

Automation Engine

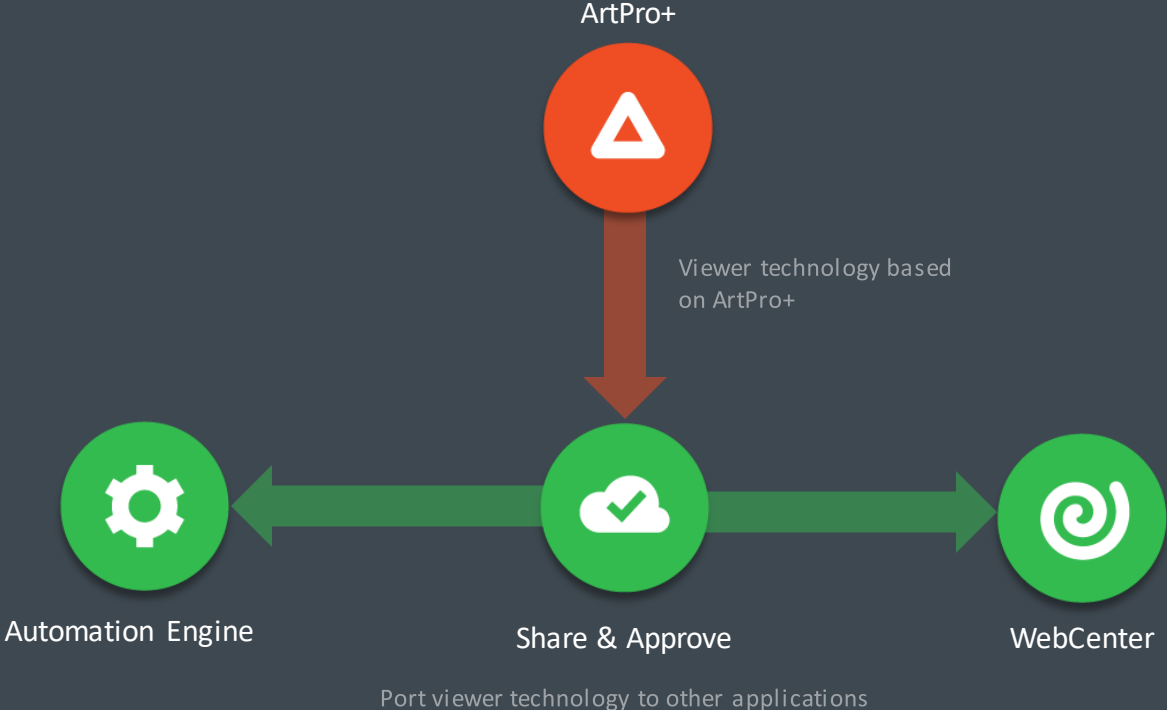
What's New in 23.03

Paul Land and Benedict Outtier
Product Manager and Product Owner

New Viewer technology

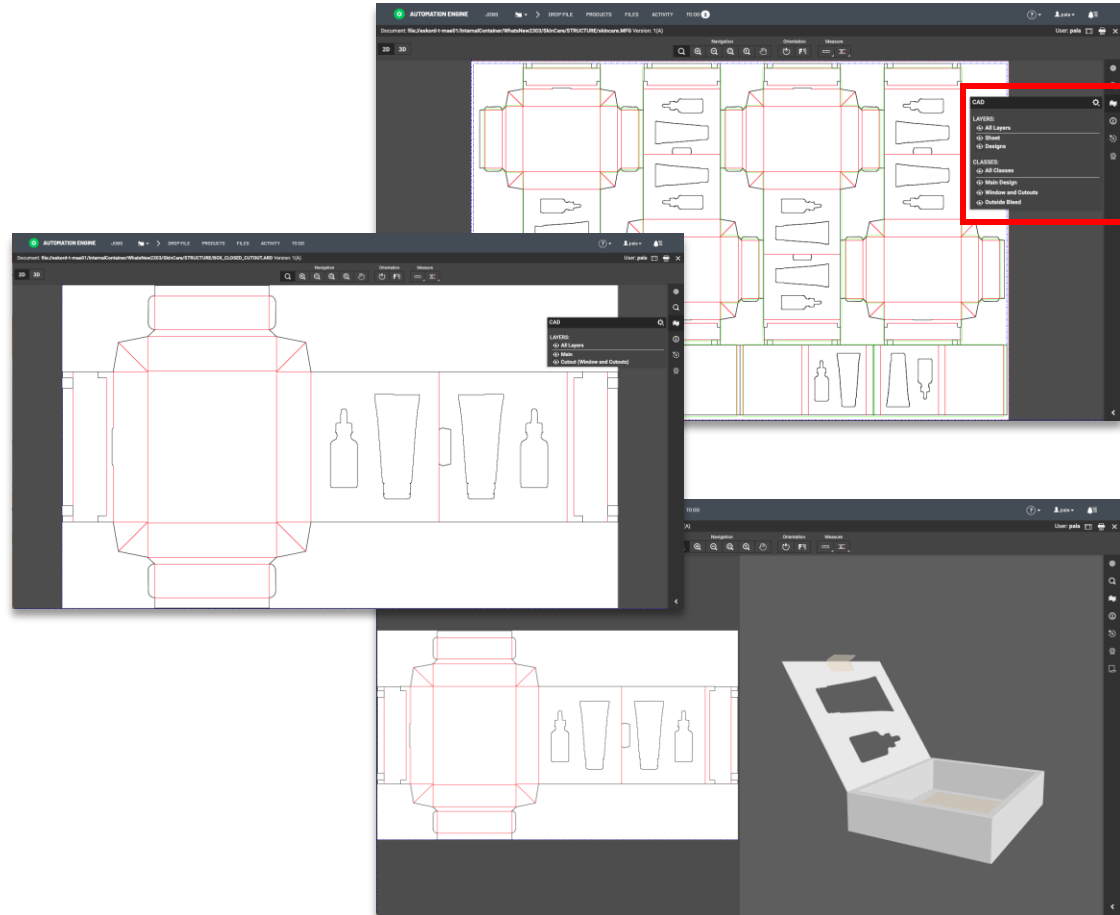
Improved user experience and a host of new features to increase quality

Unifying the Viewer



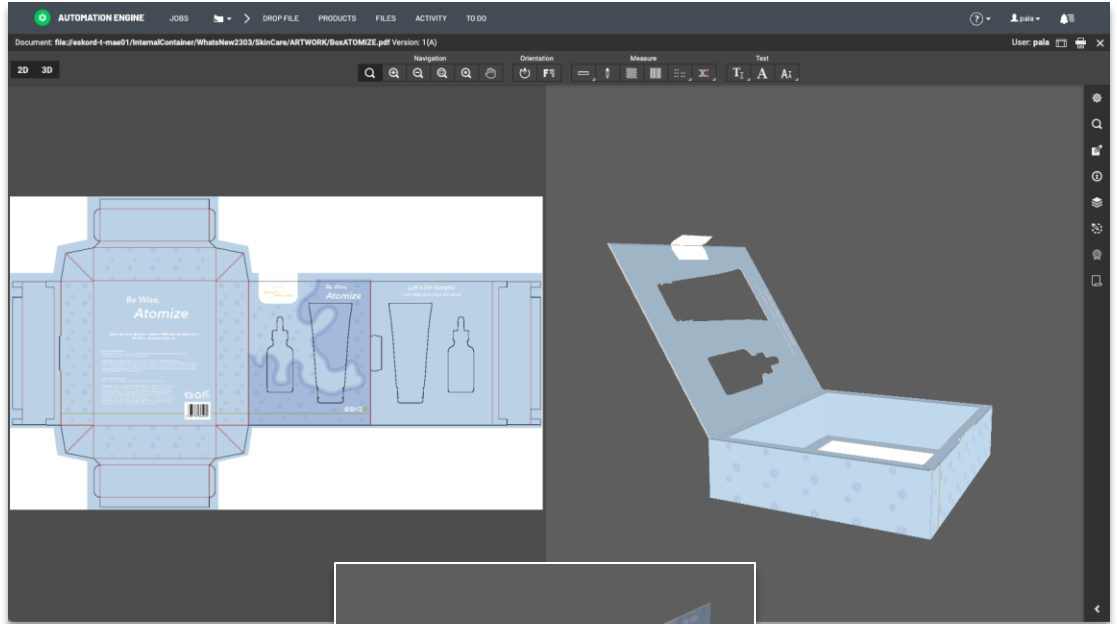
View CAD Files

- You can now view CAD files in the AE Viewer
 - ARD, MFG, ZAE
- Enables quick and easy view on all the layers within the CAD file
- View in 3D, if folds have been defined
- Improves Quality Control

