1. The paint style of the original object is changed to 0% for every separation.

2. A slightly larger **Spread** object is generated.
3. The **Spread** object gets the paint style of the original object, but is changed to “trans” for every separation that had a 0% value.
4. If the original object had a blend mode, the original and spread object are grouped and the blend mode is applied on the group.

### 1.4.57 Tabular Step and Repeat

This action allows step and repeat in a tabular way. Learn more in the [ArtPro User Guide \(Prepress menu > Step and Repeat Tabular\)](#).

This action can step ArtPro, TIFF, EPS, DCS and PDF files. These can be an input file of the action list itself or can be picked up by a prior [Select File](#) action.

When an ArtPro file and a **marks** file are bundled in a folder, the **Select File** action would then select the ArtPro file (or any other of the supported formats), and be followed by a **Select File** action to select the **marks** (ArtPro) file that will be used to generate the register marks.

In **Use Box**, you define which page box needs to be used as reference for the step distance.

#### Settings

- **Count.** H and V amount of instances of the stepped file.
- **Begin Pos.** H and V offset to the ruler position for the first instance of the stepped file.
- **Step.** When left on (0,0), the step distance is equal to the (below) selected page box of the stepped file.
- **Angle Setting.** Rotation of the stepped file.
- **Cut Marks.** Adds **Cut Marks** to any of the stepped instances.
- **Keep Bleeds.** Keeps the bleed of the stepped file in the step and repeat file. Bleeds are always kept outside of the step and repeat job size. Note that bleeds overlap when the step distance is set to the Trim box.
- **Place Single-Separation ArtPro File in Single Separation.** When this option is not selected, objects in this AP file with 100% of the single separation are considered to be registration color and thus get 100% of every ink in the repetition. When this option is selected, the file is inserted in one single separation instead.
- **File & Font Settings.** This gives access to the root folders, folder mapping and fonts folders when the file to be stepped is an ArtPro file. Learn more in the [Open ArtPro File](#) action.
  - **Color Management Settings.** When you wish to enable color management for the step and repeat file, select a color management settings file (that was previously saved in ArtPro). This file contains all ICC profiles and settings to determine how color has to be treated throughout the rest of the action list (example: proofing of the step and repeat document), including ICC profiles for proofing, printing, etc.

### 1.4.58 Text to Paths

This action automatically converts all the (selected) text to outlines. This is useful when exporting ArtPro files to environments where the fonts are not available.

Note that when importing PS or PDF files, text could already have been converted to outlines (when the option **Convert to Real Text** was not set during **Importing**).

## 1.4.59 Transform

This action applies a transformation to all or selected objects in the file. You can move (**Distance**), **Scale**, **Rotate** or **Shear** objects.

### Options

- **Repeat.** Use this to execute the transformation multiple times.
- **Copy.** This copies the contents of the file before executing the transformation. If at the same time repetition is set, there will be multiple copies.
- **Apply on:**
  - **Path, Paint, Soft Mask:** These options determine if the objects and their contents are transformed, or only the contents without the objects, or the objects without the contents. For example if a clipping path with an image would be transformed and Path is not selected, then only the image itself is transformed and not the clip path.
  - **Notes.** Transforms the notes along with the rest of the file, so that the positioning of the notes inside the file remains the same.
- **Scale Strokes.** When not selected, the stroke width does not change when scaling. When selected, the stroke remains a stroke and its width is changed for the same percentage as the parent path was scaled. For example, scaling an object with a 3 mm stroke to 150%, results in an object with a 4.5 mm stroke. When scaling is un-proportional, the stroke width is scaled proportionally, by the geometric mean of vertical and horizontal scaling (= the square root of the product of vertical and horizontal scaling).
- **Center Paint** (only available if the **Apply on: Paint** and **Soft Mask** is off). When selected, it transforms the path only, but then repositions the paint based on the center point of the path: the point in the paint that was on the center point of the original path is placed on the center point of the transformed path. For example, this can be used when scaling or distorting step and repeat files, without scaling the contents of the paths, but still retaining their position inside the paths.
- **Use Ruler.** When selected, the center of the ruler is used as the center for rotation and scaling. When not selected, the center of the selected objects is used.

## 1.4.60 Trim & Bleed

This action calculates a trim and/or bleed for all objects in the file. It is mostly used when step and repeating. Learn more in the [ArtPro User Guide \(Prepress menu > Step and Repeat Nested\)](#).

## 1.4.61 Update ArtLink

The **Update ArtLink** action is comparable to the **ArtLink** action. While the **ArtLink** action creates as many versions as there are records in the database file, the **Update ArtLink** action

does not create any files or versions. It modifies an object on-board an ArtPro file by updating its ArtLink that was already put there earlier. This action opens the ArtPro file and so re-reads information from the specified database record(s) (defined in the **Record Number** field) or from an the XML file.

Learn about most of its settings on the page of the action [ArtLink](#) on page 8 .

### Additional Key Values

The **Additional Key Values** allow to define values for specific keys. These keys are defined from the action list rather than coming from the database file. For example: this can be useful to set the name of the operator. You can also use the **Template Editor** and even insert SmartNames.

## 1.4.62 Vector Trapping

This action offers an alternative (older) version of trapping technology than the [PowerTrapper](#).

For a full description of its different settings, we refer to the [ArtPro User Guide \(Prepress menu > Automatic Trapping\)](#).

**Note:** In the ArtPro user guide, the trapping modes **Packaging** and **Commercial** are often referred to as 'version 1' and 'version 2'.