# Esko Software Platform

What's New in Automation Engine 16

Esko Global Support Last revised 31-mar-17



# Topics overview

#### What's New in Automation Engine 16 | Topics

- Automated quality control | based on Global Vision technology
- Cloud Storage interaction | part of Automation Engine Connect
- Integration with Kongsberg | Device Manager for Kongsberg

Requires v16.0.1

Integration with CDI | Device Manager for CDI

Requires v16.0.2



Automated quality control

#### **Global Vision Inspect Tools**

- A set of new tasks based on Global Vision technology
  - Inspect Artwork
  - Inspect Braille
  - Inspect Barcode
  - Inspect Text
  - Inspect Spelling
- A configure panel for Global Vision licensing
- The Global Vision Profile Editor to create or modify profiles



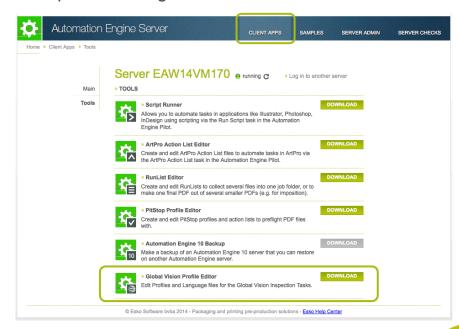




# Global Vision Profile Editor

#### Global Vision Profile Editor | Introduction

Several of the inspection tasks ask you to select an inspection Profile. You can change and create such profiles using the **Global Vision Profile Editor**.



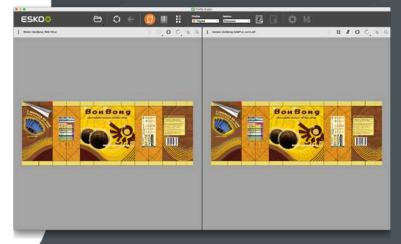


#### **Global Vision Profile Editor**

- Version of Global Vision's standalone application ArtProof / ScanProof (the Esko version has a different interface and functionality).
- Test and manage Profiles that are used in Automation Engine's Inspection tasks.
- Interactive tools to compare artwork,
   inspect barcodes, translate braille, inspect text or spelling.

Caution: This application is very memory intensive, especially when you open files that are large in dimensions, or if you request a high resolution

Note: As with the Inspection tasks, you need a license from Global Vision to use the application





#### Global Vision Profile Editor | How does it work?

- The application first creates rasterized files at a chosen resolution and then inspects those files.
- PDF files and PDF compatible AI files are first opened in a Prepare PDF window where you can choose to crop to a specific region or to ignore inks or layers before the file is being rasterized.
- File Support
  - PDF and AI (when PDF compatible)
  - RIP data: TIFF, LEN
  - Pictures: BMP, PNG, JPG
- The Inspect Text and Inspect Spelling modes also support these file types:
  - DOC, XLS, XLSX, XML, HTML

Learn more about the Global Vision Profile Editor in the <u>Automation Engine user manual</u> (see chapter "Quality Control tools").



Global Vision Inspection Tasks

#### Global Vision Inspection Tasks | Overview

Automation Engine 16 offers a set of tasks that use technology from Global Vision.



**Barcode Inspection task** | verify barcode(s) in the background to avoid opening every single file for verification.

**Braille Inspection task** | a task to verify a braille separation to be sure the content of this separation is correct.

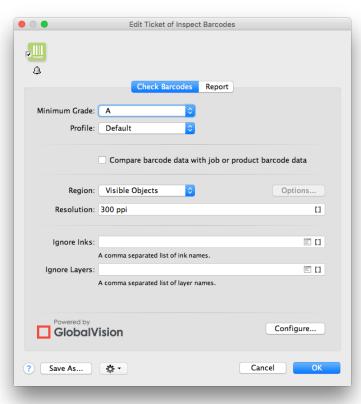
**Artwork Inspection task** | this task performs a pixel-based comparison between 2 files and supports PDF, AI (PDF-compatible), BMP, TIFF (including 1-bit), JPG, PNG.