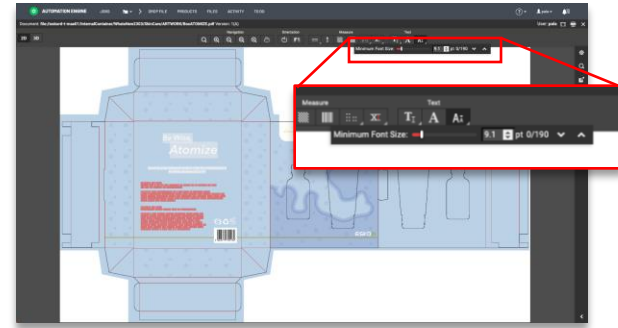
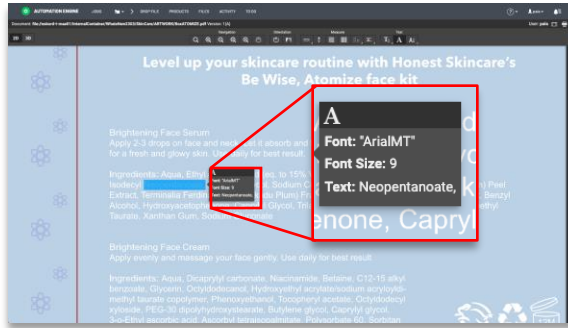
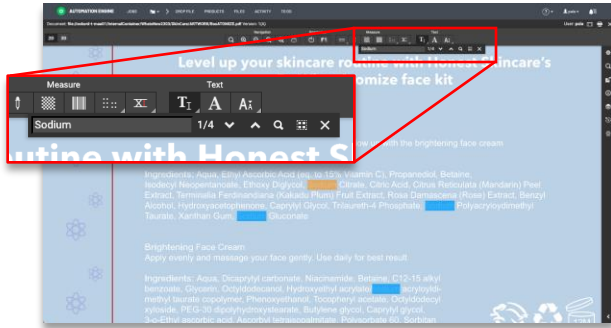


3D Viewing

- Viewing files in 3D helps to correctly visualize the final product
- Easily detect incorrect elements placed on the wrong flaps
- No additional software required

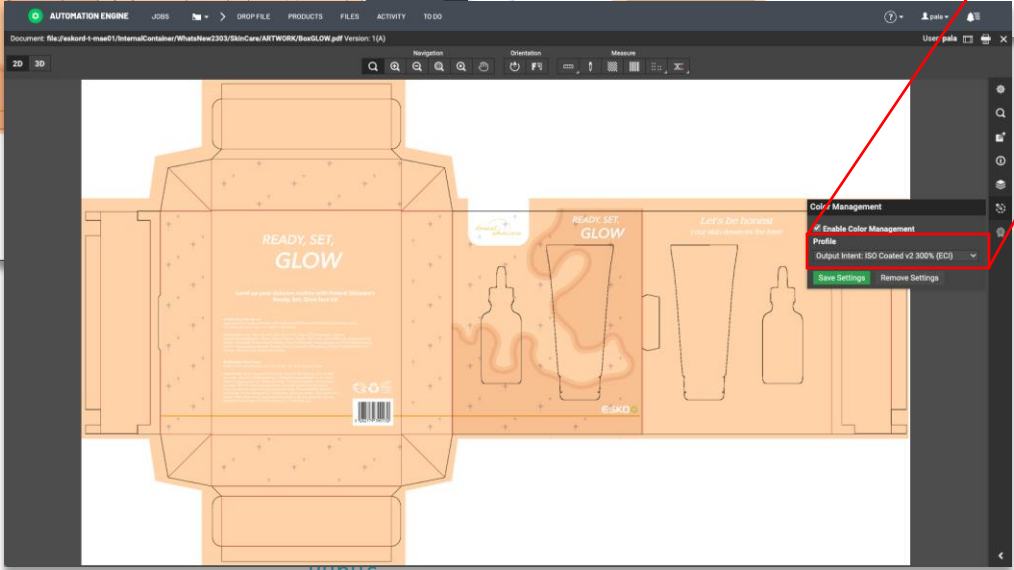
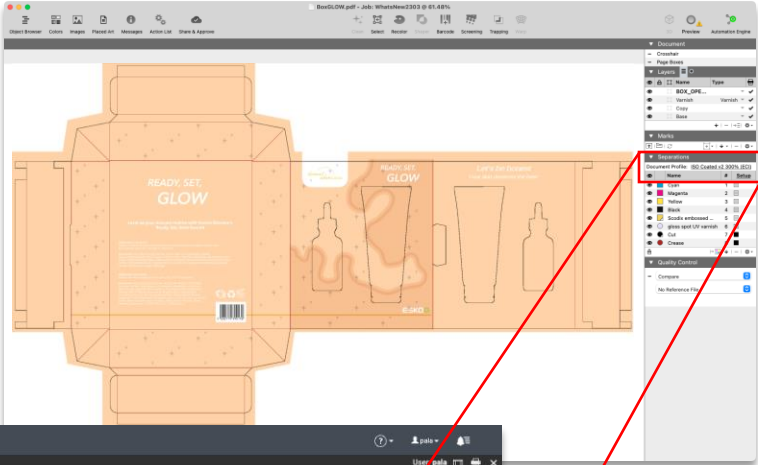
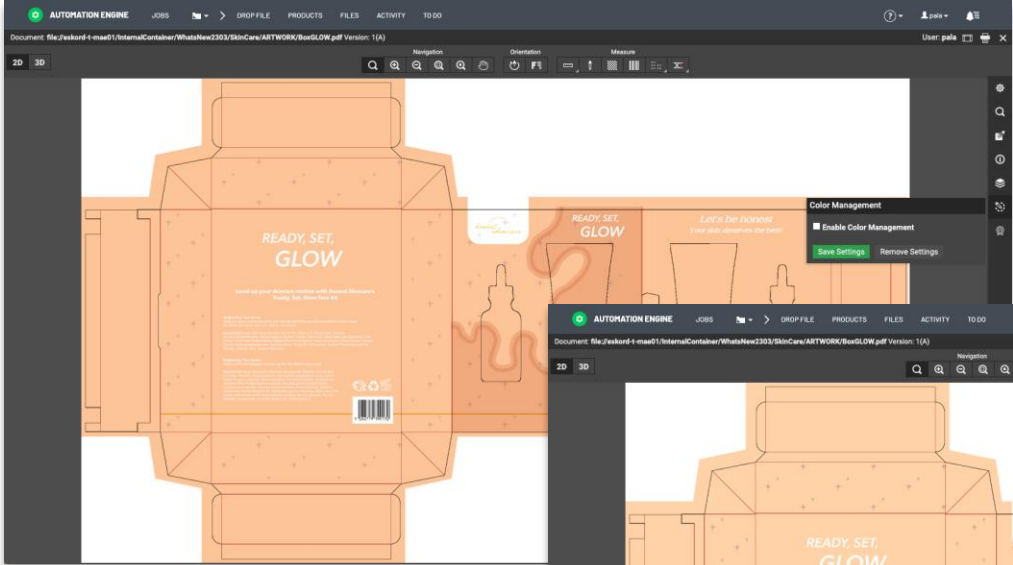


New text tools



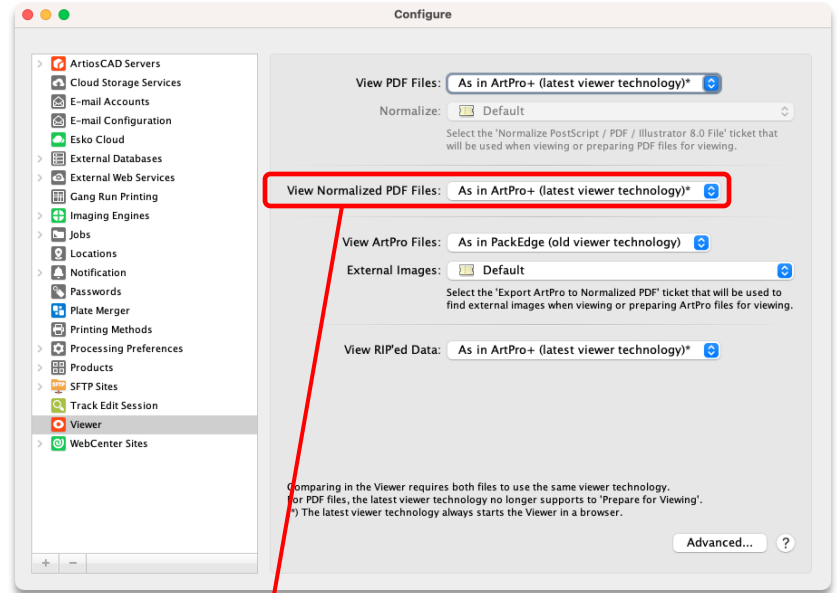
- Search for text in the file
- Font identification
- Highlight text that violates minimum point size

