

What's new in Imaging Engine 16.0.2

PreRelease version 11

17/03/2017

What's new in Imaging Engine version 16.0.2

This document lists all changes and improvements since Platform 16 – July Release. The document will give an overview of:

- New Functionality
- Solved customer issues

This PreRelease version is **feature complete** and **production ready**.

New Functionality - General

- General
 - New Adobe Kernel (APPE 4.6)
 - SmartMark support for correction curve
 - Improved font handling
 - Improved file handling
 - Compensate for outline thickness
- CTP specific
- Proof specific

What's new in Imaging Engine 16.0.2

- New Functionality
 - **General**
 - CTP Specific
 - Proof Specific
- Solved Customer Issues

New Adobe Kernel (APPE 4.6)

The kernel of Imaging Engine has been updated from APPE version 4.1 to **APPE version 4.6**. This version includes:

- Performance improvements
- Memory usage improvements

With this new version a lot of memory issues and/or timing issues are solved.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - **New Adobe Kernel (APPE 4.6)**
 - SmartMark support for correction curve
 - Improved font handling
 - Improved file handling
 - Compensate for outline thickness
 - CTP Specific
 - Proof Specific
- Solved Customer Issues

SmartMark support for correction curve

In PackEdge it is now possible to add the **correction curve** as a **Text SmartMark** when creating a new SmartMark.



When using such a SmartMark in a separations ticket of Imaging Engine, the value of the Correction Curve option is shown in the RIPped output.

Correction Curve = TL_LOTUS_FNC_SCR_SingeCurve_Bump.dgc

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - New Adobe Kernel (APPE 4.6)
 - **SmartMark support for correction curve**
 - Improved font handling
 - Improved file handling
 - Compensate for outline thickness
 - CTP Specific
 - Proof Specific
- Solved Customer Issues

Improved font handling

Previously jobs could fail if a font had **incorrect hinting information**. Although this can lead to reduced quality rendering of the text, it won't cause incorrect characters to be printed. A toggle was added to **ignore these issues** and continue RIPping when the toggle is not checked.

Generate an error if the job contains font hinting errors 

This option has been added to the **PDF Objects tab** for all Imaging Engine tickets.

If the job does contain font hinting issues and the toggle is not checked the task ends in warning stating:

NON-FATAL PDFL Exception: Cannot extract the embedded font 'NAAAAA+Helvetica-Light' - Problem with Truetype font program. (Hinting Error)
Please verify the output.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - New Adobe Kernel (APPE 4.6)
 - SmartMark support for correction curve
 - **Improved font handling**
 - Improved file handling
 - Compensate for outline thickness
 - CTP Specific
 - Proof Specific
- Solved Customer Issues

Improved file handling

Previously all normalized input files were processed by a subtask to prepare them for the Imaging Engine (Resolving input file...).



Image to Screened Separations on Imaging1 0% Resolving input file...

This could take some time and was not always needed. To speed up the Imaging Engine tasks, this preparation is now only done when really needed, meaning this is only done when the input file contains external references. This results in some **improved performance**.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - New Adobe Kernel (APPE 4.6)
 - SmartMark support for correction curve
 - Improved font handling
 - **Improved file handling**
 - Compensate for outline thickness
 - CTP Specific
 - Proof Specific
- Solved Customer Issues

Compensate for outline thickness

When creating output at lower resolutions, the output of outlined text and line art looks thicker when using Imaging Engine (compared to FlexRip and NexusRip). This is because Imaging Engine is based on APPE which uses a overscan algorithm and FlexRip and Nexus were using centerscan algorithms.

To simulate the output of FlexRip and Nexus a new option has been added to the output tab to make the output more 'thin':

Compensate for outline thickness **【】**

This is a PreRelease option. Please make sure to verify the output.
Compensating for outline thickness can demand extra processing resources.

This option is available for all tickets generating unscreened output.