**Text Inspection task** | compares text information received from your customer versus the text that is used within the artwork to ensure no typo's or copy/paste errors happened during the artwork creation.

**Spelling Inspection task** | perform a spell check on your text to be sure there are no text mistakes being sent to the Artwork studio or pre-media company which will lead to extra iterations or even wrong printed products.



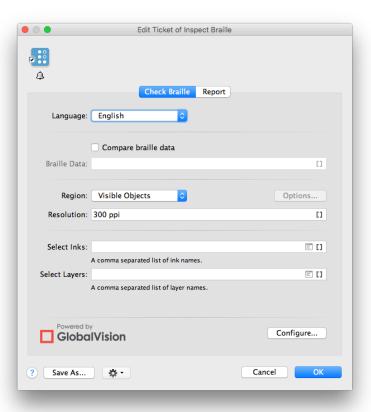
#### Global Vision Profile Editor | Inspect Barcodes



- Inspects all barcodes in a file.
- Scans and decodes them.
- Verifies their grade (quality level) against the minimum grade chosen in the ticket.
- Possibility to compare against Job or Product barcode.



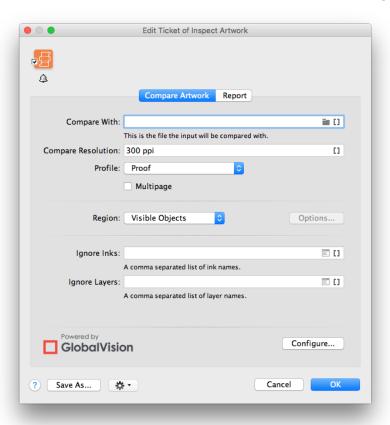
#### Global Vision Profile Editor | Inspect Braille



- Detects braille, translates it to a chosen language.
- Displays information such as the language, number of dots, number of characters, number of lines, dot spacing, character spacing, word spacing and line spacing values.



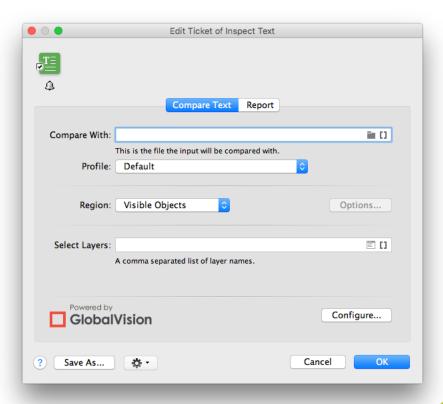
#### Global Vision Inspection Tasks | Inspect Artwork



- Compares one or more 'sample' files to a 'master' file.
- Selects the defined region of interest, aligns the files and then compares them.
- Supports multi-page inspections as well as step & repeat files.



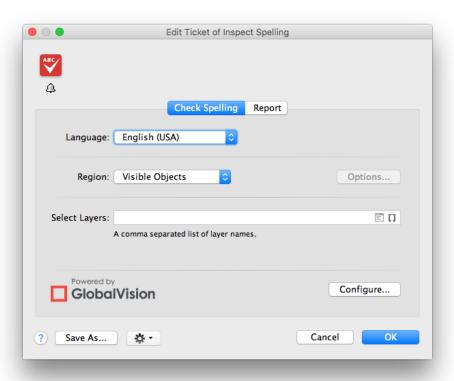
### **Global Vision Inspection Tasks** | Inspect Text



- Compares the text in the input file with the text in another file.
- A profile defines how should be compared and what should be seen as a difference (for example if you consider a font type or font size change a difference)



#### Global Vision Inspection Tasks | Inspect Spelling

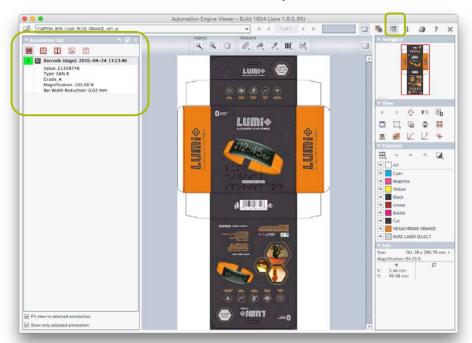


- Checks the spelling of the text in the input file.
- Specify the language (this can also be a custom dictionary).



