

PDF Preflight

A Key to Improving
Workflow Efficiency

Joseph Schorr, Extensis, Inc.

Preflight

- Inspecting a document's structure, fonts, colors, images for potential problems that could prevent proper output.
 - Check for completeness
 - Check for show-stopping problems
 - Check for optimal speed and quality settings

Why preflight matters

- Most jobs submitted for output are not “print-ready.”
- Many (most) PDFs for electronic distribution are less than optimal.
- “The price, quality and speed of a job, as it proceeds down the manufacturing path, are greatly affected by uncaught errors.”
 - Special Report, *Graphic Arts Technical Foundation*, 1999

A major CTP barrier

- Folio Magazine’s Digital Publishing Trends Survey 2000
 - “The cost of checking digital ads is the greatest obstacle standing in the way of CTP, say publishers.”
 - “Last year, publishers reported that, on average, a whopping 56.2 percent of ads contained print-output errors.”
 - “Ad specification problems still remain an enormous frustration in the production workflow.”

What's the *real* cost?

- Printing Impressions, February 2001
 - “Errors and rework in commercial printing may cost the printer, on average, an amount equal to 20 percent to 30 percent of Value Added Sales each year.”
 - “We can measure the cost of time and materials in rework--the tip of the iceberg that shows above the waterline. But we have no means to measure the seven-eighths of the iceberg beneath the water--the monetary impact on loss of customer loyalty and new work, disruption of tight schedules, degraded worker morale, and forborne marketing opportunities resulting from mistakes and rework.”

Myth #1: PDFs are “self-preflighted”

- While distilling a PDF “cleans up” some problems, it doesn't solve them all...
 - Fonts may not get embedded
 - Fonts may be embedded, but wrong kind
 - Fonts may be embedded but improperly styled
 - Images are embedded but not in correct color mode
 - Images are embedded but with incorrect resolution
 - Wrong PDF version compatibility
 - Documents created to wrong size

Myth #2: PDF inspection is “too late”

- The earlier problems are detected and solved, the better, but...
- If problems can be corrected, it's not too late

Myth #3: PDF/X-1 eliminates preflight

- Enforces font embedding and CMYK colors, etc.
- Still allows for a number of potentially problematic attributes
 - Page sizes
 - Small, multicolored fonts
 - Rule/frame sizes
 - Image resolutions

Multi-stage preflight workflow

- Check “native” application files prior to creating PDF
 - Document construction errors
- Check PDF file itself
 - “Distillation” errors
 - Errors that were overlooked or left unfixed in native files
 - Design-related errors that may not have been flagged earlier

What can preflight software check for?

- Document structure:
 - PDF or Acrobat version
 - Security settings
 - Creation by PDFWriter
 - Page sizes/blank pages
 - Optimization

What can preflight software check for?

- Fonts:
 - Embedding
 - Subsetting
 - TrueType & Multiple Master
 - Menu styling
 - Double-byte fonts
 - Presence of specific fonts

What can preflight software check for?

- Images
 - Effective resolution of color, grayscale and bitmap images
 - Rotation and skewing
 - Type of compression used (JPEG, ZIP)
 - Presence of custom halftones, transfer functions, UCR/BG
 - Presence of absence of ICC profiles

What can preflight software check for?

- Colors
 - RGB vs. CMYK color spaces
 - Indexed color space
 - Presence of spot colors

Not all “preflights” are created equal

- Inspection is only as good as “profiles” or “rules” that are applied.
- Profiles should be developed and tuned by prepress experts and distributed to customers
 - Some allow profiles to be locked
 - Internet solutions put profiles in hands of service provider
- Multiple output devices may mean multiple profiles.
- Verify that preflighting tools are reporting accurately.

Types of PDF preflight software

- Acrobat plug-ins
- Desktop software
- Server software
- Integrated as components of PDF workflow solutions
- Internet, web-based software

The Universal Preflight Dilemma

- No matter how good the tools are, preflight always seems to happen too late.
- Content creators should preflight, but don't want to.
- Time-consuming, tedious, technical.

What's needed:

- Get files preflighted *before* submission.
- Keep customers happy about the process
- Allow professionals to configure preflight software
- Customer training to correct errors and avoid future mistakes.
 - 75% to 90% provide free training to customers

Solution: automated, remote preflight

- Seamless part of online file submission process.
- Inspection controlled by provider, not customer.
- Errors reported before files are submitted.
- Automated collection of reports and support files.
- Can include integrated customer help online.
- Can produce an inventory report of all fonts, images, and colors used in a document.

Summary

- Successful PDF workflow requires solid preflighting process.
- Ideally: preflighting occurs both before PDF creation and after.
- Will continue to be true, even with PDF/X.
- Wide range of automated preflighting tools for PDF available.
- New generation of tools make it possible for preflight to be pushed upstream automatically.

Questions, comments...?

jschorr@extensis.com