Color Managed Viewing



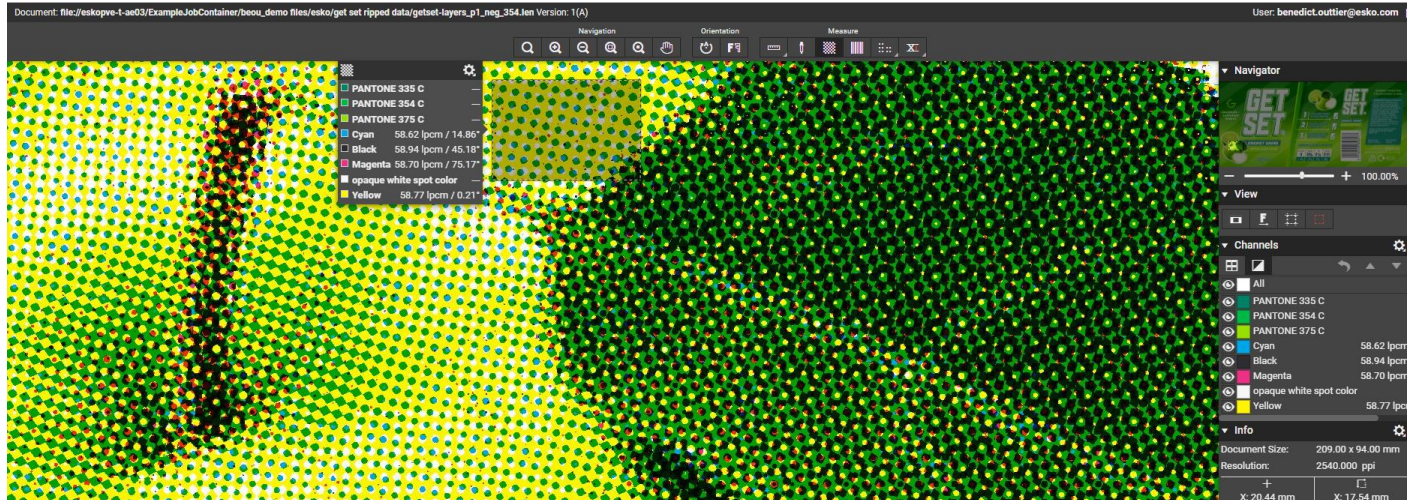
Viewing Normalized PDF files as in PackEdge

- View PDF files as in ArtPro+ while still viewing Normalized PDF as in PackEdge (its native classic editor)
 - Keeps original screening info



Additional support for Digital Film

- Shows as printed result / easier during the QC process
 - Automatic inversion
 - Automatic re-mirroring

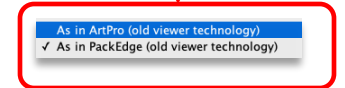
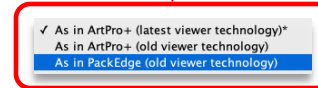
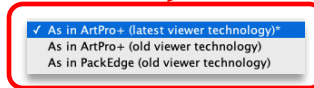
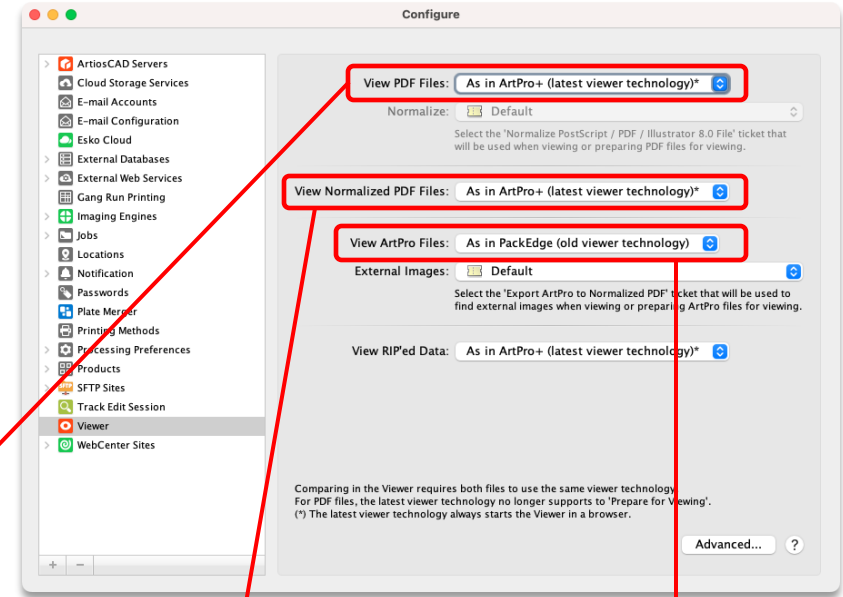


Known Limitations

- Not possible
 - Cannot view ArtPro classic files
 - Cannot compare files using old *and* new technology
- Not available yet, but planned
 - Seamless view
 - Invert separation
 - Global Vision annotations
- A complete list of the known limitations can be found in the [release notes](#)

Upgrade to the latest technology when it suits you

- The new viewing engine is completely configurable
 - Choose when you want to use the new engine
- All existing viewing technologies are available
 - Now possible to set a different engine for Normalized PDF than for native PDF(+)



My Workspace

New in AE's browser client

Improved user experience for Quality Control

- Easily compare 2 files from within a To-Do item

The screenshot displays the 'AUTOMATION ENGINE' interface. The top navigation bar includes 'JOB', 'DROP FILE', 'PRODUCTS', 'FILES', 'ACTIVITY', and 'TO DO' (with a notification badge). The main content area is titled 'TO-DO VERIFY RESULT'. It features a checkbox labeled 'I am currently handling this to-do item' and a 'Forward To-Do' button. Below this, the 'From' field shows 'benedict.outlier' with a 'Show Details' button. A 'Files' section contains a table with two rows: 'artwork.pdf' and '2346B_GS_Lime_not strictly descending.pdf'. Each row has a 'Compare' button in the 'ACTIONS' column. A 'Message' section at the bottom states 'compare the resulting file with the original input'.

NAME	ACTIONS
artwork.pdf	Compare
2346B_GS_Lime_not strictly descending.pdf	Compare

- Products view: a new 'Compare To' function

File actions in My Workspace

- Copy, Move and Duplicate files and folders

1. Click Select
2. Select Files
3. Select Copy or Move
4. Choose destination to copy or move files to
5. Click Move or Copy here

The image displays three overlapping screenshots of the Automation Engine interface, illustrating the steps for file actions:

- Left Screenshot:** Shows the 'FILES' view with a table of files. The 'SELECT' button in the top toolbar is circled with a red '3'. The first row of the table is highlighted, and the 'SELECT' icon in its row is circled with a red '2'.
- Middle Screenshot:** Shows the same 'FILES' view, but the 'COPY' button in the top toolbar is circled with a red '3'.
- Right Screenshot:** Shows the 'SELECT FOLDER' dialog box. The 'ARTWORK' folder is selected in the 'Folder' dropdown, and the 'ARTWORK' folder in the list is circled with a red '4'. The 'Move here' button at the bottom right is circled with a red '5'.