#### Global Vision Inspection Tasks | Reporting

Annotations are written in the input file or stored as an extra output pin (XFDF) and read by the viewer.



NOTE: these annotations can also be read in Adobe® Illustrator® with DeskPack on board. The annotations plugin is part of the free data exchange plugin.



### Global Vision Inspection Tasks | Reporting

A report (PDF and/or XML) is written in a chosen directory.





Cloud Storage interaction

#### Cloud Storage | Access Points to Download Files

- A cloud storage Access Point scans a folder "in the cloud" and downloads (moves) any new files that appear in that folder or its subfolders onto a folder in an Automation Engine Container.
- The downloaded files are removed from the cloud storage and AE starts a workflow with those files.

#### We currently support these 3 cloud storage providers:







OneDrive

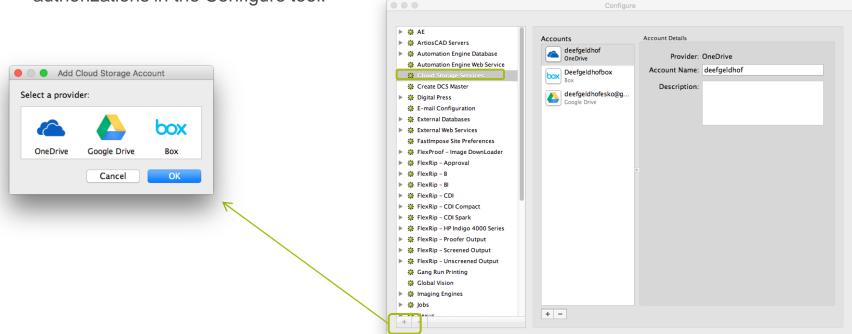
Google Drive

Box

#### **Cloud Storage** | How to add an account?

Before you can use such an Access Point, you need to configure one or multiple account

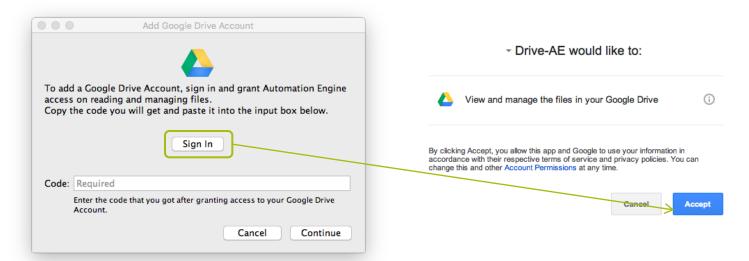
authorizations in the Configure tool.





### Cloud Storage | Authorize an account

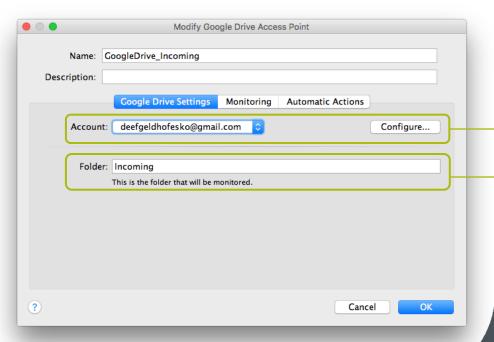
Sign in with a Google / Microsoft / Box account and grant access to that account so Automation Engine can access your online folders.





#### **Access Points |** Generic options

Most of the options are identical to those documented for other Access Points.