Remark: This option will remain a PreRelease option, even when Imaging Engine 16.0.2 is released. This means the output generated by activating this option can change in future versions.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - New Adobe Kernel (APPE 4.6)
 - SmartMark support for correction curve
 - Improved font handling
 - Improved file handling
 - **Compensate for outline thickness**
 - CTP Specific
 - Proof Specific
- Solved Customer Issues

New Functionality - CTP

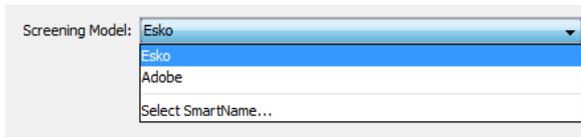
- General
- CTP specific
 - Esko Screening model
 - Jump to nearest ruling behavior
 - Screen Angle Set
 - Public parameter support for screening parameters
 - In-RIP dot cleanup
 - HighLine XM screening
- Proof specific

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - **CTP Specific**
 - Proof Specific
- Solved Customer Issues

Esko Screening Model

When using object screening on objects containing some **transparency**, the screened output could look quite different compared to FlexRip ([more info](#)). To have **more FlexRip-alike output**, a new option has been introduced in the “**Advanced Screening Settings**” panel:



When selecting ‘Adobe’, all output will be the same as the 16.0.1 release. This output is comparable with Nexus but not guaranteed to exactly match Nexus output ([more info](#)). When switching to ‘Esko’ the output will be similar to FlexRip, but not always exactly match FlexRip output ([more info](#)).

What’s new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - **Esko Screening model**
 - Jump to nearest ruling behavior
 - Screen Angle Set
 - Public parameter support for screening parameters
 - In-RIP dot cleanup
 - Highline XM screening
 - Proof Specific
- Solved Customer Issues

Jump to nearest ruling behavior

To make differences between requested screen rulings and **actually used screen rulings in the output more controllable**, the behavior for jumping to a nearest ruling can be set. This can be done by configuring the Imaging Engine device in the Automation Engine Configure Tool.

Restrict Ruling: Minimum Ruling:
 Maximum Ruling:
Exact Ruling Not Available:
 Maximum Ruling Difference:

The ruling can be restricted to a certain range and / or can be restricted by not deviating more than a certain amount of lpi. If the ruling always needs to be exact to what was requested, the 'Exact Ruling Not Available'-option can be set to 'Task Fails'.

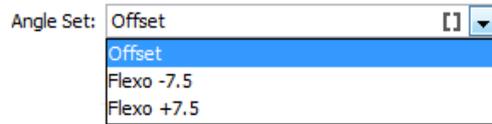
The default is to always jump to an existing ruling. This solves the issue of the Imaging Engine task failing whenever SmartNames for 'output resolution' or 'dotshape' were used.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Esko Screening model
 - **Jump to nearest ruling behavior**
 - Screen Angle Set
 - Public parameter support for screening parameters
 - In-RIP dot cleanup
 - Highline XM screening
 - Proof Specific
- Solved Customer Issues

Screen Angle Set

A new option has been introduced to define the default screen angle set. Before this was internally always set to use the offset-angles, but now this can be changed by the user:



Based on the selected screen angle set, the available rulings are updated showing only the rulings which are available for the given angle set. Previously some rulings were shown, which were not available for the default angles resulting in small ruling differences between the rulings visible in the ticket and those used in the output.

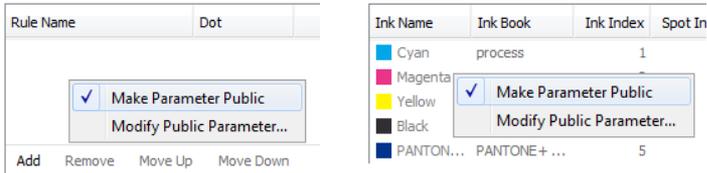
What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Esko Screening model
 - Jump to nearest ruling behavior
 - **Screen Angle Set**
 - Public parameter support for screening parameters
 - In-RIP dot cleanup
 - Highline XM screening
 - Proof Specific
- Solved Customer Issues

Public parameter support for screening parameters (1)

The **screening parameters** (dot, angle, ruling) can now be made **public** in the 'Image to Screened Separations'-ticket so they can be used in Shuttle, PackEdge,...

To make these parameters public, the user can do a right-mouse click on the Exceptions overview (Exceptions tab) or when a single output file is selected on the Separations overview (Separations tab & Exceptions tab).