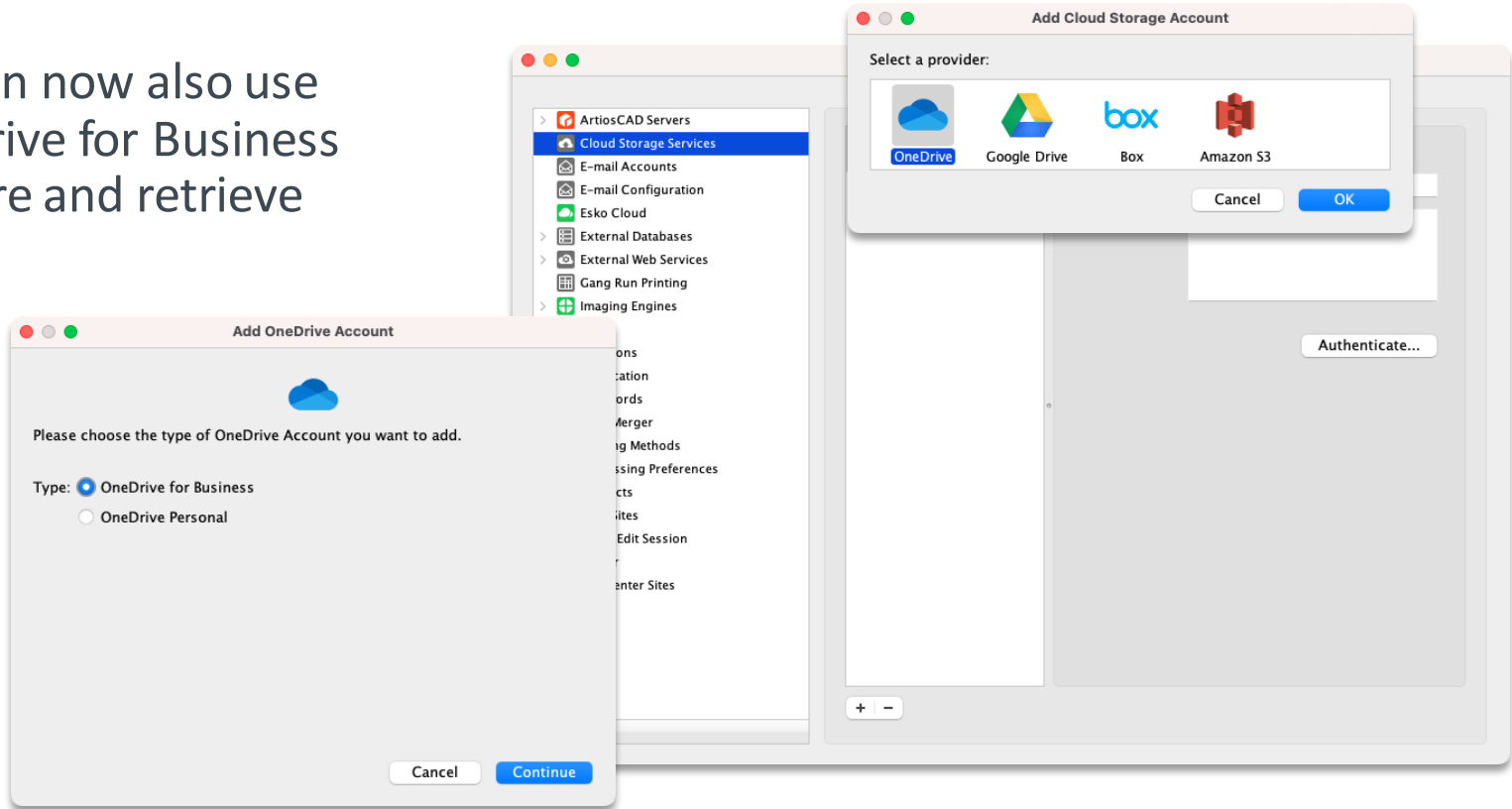
NAME	ACTIONS	TYPE	SIZE	DATE MODIFIED
OLD				March 9, 2023 9:54 AM
BOX_CLOSED_CUTOUT.ARD		ARD File	59 KB	March 9, 2023 9:55 AM
BOX_CLOSED_NOOUTTOUT.ARD		ARD File	47 KB	March 9, 2023 9:55 AM
BOX_OPEN_CUTOUT.ARD		ARD File	59 KB	March 9, 2023 9:55 AM
BOX_OPEN_NOOUTTOUT.ARD		ARD File	47 KB	March 9, 2023 9:55 AM
BoxATOMIZE.ai		PDF File	3.1 MB	March 9, 2023 9:54 AM
BoxATOMIZE.pdf		PDF File	2.5 MB	March 9, 2023 11:50 AM
BoxDLW.ai		PDF File	1.1 MB	March 9, 2023 9:54 AM
BoxDLW.pdf		PDF File	2.2 MB	March 9, 2023 9:54 AM
BoxH2O.ai		PDF File	591 KB	March 9, 2023 9:54 AM
BoxH2O.pdf		PDF File	2 MB	March 9, 2023 9:54 AM
CreamATOMIZE.ai		PDF File	504 KB	March 9, 2023 9:54 AM

Value for Maintenance

A host of new features designed to improve
efficiencies

Cloud Storage supports OneDrive for Business

- You can now also use OneDrive for Business to store and retrieve files



Tools to improve workflow performance

- Keep the size of workflow tickets under control to improve performance
 - Oversized workflow tickets put a significant burden on the workflow server
 - Smaller workflow tickets consume less resources (RAM/CPU)
 - Increase workflow capacity by reducing the ticket size

Task Type	Ticket Name	Tags	Description	Modified By	First Submitted From
Workflow	prepress - general	pr, pri		-	26/01/2023, 09:06
Workflow	prepress - speed	pr, pri	Contains all the functionalit...		12/01/2023, 15:14
Workflow	platemaking - std	pr, pri	Plating flow v1		17/03/2023, 14:22

Keeping your workflow tickets small significantly improves the performance of your system

- Check the size of your workflow tickets to learn which ones can be optimized
 - 100 KB = perfect, size is optimal
 - 1,2 MB = it's better to optimize this ticket
 - 1,9 MB = this ticket must be optimized (warning dialog will pop up when saving)

Tools to improve workflow performance

- Reduce workflow ticket size

- Detect and remove unused public parameters and nodes with the new Warnings pane (replaces the 'Validate Workflow' tool)

Removed unused elements.

This will reduce ticket size and improve performance

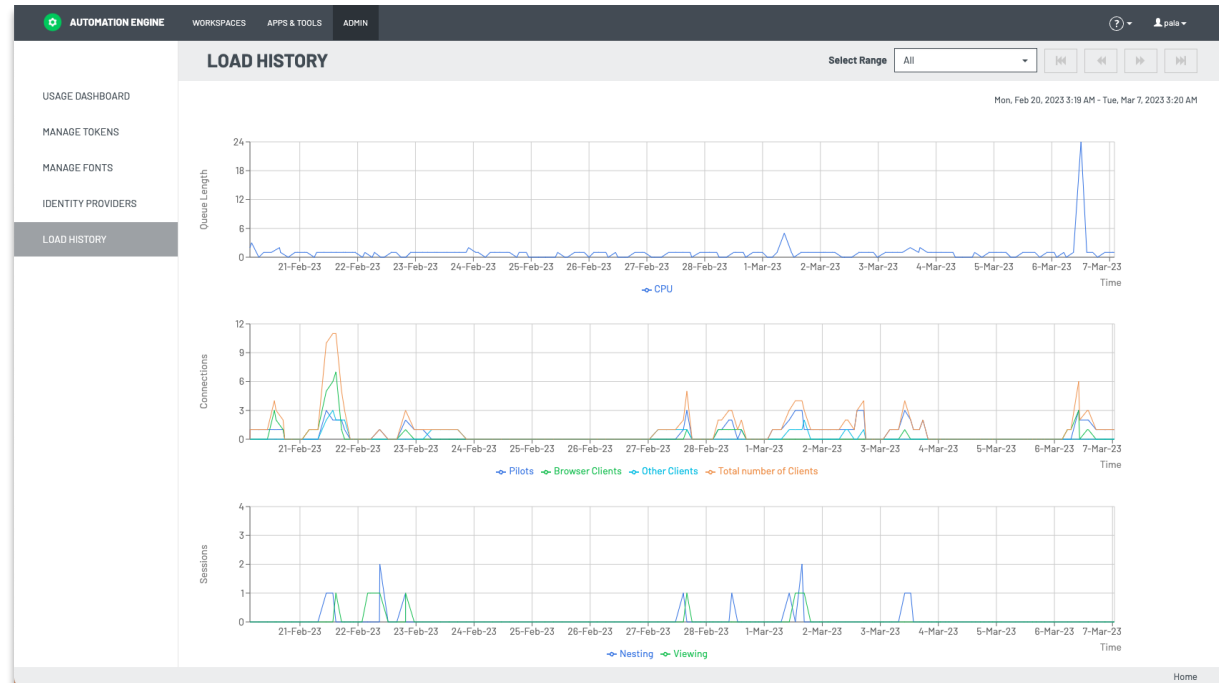
- Link to other workflows rather than embedding them

Tools to improve workflow performance

- Too many workflow tokens affect performance and stability
- A workflow token limit was introduced
 - As a safety mechanism for an unexpected high number of tokens, workflows exceeding the limit will be automatically cancelled
 - It is possible to override this limit in Configure
 - But it is better to optimize your workflows (and increase capacity)
 - [This page in the manual](#) explains how to avoid an excessive amount of tokens

New Admin page: Load History

- Analyze the historical load on your Automation Engine server software
 - Concurrent tasks, users, viewers ...
- Is the capacity of the server still adequate?



Approval Master for Share & Approve

- Specify an approval *master*: one that can force approve/reject

Dialog box: Edit Ticket of Start Approval Cycle on Share & Approve

Approval Type: By E-mail

Approver: somebody@esko.com
A comma separated list of e-mail addresses.

Language: English
This language will be used for unregistered users.

Approval Master: From folder setup
The e-mail address of a registered user.

Due Date: None

Buttons: Save As..., Advanced, Cancel, OK

Dialog box: Edit Ticket of Start Approval Cycle on Share & Approve

Approval Type: By E-mail

Approver: somebody@esko.com
A comma separated list of e-mail addresses.