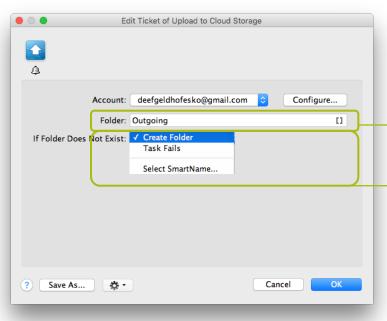
Account: Choose an account from the list that you added in the Configure tool. Only the accounts for the selected provider are shown.

Folder: By default, this is the account's home directory. Subfolders of the specified folder are also scanned! When you do not want all these folders scanned, you can specify a subfolder, for example "/PrePressData". Then, only all data in that folder and its subfolders will be scanned.



#### **Upload tasks | Upload to Cloud storage**

This task uploads files to a folder on a cloud storage service (Box, Google Drive or OneDrive).



**Folder:** Define the folder where you want to upload the files. When you leave this field empty, the files are uploaded to the account's home directory.

**NOTE:** When the destination folder does not exist, you can Select a SmartName that returns the value "1" to create a folder.

Select a SmartName that returns the value "0" to force the task to fail.

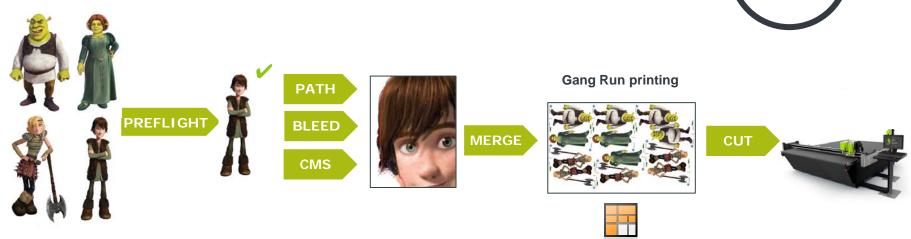


# Device Manager for Kongsberg

Requires v16.0

## Device Manager for Kongsberg | Workflow overview







#### **Device Manager for Kongsberg | What do you need?**



- iPC (i-cut Production Console) v2.0.1 or higher. This is the new front-end software for the Kongsberg table.
  - NOTE: iPC only works with a Local License so it is not possible to use Remote Desktop!
- License for Device Manager for Kongsberg.
- License for Layout module to produce nested layouts (Gang Run Printing)

## **DM for Kongsberg |** Controlled cutting tools

- Job tracking
- Production reporting
  - Utilization feedback
  - Machine and Job feedback
- Production planning
- Machine visibility from everywhere
- Creating nested layouts
- Estimation