Rules are applied from bottom to top.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Esko Screening model
 - Jump to nearest ruling behavior
 - Screen Angle Set
 - **Public parameter support for screening parameters**
 - In-RIP dot cleanup
 - Highline XM screening
 - Proof Specific
- Solved Customer Issues

Public parameter support for screening parameters (2)

This public parameter is merged with the public parameter for inks selection into 'Ink and Screening Selection', meaning that for the 'Image to Screened Separations'-ticket:

- When defining ink selection as public parameter, also screening parameters are made public
- When defining screening parameter as public parameter, also ink selection is made public

All inks

Inks:

<input type="checkbox"/> Ink Name	Ink Book	Ruling	Angle	Dot Shape	Ink Type	Printing ...
<input checked="" type="checkbox"/> C	process	120 lpi	7 °	C	Normal	Unknown
<input checked="" type="checkbox"/> M	process	<input type="text" value="120"/>	37 °	C	Normal	Unknown
<input checked="" type="checkbox"/> Y	process	120 lpi	82 °	C	Normal	Unknown
<input checked="" type="checkbox"/> K	process	150 lpi	67 °	CO	Normal	Unknown
<input checked="" type="checkbox"/> PANTONE Warm Red C	PANTONE+ Solid C...	120 lpi	45 °		Normal	Unknown
<input checked="" type="checkbox"/> Orange	ClassicColors	120 lpi	45 °		Normal	Unknown
<input type="checkbox"/> Green	ClassicColors	120 lpi	45 °		Normal	Unknown
<input checked="" type="checkbox"/> Violet	ClassicColors	120 lpi	45 °		Normal	Unknown

Ink and Screening Selection:

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Esko Screening model
 - Jump to nearest ruling behavior
 - Screen Angle Set
 - **Public parameter support for screening parameters**
 - In-RIP dot cleanup
 - Highline XM screening
- Proof Specific
- Solved Customer Issues

Public parameter support for screening parameters (3)

Similar as with public parameters for ink selection, **settings from the ticket are not taken over** when using this ticket in shuttle, PackEdge,... For Example if a screening exception is defined in the ticket and this ticket (which has been made public) is used in Shuttle, the view will not show this exception, it will only show all information from the file.

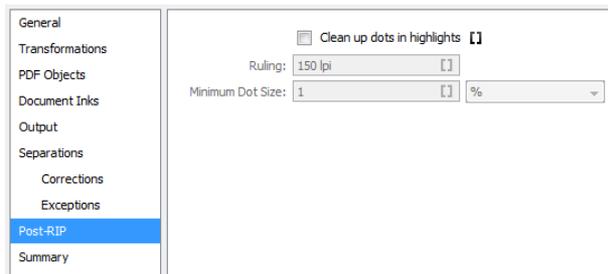
If a launched ticket, which was launched from e.g. Shuttle, is opened in Automation Engine Pilot, all overruled screening parameters will be converted to exceptions. These exceptions are shown in the exceptions overview.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Esko Screening model
 - Jump to nearest ruling behavior
 - Screen Angle Set
 - **Public parameter support for screening parameters**
 - In-RIP dot cleanup
 - Highline XM screening
 - Proof Specific
- Solved Customer Issues

In-RIP dot cleanup

A new tab has been added to the “Image to Screened Separations” ticket, called “Post-RIP”. It contains the parameters to activate and tune the in-RIP dot clean up.



Dots in the highlights will be cleaned according the used screens. If the screens do not enforce specific dot clean up parameters, the specified settings in the ticket are used as default:

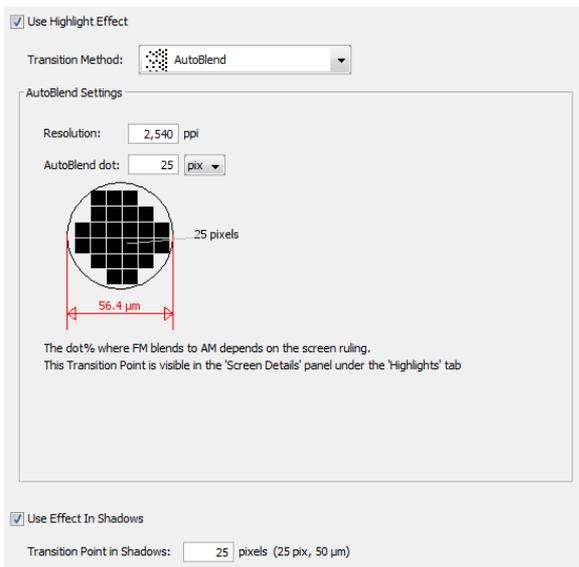
- Ruling: the plate ruling (a.k.a. the digital resolution) which defines an isolated dot
- Minimum Dot Size: An isolated dot will be cleaned if the size is smaller than the given minimum dot size.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Esko Screening model
 - Jump to nearest ruling behavior
 - Screen Angle Set
 - Public parameter support for screening parameters
 - **In-RIP dot cleanup**
 - Highline XM screening
 - Proof Specific
- Solved Customer Issues

Highline XM screening

Highline XM screening is now also supported in Imaging Engine. When the Autoblend license is available, ScreenManager will allow to create Highline XM screens. It is possible to define the effect both in highlights and in shadows. More information can be found in [this Knowledge Base article](#).