Language: English
This language will be used for unregistered users.

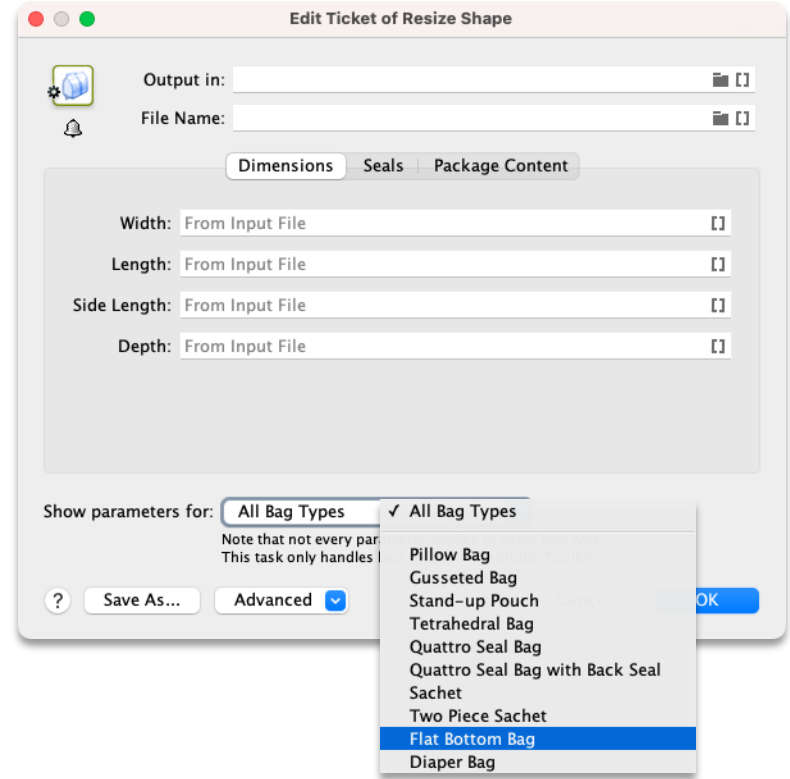
Approval Master: somebodyelse@eskoc.om
The e-mail address of a registered user.

Due Date: None

Buttons: Save As..., Advanced, Cancel, OK

Resize Shape Improvements

- Support for Flat Bottom Bags in the 'Resize Shape' task



General Miscellaneous updates

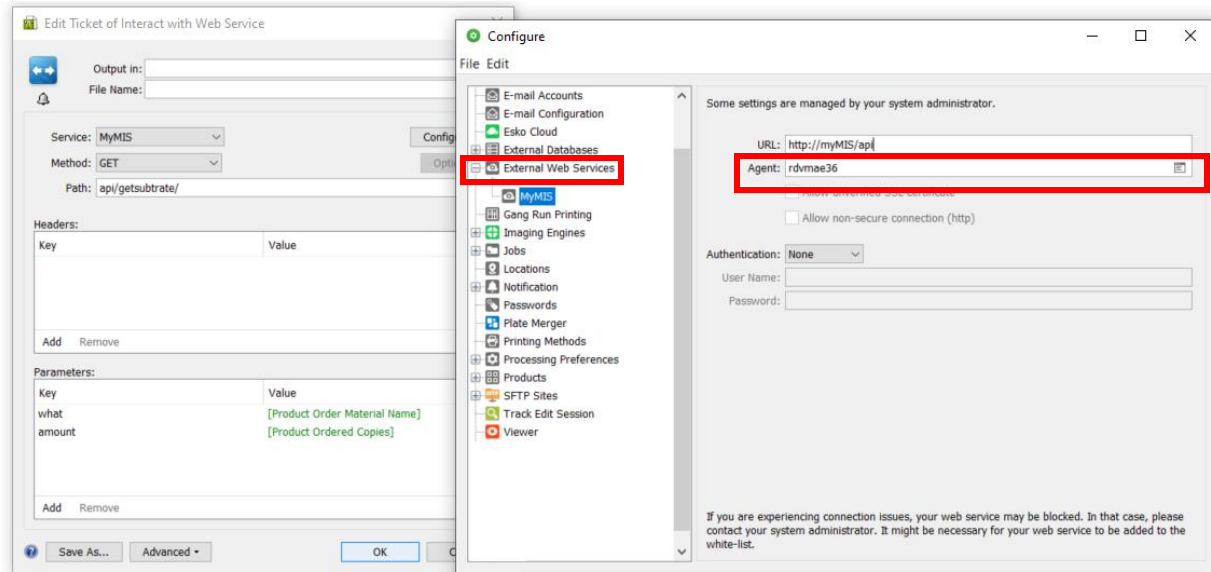
- New search option in SmartNames view: search on content
- Updated PitStop library to PitStop 2022 update 1
- Updated GlobalVision SDK to version 5.12
- OAuth2 based E-mail Accounts - can now be used for outgoing mail
- Export PDF Info task – screening information from PDF+ files can be extracted
- And many more ...
 - See the [Release Notes](#) for a complete overview of all changes

AE SaaS

Connect to Web Services via the Agent

- An AE SaaS in a data center was not able to connect over HTTP to an MIS which is in another LAN.
- This is now also possible via the local Agent. These tools can now also use the Agent:

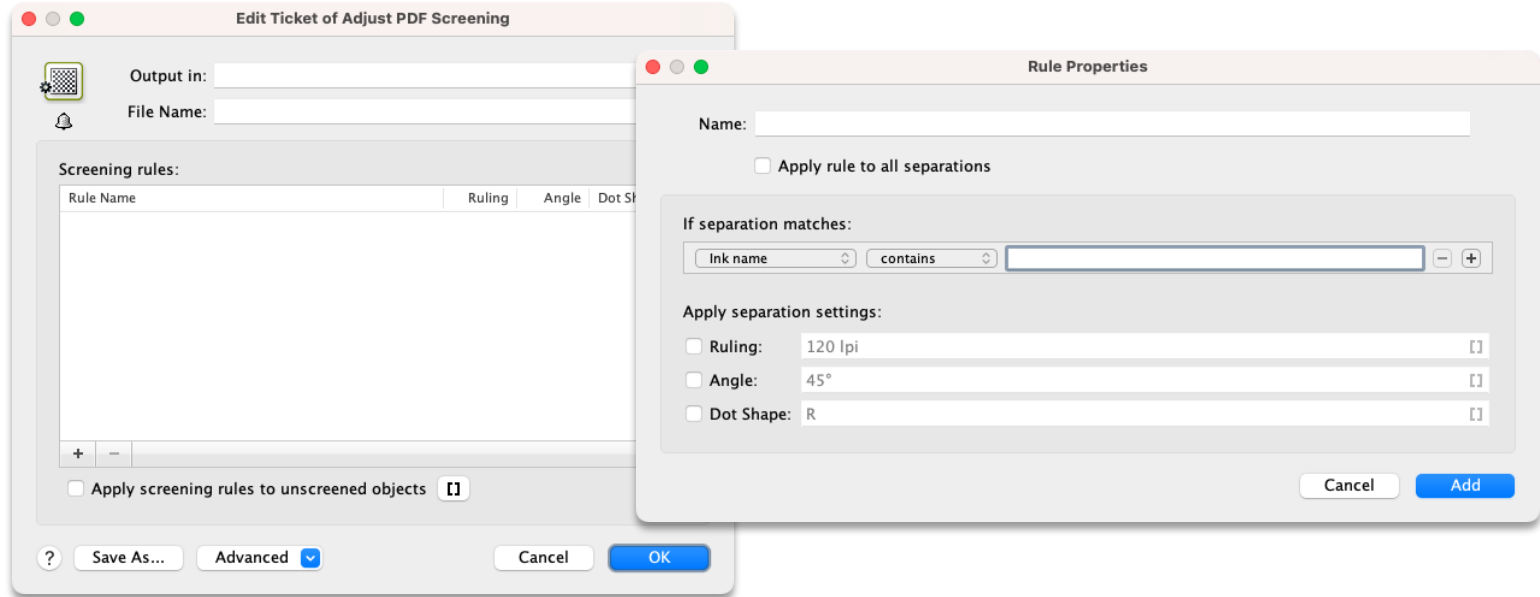
- Interact with Web Service task
- Web Service Access Point