## **DM for Kongsberg |** Tracking status Job







Clear overview what the status of the job is at any time



#### **DM for Kongsberg |** Reporting & Analytics

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<FlexoPlateReport Generated="2016-02-16T15:19:09+0100">
   <Plate id="56c3-2ef4-0001@rdvmae14">
                                  Upload to Cloud
        <State>MP:DONE</State
        <Manufacturer>Dupont//Manufacturer>
        <Brand>DFH 1.14 (0/5)
        <Device>rdvmae14
                                   ftp.esko.com-S
                     mm">2032.0</Width> W
        < Reso Router no
                          (Resolution>
        <ImgTechn>BixeN
        <CutWF>BevOl Cut.\wf</Cutwr
        <URI>http://LOPPEM 4412/DFS
        <CutF>LOPPEM 201602 6-1514 Interact with Web F>
        <TotalArea unit="sqmn">2550000 Service
        <ToalUsedArea unit="sq\m">1672380.0</ToalUse
        <Waste unit="sqmm">87800 0</Waste>
       <Estimated unit="sec">1577</es
       <Laser-Energy unit="J/sqcm">3.2773ser-Energy>
Copy or Move
```



#### JOB INFORMATION

- How many sheets?
- How much square mm cut?
- When output started/ended?

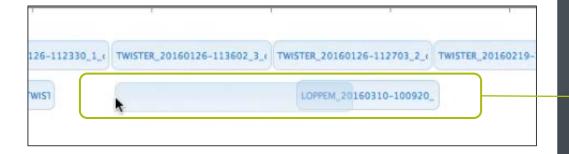
#### MACHINE INFORMATION

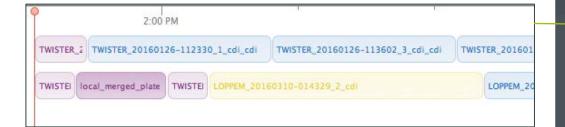
- Total amount of sheets cut?
- How much uptime/downtime?
- Total sheet usage/wastage?



#### Requires v16.0.

## **DM for Kongsberg | Planning Board**







Drag & Drop changing priorities of jobs on the same table.

Coloring based on job type, tooling, substrate, etc. helps planning the jobs more efficiently.



## **DM for Kongsberg |** Machine status



Jobs waiting for cutting



Estimated end time of plates in the queue

Status of device



# Device Manager for CDI

Requires v16.0.2

#### **Device Manager for CDI | What do you need?**

- Check with Esko Support if your Grapholas and or DFS Merger/Exposer has the required version.
- Optionally, to drive the cutting workflow, you need i-cut Production Console 2.0.1 build 1328 or more recent.
- License for Device Manager for CDI
- Automated Flexo plate making module
  - Tasks to crop / add margins to LEN files
  - Automatic merging in AE



#### **Device Manager for CDI | What is it?**

- Job tracking
- Production reporting
  - Utilization feedback
  - Machine and Job feedback
- Production planning
- Machine visibility from everywhere
- Manual Plate Merging
- Estimation

Learn more in the **Automation Engine user manual** 





### **Tracking Job Status**







Clear overview of what the status of the job is at any time



## **Reporting & Analytics**

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<FlexoPlateReport Generated="2016-02-16T15:19:09+0100">
   <Plate id="56c3-2ef4-0001@rdvmae14">
                                   Upload to Cloud
        <State>MP:DONE</State
        <Manufacturer>Dupont/k/Manufacturer>
        <Brand>DFH 1.14 (0/5)</Brand>
        <Device>rdvmae14
                                94</ftp.esko.com-S
                     "mm">2032.0</Width> VV
        <ResoRoutern>228

    Resolution>
        <ImgTechn>BixeX<
        <CutWF>Bev⊗l Cut.xwf</Cutwr>
        <URI>http://LOPPEM 4412/DFS/
        <CutF>LOPPEM 201602 6-1514 Interact with Web F>
        <TotalArea unit="sqmm\">2550000.0</TotalArea>
        <ToalUsedArea unit="sq\m">1672380.0</ToalUsed
        <Waste unit="sqmm">87800000
       <Estimated unit="sec">1577</es
       <Laser-Energy unit="J/sqcm">3.2773ser-Energy>
Copy or Move
```



#### JOB INFORMATION

- How many plates?
- How much square mm exposed?
- When output started/ended?
- •

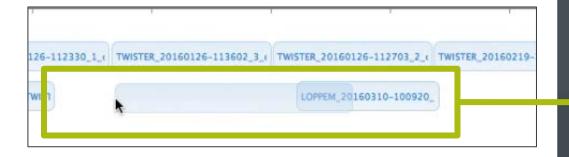
#### MACHINE INFORMATION

- How many CDI plates exposed?
- How much uptime/downtime?
- Total plate usage/waste?
- ..



