What’s new in Imaging Engine 16?

PR-506

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Roadmap for Imaging Engine

- Focus is on migrating customers from FlexRip and NexusRip
  - For version 16 (July 2016) focus is completing Nexus migrations
  - There will be follow up versions at end of 2016 and in 2017 to complete FlexRip migrations
New functionality in Imaging Engine 16

- New features
  - Correction window
  - Content Proofing
- Improvements
  - In User Experience
  - On Workflows
- Additional remarks
  - Pre-release of Esko Screening model
  - System recommendations
Corrections window:

Correction Curve
Minimum & Maximum correction
Corrections window: Need for it?

**NexusRip**

![NexusRip Corrections Window](image1)

**FlexRip**

![FlexRip Corrections Window](image2)

**Imaging Engine 14.1.1**

![Imaging Engine 14.1.1](image3)
Corrections window
Corrections window
Corrections window: Correction Curve

Curve a

Curve b

Curve X

Combinations of a and b with X

- Combination a+b
- Combination X+b
- Combination a+bX
Corrections window

Drop to 0%

Hold to Minimum Dot

![Corrections window interface](image-url)
Corrections window

- **Raise to 100%**
- **Hold to Maximum Dot**
Corrections window
Corrections window: Minimum and Maximum

- Best way to create a Bump curve is still Curve Pilot
  - More options to create your bump
  - You can use a reference curve
  - You can check the result of the bump in Curve Pilot (compensation values)
  - You can use ‘Print simulation’ to check the output
  - Highlight contrast and tone better predictable (Correction is more guessing)

- We are working on a preview combine curves in Curve Pilot!
In what priority are curves put?

- PDF transfer curves
- Press curve
  - Applicable Exception
  - If not, available Press Curve from file
  - If not, Default Press curve
- Plate curve
- Corrections (minimum/maximum)
A separate corrections window is added
- A 3rd curve can be set
- Order in which to take the 3rd curve can be set
- Minimum and maximum can be set
- All is available with smart names and public parameters
Content Proofing
Content proofing?

NexusRip

FlexProof /GDI /RTL /PS
Content proofing!

Imaging Engine
Content proofing: Proof For Content Approval

All as to be expected...
It’s what’s not visible!
Content proofing: Proof For Content Approval

- We take defaults:
  - Use Proof Server for Drivers: **only** CMYK-driven devices
Content proofing: Proof For Content Approval

- We take defaults:
  - Document inks
    - Generate an error if the job contains unregistered inks
  - No limitation on PantoneLIVE inks (can be used)
  - No white coloring
    - White Coloring: No Coloring
      - C: 0%  M: 0%  Y: 0%  K: 0%
  - No verification
    - Print verification strip
Content proofing: Proof For Content Approval

We take defaults:

- PDF objects

- Color strategy

- Recalibration is not used (is mentioned in the Log file)
Content proofing: Proof For Content Approval

How do I get this content proof?

- There is a migration process for NexusRip users
- There is a migration process for FlexRip users (GDI/RTL/PS flavors)
- If you have IE, you can purchase it
  - Contact a sales representative
What to remember?

A “Proof for Content Approval” ticket is available
- Only CMYK-driven devices
- No CMS settings
- No recalibration applied
- No verification available

Back to overview
User Experience Improvements

Renaming of Tickets
Ink selection can be set with a public parameter
Support for 'Spot Ink Index'
Direct access for screen and curve exceptions
# UX Improvements: Ticket names

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FlexRip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/TG</td>
<td></td>
<td></td>
<td>Image to Unscreened Separations</td>
</tr>
<tr>
<td>/T4</td>
<td></td>
<td></td>
<td>Image to Screened Separations</td>
</tr>
<tr>
<td>FlexProof</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/GDI</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>/RTL</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>/E</td>
<td></td>
<td></td>
<td>Proof for Content Approval</td>
</tr>
<tr>
<td>Calculate Ink Key Settings (InkPlanner)</td>
<td></td>
<td></td>
<td>Calculate Ink Key Settings (CIP3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proof (Pack Proof)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proof for Contract Approval</td>
</tr>
</tbody>
</table>

- **Suites**: Suite 12.X, Suite 14.0, Suite 14.1
- **FlexRip** includes /TG and /T4
- **FlexProof** includes /P, /GDI, /RTL, /E
- **Calculate Ink Key Settings** (InkPlanner) includes /P and /E
UX Improvements: Ticket names

“Image to” = Create (bitmap) file output

“Proof for” = Create physical output

“Calculate” = Create parameter output

Image to Unscreened Separations
Image to Screened Separations
Image to Unscreened Proof
Proof for Content Approval
Proof for Contract Approval
Calculate Ink Key Settings (CIP3)
UX Improvements: Ink Selection via Public Parameters

- Make public

- Use in editors

- Not yet for Screen Parameters
UX Improvements: Spot Ink Index

Nexus: ‘spot rotating’

Imaging Engine: Spot ink index

Spot1: 75
Spot2: 45
Spot3: 0
Spot4: 75
Spot5: 45
...