Migration to Native PDF

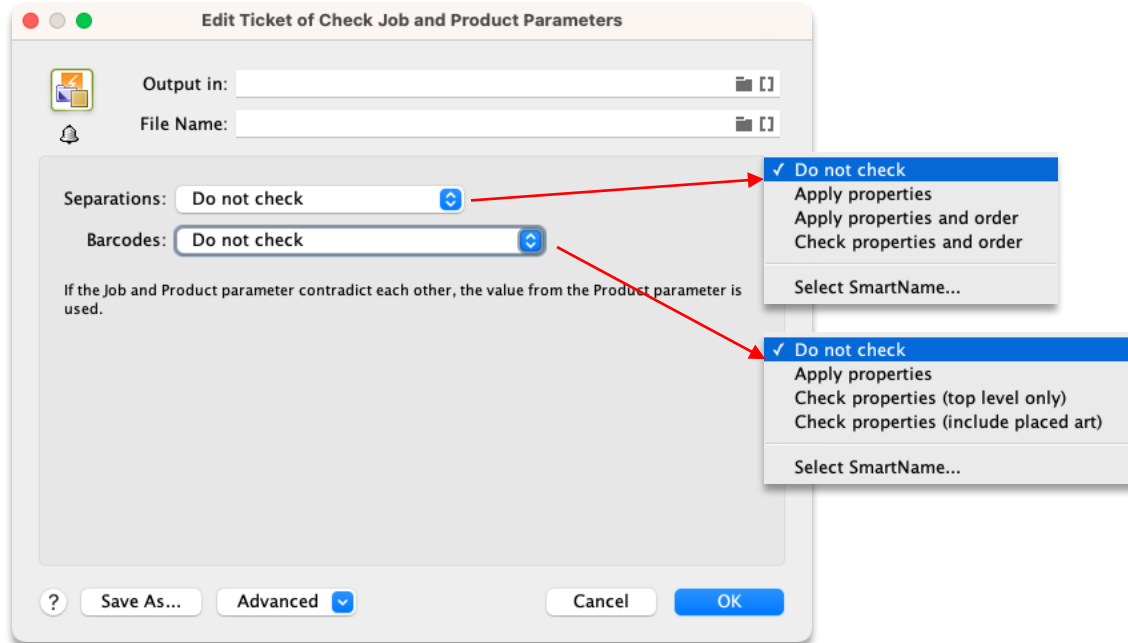
A new 'Adjust PDF Screening' task

- A PDF+ compatible task to 'Adjust PDF Screening'



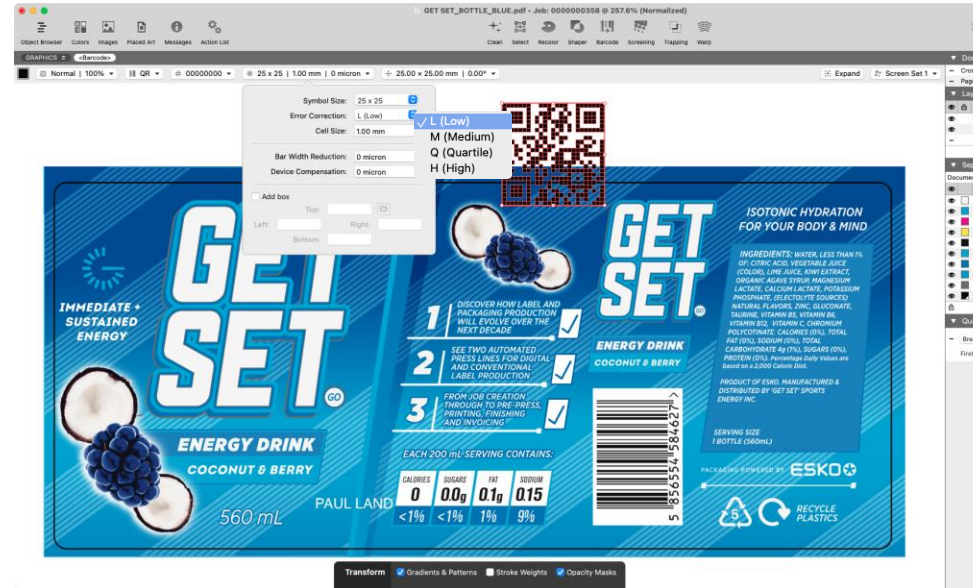
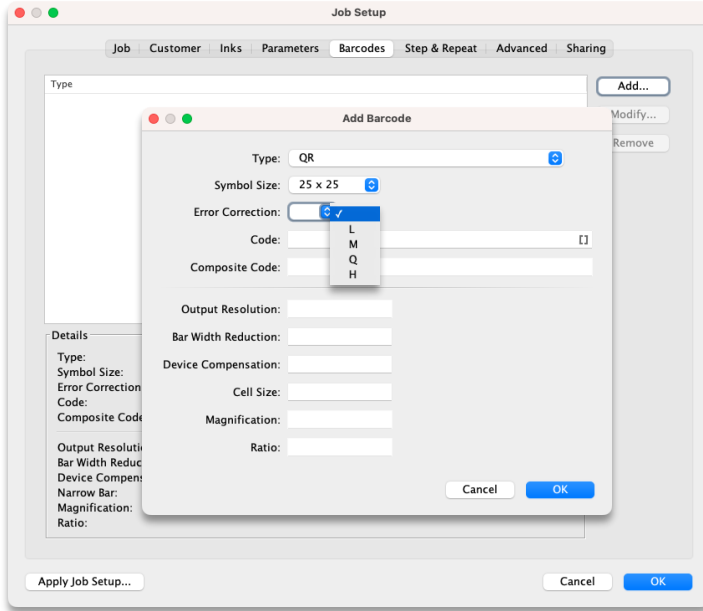
A new 'Check Job and Product Parameters' task

- A PDF+ compatible task to 'Check Job and Product Parameters'



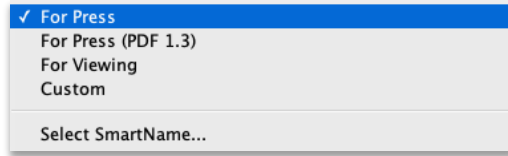
Updated Job Parameters

- Barcode parameters in Job Setup are aligned with ArtPro+
 - Example: symbol size and Error correction for QR