Requires v16.0.2

#### **Planning Board**



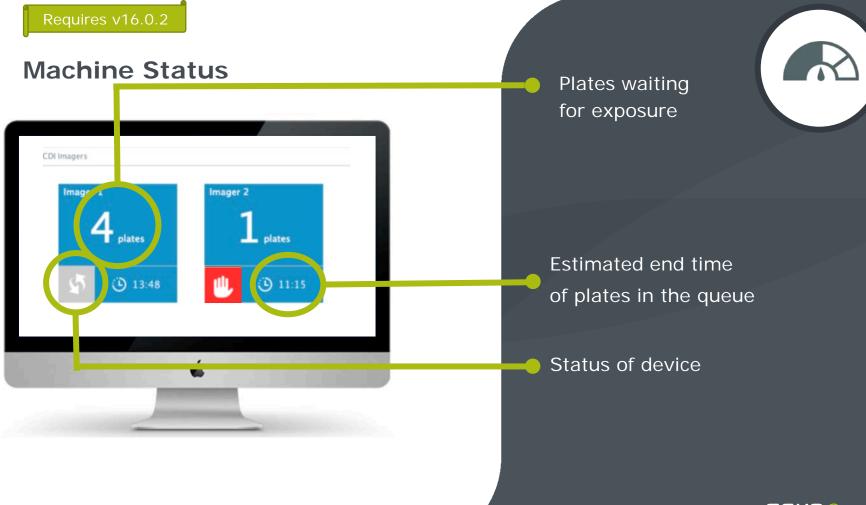




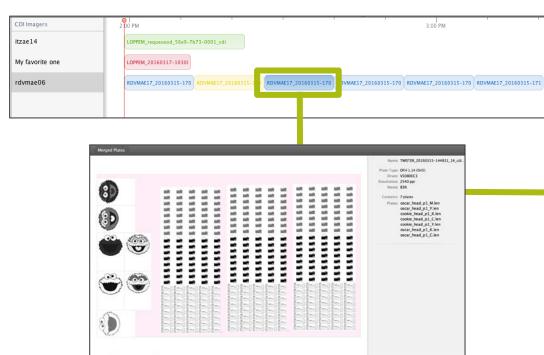
Drag & Drop changing priorities of plates on the same CDI or even from one device to another.

Coloring based on plate type, resolution, separation names etc. help planning the jobs more efficiently.





#### Visibility on workload per CDI





Clear time line on merged plates to be exposed.

Extra information on plate content.

Possibility to switch between merged plate mode and job mode.



## Device Automation for Flexo platemaking

Requires v16.0.

CROP

## Automation in a Flexo workflow | Overview







MERGE







Submit to Plate Merger











Submit to Kongsberg Table









Extend LEN files



#### **Automated Flexo Platemaking** | Overview

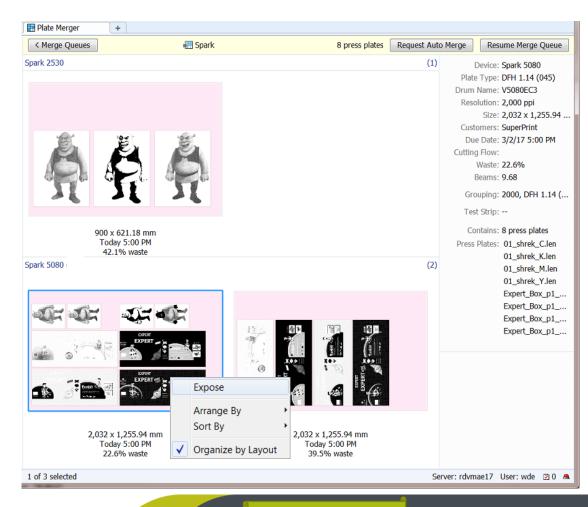
- No human interaction required to prepare the ripped files for exposure, leading to repeatable processes.
  - > Time saving: no manual editing required.
  - **Error reduction:** Based on conditions, the correct values will always be applied.
- No human interaction required to merge separations on a CDI Plate.
  - Less waste
  - No errors because of merging wrong combinations
- Accurate cutting.
  - Higher quality
  - Less errors