What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Esko Screening model
 - Jump to nearest ruling behavior
 - Screen Angle Set
 - Public parameter support for screening parameters
 - In-RIP dot cleanup
 - **Highline XM screening**
 - Proof Specific
- Solved Customer Issues

New Functionality - Proof

- General
- CTP specific
- Proof specific
 - New Proof Server
 - Image to Content Proof (RGB) task
 - Use document profile
 - Multi-channel composite TIFF

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - **Proof Specific**
- Solved Customer Issues

New Proof Server

A new Esko Proof Server is available which is based on the XF Server 6.3 and includes following new things:

- Supports Epson P7000/9000 HT drivers
- Supports Epson P6000/8000 HT drivers
- Support for Epson Px0000 HT drivers
- Support for Epson SC-S306x0, 506x0, 706x0 devices
- Support for Canon Pro 1000, 2000, 4000, 4000s, 6000, 6000s devices
- Support for Mimaki ULF-3024HG device
- Support for Roland VersaCamm VS-300i device

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Proof Specific
 - **New Proof Server**
 - Image to Content Proof (RGB) task
 - Use document profile
 - Multi-channel composite TIFF
- Solved Customer Issues



Image to Content Proof (RGB) task

A new Imaging Engine task has been implemented to generate RGB JPEG images of the selected input file(s), the “Image to Content Proof (RGB) task”.

It allows the user to create a content proof and write it to file instead of needing to create a physical proof.

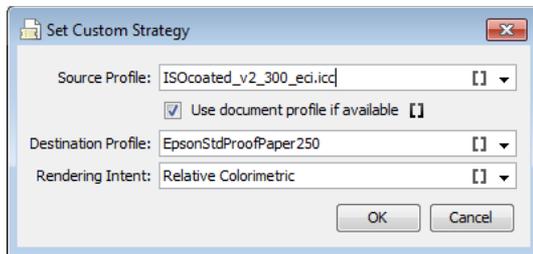
As it’s a content proof, the user cannot select any color management options as everything will be converted to the RGB color space. The file type is set to JPEG and cannot be changed.

What’s new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Proof Specific
 - New Proof Server
 - **Image to Content Proof (RGB) task**
 - Use document profile
 - Multi-channel composite TIFF
- Solved Customer Issues

Use document profile

When doing profile to profile color management in the Imaging Engine proofing tickets, a new option to **use the document profile** has been added.



If the input file does not contain a document profile, the source profile specified in the ticket will be used.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Proof Specific
 - New Proof Server
 - Image to Content Proof (RGB) task
 - **Use document profile**
 - Multi-channel composite TIFF
- Solved Customer Issues

Multi-channel composite TIFF

When selecting 'TIFF output' and '1 File per page' (i.e. composite TIFF output) in the 'Image to Unscreened Proof'-ticket, all color strategies are shown in the list of available color strategies. Before only color strategies which generated CMYK output were shown. Only for JPEG compression this CMYK restriction is still applied as this is a technical limitation of the JPEG compression.

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Proof Specific
 - New Proof Server
 - Image to Content Proof (RGB) task
 - Use document profile
 - **Multi-channel composite TIFF**
- Solved Customer Issues

Solved Customer Issues

- A list of all fixed customer issues can be found in the Release notes of Imaging Engine 16.0.2
- Some notable fixed customer issues
 - Faster handling of big normalized files (opening panel and creating JDF)
 - Improved output when using Line screen
 - Improved output quality for anti-aliased unscreened output
 - Improved connectivity with Proof Server
 - Better support for custom screening exceptions when using point as decimal separator

What's new in Imaging Engine 16.0.2

- New Functionality
 - General
 - CTP Specific
 - Proof Specific
- **Solved Customer Issues**

ESKO 