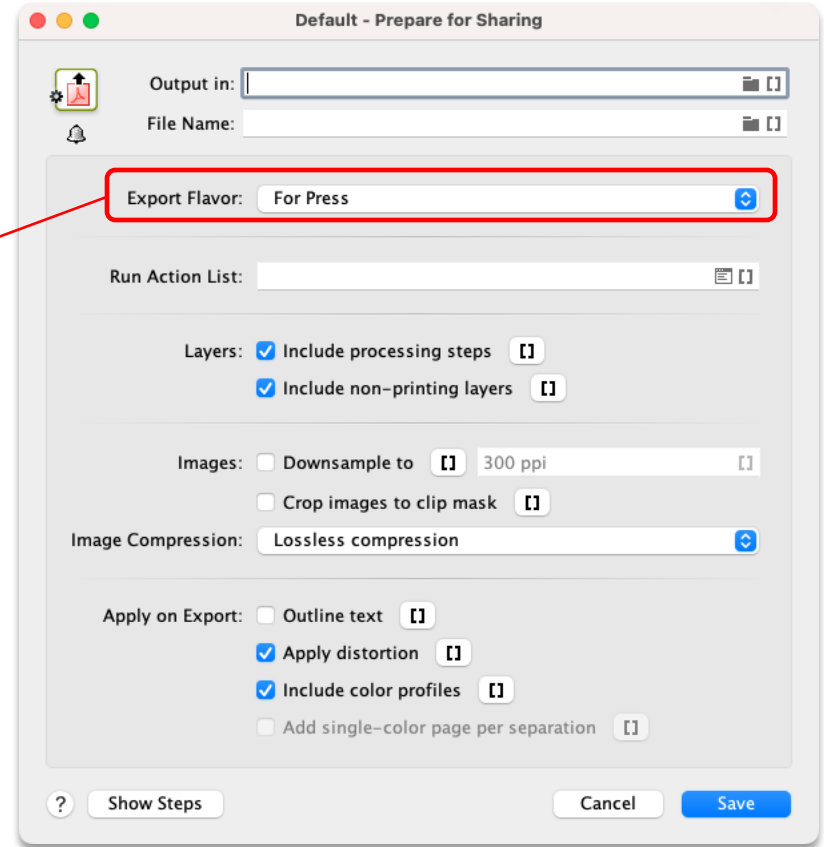


Prepare for sharing

- 'Export Flavor' option was added



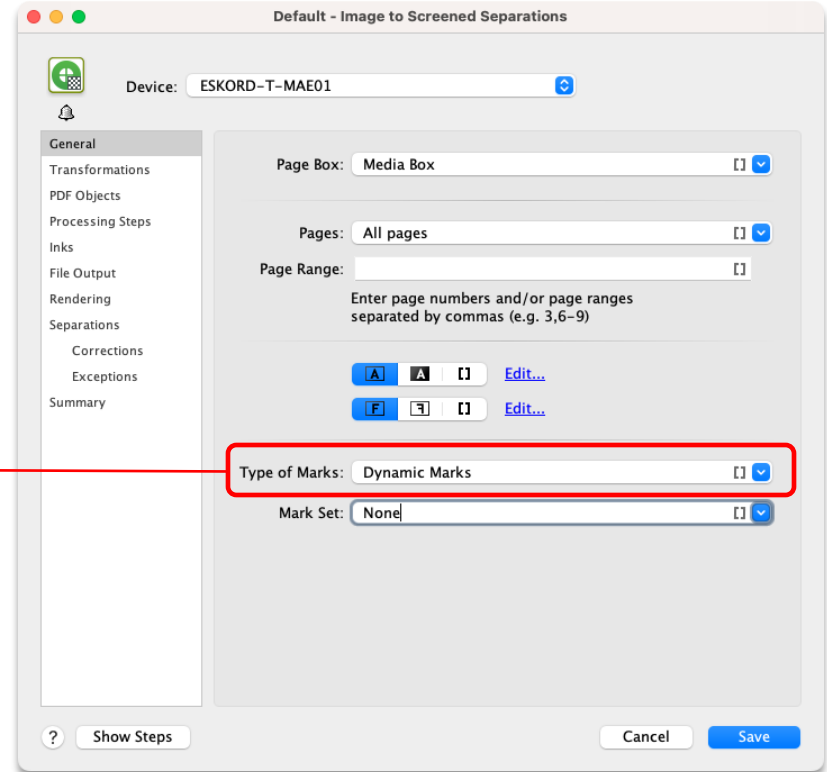
- Per selected use case, it selects, deselects, enables or disables the relevant options



Imaging Engine using Dynamic Marks

- Imaging Engine tasks now also support Dynamic Marks

SmartMarks (Classic)
Dynamic Marks

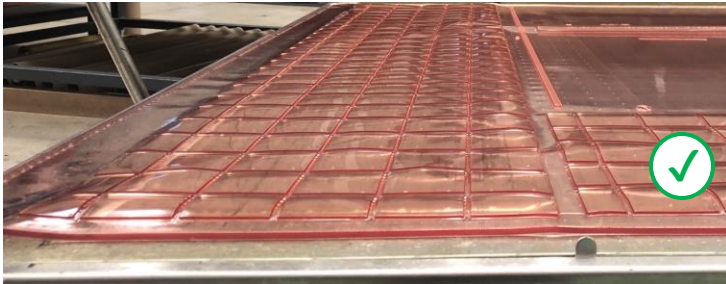
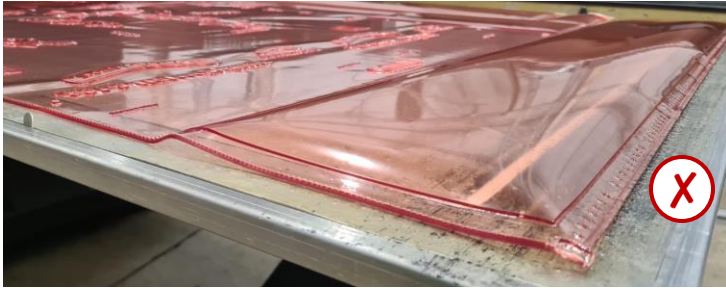


Other PDF+ improvements

- New text engine used for marks and VDP
 - It may generate slightly different output compared to previous versions, but it should be closer to the text engine from Adobe Illustrator
- VDP Improvements
 - New type of text mark: 'Text on path'
 - Variable placed art (PDF file) was added
 - Many more barcode types supported as variable barcode
- New PDF Action list actions
 - Spread thin parts
 - Move objects to processing step layer
 - Update trap layer

Flexo Engine

Grid Pattern Fill option for Solvent Saver

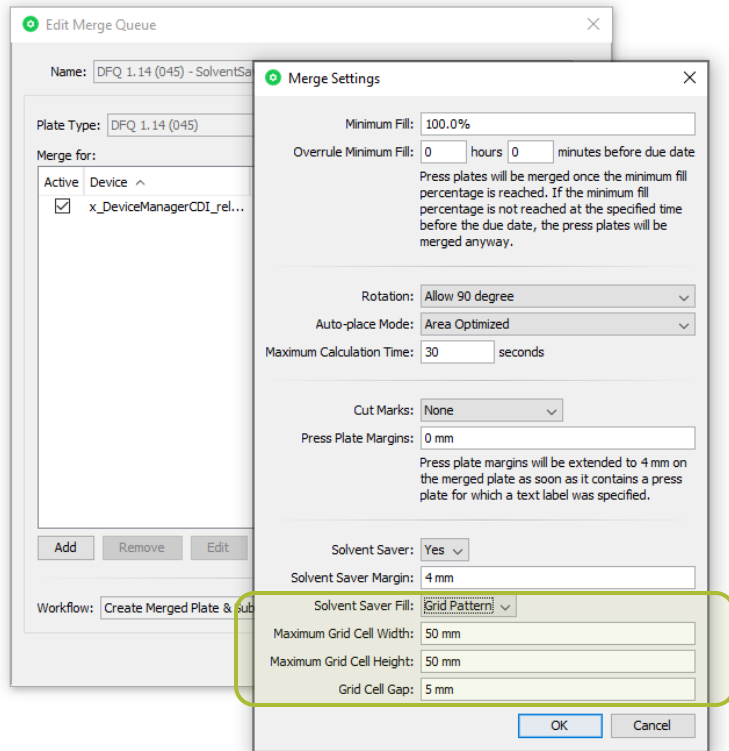


The “**Solid**” Solvent Saver fill (default till 23.03) resulted in thicker plates curling

Due to excessive solvent absorption

The new “**Grid Pattern**” fill option significantly reduces plate curling

Grid Pattern Fill option for Solvent Saver

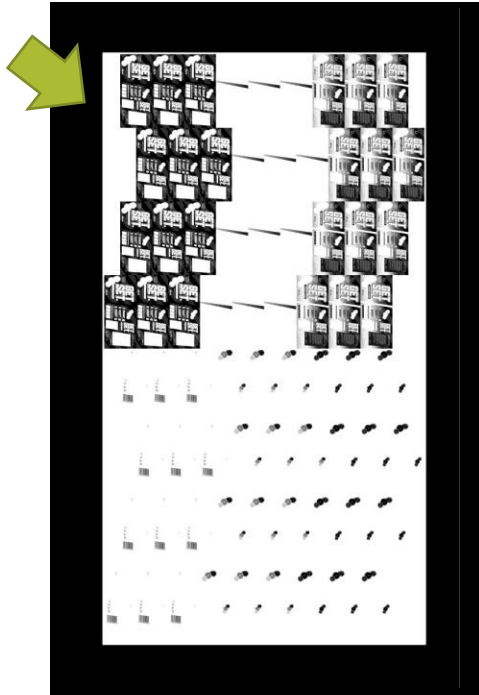


How to activate?

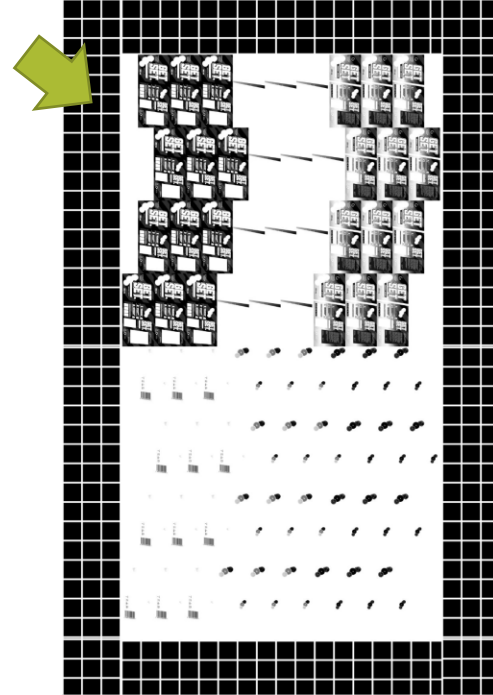
- Merge Settings
- Two fill options:
 - Solid
 - Grid Pattern
- Grid Pattern parameters:
 - Maximum Grid Cell Width
 - Maximum Grid Cell Height
 - Grid Cell Gap
- Defaults are 50 mm, 50 mm and 5 mm

Grid Pattern Fill option for Solvent Saver

'Solid Fill'



New 'Grid Pattern Fill'



Improved Merging Algorithm

The screenshot displays the ESKO software interface for managing merge queues. The main window shows two layout options for a 2,032 x 1,254.94 mm plate. The left layout, highlighted with a blue border, represents the improved algorithm with 15.4% waste. The right layout, highlighted with a red border, represents the old algorithm with 21.9% waste. A green arrow points from the improved layout to the old one, indicating the improvement. The right sidebar provides details for the device (rdvmae35) and lists 13 press plates.