ESKO

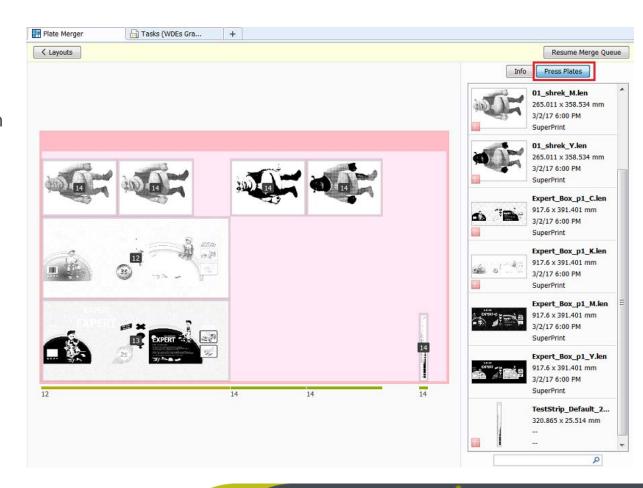
#### Viewing rejected Layout Proposals

- When the minimum fill percentage is not reached, many of the layout proposals that the Plate Merger makes are not good enough to become a Merged Plate that will be exposed.
- In many cases, you may want to see those rejected layout proposals. You can view and inspect them.
- You can select one and choose to 'Expose' it anyway.



# Changing a Layout Proposal before Exposing it

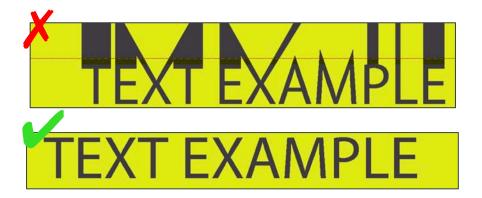
- Double click a layout to zoom in and inspect it closer.
- Reposition Press Plates, manually or numerically.
- Resize the layout area, by crop & fit or numerically.
- See a pre-calculation of exposing beams per vertical lane.
- See the list of (currently placed) Press Plates. Drag & drop (back) onto the layout.
- 'Expose' when done making changes.

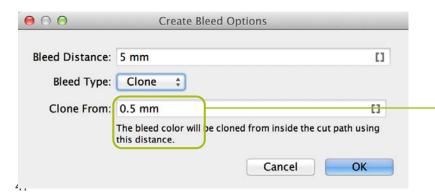




# Other New functionality

#### Auto Create Bleed | New option





Automatic bleed creation based on cloning of pixels, could result in strange effects in case pixels (that should not influence the bleed) touched the border of the file.

This new option ensures 100% of the jobs can be handled without a manual touch.



## Moving prepared view data

Prepared view files are stored in a hidden folder on the server. Prior to Automation Engine 16, when moving an Artwork file, the link with the prepared data was broken.

View files are automatically copied along with the artwork file from now on.



#### Other features

- ARD support in Gang Run.
  - No need to place ARD files in PDF files to run them through the gang run.
- Support for PitStop 13.2.
  - This enables "Preflight for Packaging" in Automation Engine.
- The Publish for WebCenter task now also publishes annotations.

# (Soon) Outdated Tasks

#### Concept

- With the release of every major new version, some Automation Engine tasks become "Soon Outdated". This means that those tasks can in a next major version become "Outdated" (no longer available).
- The Automation Engine Manual describes this concept in more detail and also lists these tasks.
   The manual also describes your alternative for each "soon outdated" task. This way, you have the time to switch to that new behavior before those tickets are no longer available.
  - Learn which tasks become "Soon Outdated" or "Outdated" in this version in this page of the manual, at the end of the chapter "Tasks and Workflow Controls":
  - https://docs.esko.com/docs/en-us/automationengine/16/userguide/enus/common/ae/concept/co\_ae\_thedeprecatedtasks.html
- Each ticket of such a task clearly shows you it's state and offers a direct link to the online user manual with more info.