![Image of Nexus and Imaging Engine interfaces showing spot ink values]
UX Improvements: Spot Ink Index
UX Improvements: Direct access for Screen and Curve Exceptions
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UX Improvements: Direct access for Screen and Curve Exceptions

- Clearing a custom value:
  - Right-click on the screen parameter in the ink list. (For angle or ruling: click-and-delete)
  - The exception rule linked with the custom value is also removed.

- It is not possible to set a custom value using a smart-name nor public parameter.
- You can mix custom and standard exceptions

- In the *Image to Unscreened Separations*, a custom value can be set for the Press Curve only
What to remember?

<table>
<thead>
<tr>
<th>Rule Name</th>
<th>Dot</th>
<th>Ruling</th>
<th>Angle</th>
<th>Press Curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>-</td>
<td>140°</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Process Inks with Square</td>
<td>S → Square</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Inks selection is available as public parameter

There is a ‘spot ink index’

You can access your screen parameters directly
Workflow improvements

Support for composite unscreened output (non-proof)
Unique plate ID for LEN output
Smart mark for plate curve
Workflow Improvements: Composite Unscrenned output

NexusRip

FlexProof
Workflow Improvements: Composite Unscreened output

- Only for unscreened output, both TIFF and PDF
- Useful for
  - Input to engraving machines (Gravure)
  - Proofing with 3rd party proofing software
Workflow Improvements: Unique Plate ID for LEN output

- Plate ID: to track files and handle re-output of plates
  - No risk to select the wrong version of the LEN file
  - The plate ID is ‘shortid’_YYYYMMDDHHMMSS_surfaceID_inkbook_inkname

- The XMP of every .LEN file (not .view file)

```xml
PlateID info in XMP of LEN file
<rdf:Seq>
  <rdf:li rdf:parseType="Resource">
    <egPlate:inkname>Magenta</egPlate:inkname>
    <egPlate:inkbook>process</egPlate:inkbook>
    <egPlate:plateid>000003376_20160301083713_000_process_Magenta</egPlate:plateid>
    <egPlate:ftplateid/>
    <egPlate:versions>
      <rdf:Bag/>
    </egPlate:versions>
  </rdf:li>
</rdf:Seq>
```
Workflow Improvements: Unique Plate ID for LEN output
Workflow Improvements: Smart mark for Plate Curve

- Smartmark from PackEdge did not contain Plate Curve, only dgc and scrdgc
- PackEdge 16 now contains ‘Plate Curve’ as SmartText
Workflow Improvements

- **APPE 4.1**
  - Imaging Engine supports up to 127 color channels. These are cyan, magenta, yellow, black and maximum 123 spot inks.
  - Certified product

- Support for the Color Strategies of Color Pilot 16 (still in pre-release)
What to remember?

Support up to 127 Inks

shortid’_YYYYMMDDHHMMSS_surfaceID_inkbook_inkname
Esko Screen model
(In Pre-release)
Esko Screening Model

- Transparent objects with Object Based Screening (OBS)
- ISO Spec isn’t conclusive, so evolved in 2 ways
Esko Screening Model

- Esko screening model will be default for new tickets
- Old tickets are still on the ‘Adobe’ model (so same as before)
System Recommendations
Imaging Engine 16 – System recommendations

- 4Gb per worker minimum, but we recommend 8 Gb per worker
  - Image resampling takes a lot of memory

- Maximum number of workers = number of cores - 1
  - AE (or AE assistant) running on the same machine: - 1 worker
  - Proof server running on the same machine: - 2 workers
  - Both running on the same machine: - 3 workers
    - Running all on same machine might be a very good idea as well...
    - Do use the IE HW check (KB96501886)!

Example: 4 core machine
- 3 workers max
- 2 workers max
- 1 worker max
- Not recommended
Imaging Engine 16 – System recommendations

- Installation location recommendations, use following order of preference:
  1. a dedicated disk
  2. a defragmented hard disk
  3. a hard disk with an abundance of free space

- AND... an SSD is preferred over an HDD
  - In some cases up to 2 times faster!