different rotation allowed 17 press plates Request Auto Merge Pause Merge Queue

rdvmae35 (12)

Device: rdvmae35
Plate Type: DFH 1.14 (045)
Drum Name: V5080EC3
Resolution: 4,000 ppi
Size: 2,032 x 1,254.94 mm
Customers: --
Due Date: --
Cutting Flow:
Waste: 15.4%
Beams: 0.89
Grouping: Pixel+, DFH 1.14 (045), 4000
Test Strip: --
Contains: 13 press plates
Press Plates: 34142700_944513-099_2128.lenx
34142700_944513-099_7687.lenx
34142700_944513-099_C.lenx
34142700_944513-099_K.lenx
34142700_944513-099_M.lenx
34142700_944513-099_SPOTLAK.lenx
34142700_944513-099_Y.lenx
34142704_944513-101_2128.lenx
34142704_944513-101_7687.lenx
34142704_944513-101_C.lenx
34142704_944513-101_K.lenx
34142704_944513-101_M.lenx
34142704_944513-101_SPOTLAK.lenx

2,032 x 1,254.94 mm
15.4% waste

Old algorithm proposed this as best layout

2,032 x 1,254.94 mm
21.9% waste

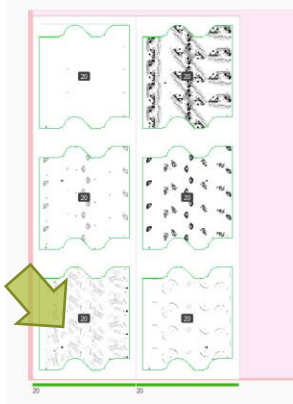
Improved algorithm now manages to add one more press plate

1 of 12 selected Server: ESKW220155 User: joan 1

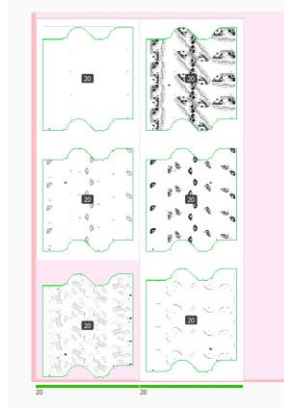
Nested Merging in Layout Proposal Editor

Better visual guidance when manually optimizing merged plates with staggered cut layouts:

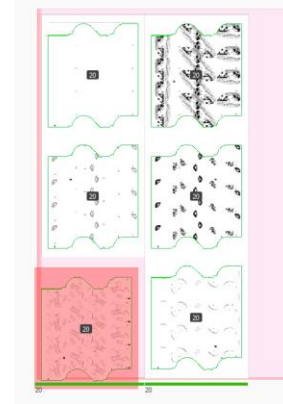
- Red indication when moving press plates with outside labels on top of each other (not supported)
- Red indication when cut lines are crossing the plate edges:



Original Position

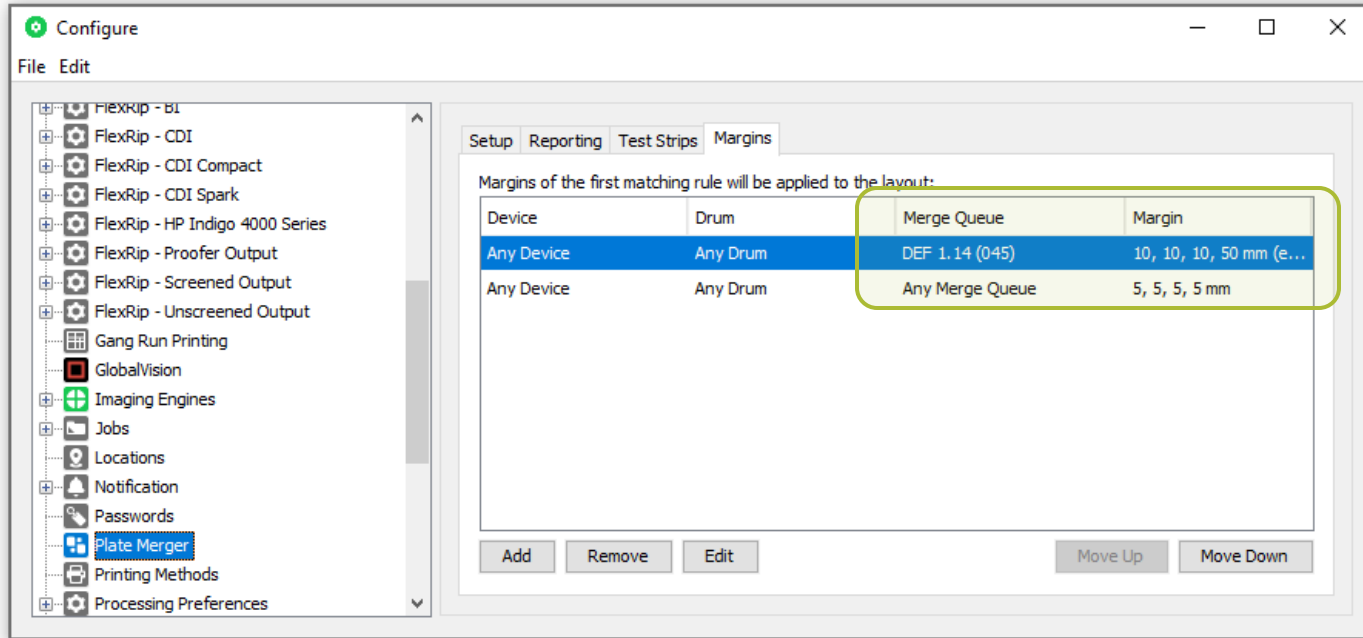


Still OK



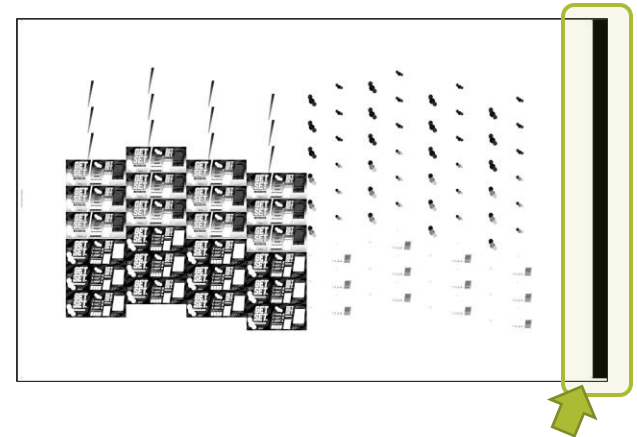
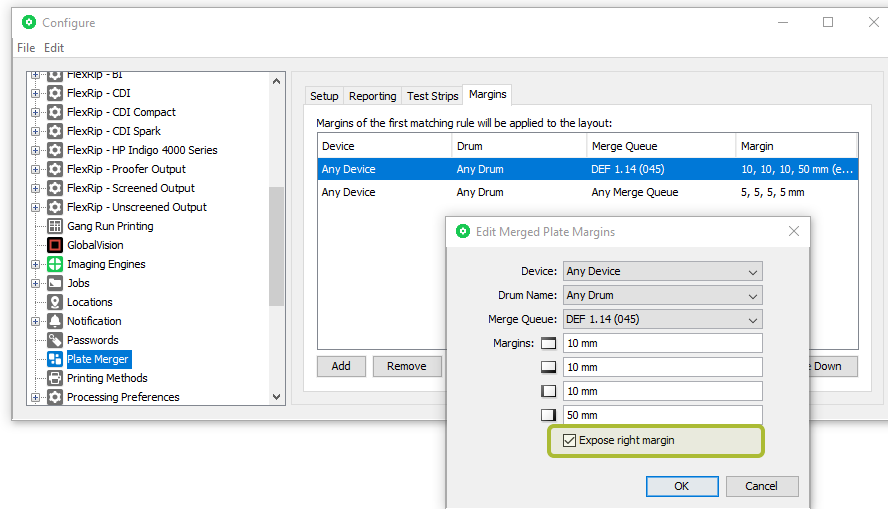
Dragged down too far

Margins now configurable on Merge Queue Level



Support for Crystal Clean Connect

- Crystal Clean Connect needs a right margin that is exposed on the merged plate
- New 'Expose right margin' option in the Edit Merged Plate Margins panel



Exposes right margin of the plate

System requirements & Known Limitations

System requirements & known limitations

- Support for SQL 2022
 - Automation Engine now supports SQL 2022 Server as a database engine
 - New Automation Engines are now installed with SQL 2022 Express
 - SQL Server 2012 is no longer supported

ESKO*