FUSION SYSTEMS international

Prepress Workflow Automation

For the 21st Century

- **Web-Based Workflow Management**
- **Automated Pre-flighting**
- **ROOM Workflow Integrity**
- **Dynamic Job Routing™**
- **Automated Post-RIP Page-Pairing and Imposition**
- **Web-Based Soft-Proofing**
- **Advanced Full-Resolution Plate Soft-Proofing**
- **Print File Format (CIP3) Ink Control Interface**

Fusion Workflow ESP provides total control over prepress production. This open, modular solution has all the tools necessary to simplify and automate the broadest range of prepress tasks.

Web-Based Workflow Management
Fusion's Print Production Manager provides an intuitive interface for job monitoring, status reporting, output management, and raster soft-proofing.

Automated Pre-flighting and File Correction
Workflows automatically check files for correct color separation conversions (RGB to CMYK), process black text to 100% black, spot colors to CMYK, and correctly set job parameters such as dot shape, calibration curves and screen ruling. Missing fonts can be emulated from a 1600 font database.

PDF files are automatically preflighted against built-in Enfocus PitStop rules as they enter the system. No longer is it necessary to individually preflight each file.

ROOM Workflow Digital Integrity
Individual pages are automatically converted to DigiPage "digital film" files. These digital film files allow for soft and hard-copy "press-accurate" post-RIP proofing, as well as post-RIP page-pairing and imposition prior to final output to film or CTP imagers.

Dynamic Job Routing™
Crucial to reliable automation, this innovative feature ensures that ripped pages are named and numbered correctly, and intelligently routed exactly as required for specific workflow processes – every time.

Automated Post-RIP Page Pairing and Imposition
Proofed and approved digital film pages are automatically paired or imposed into signatures. Completed flats are automatically queued for output.

Web-Based Soft-Proofing
An integrated Publication Proofing System (PPS) automatically posts fully ripped page proofs by publication name and section for easy web access. Raster-PDF proofs of ads or pages can be quickly opened within common Browsers for internal and/or external viewing.

Advanced Full-Resolution Plate Soft-Proofing
Quickly and easily soft-proof high resolution screened plate files from anywhere on your network for total quality control prior to plating.

Print File Format (CIP3) Ink Control Interface
Automatically export PPF information to the press for layout and ink key settings for faster make-ready times and to dramatically reduce material waste.

Workflow ESP - Simply Productive

RIP + Route → **Impose** → **Output**

Soft Proofing
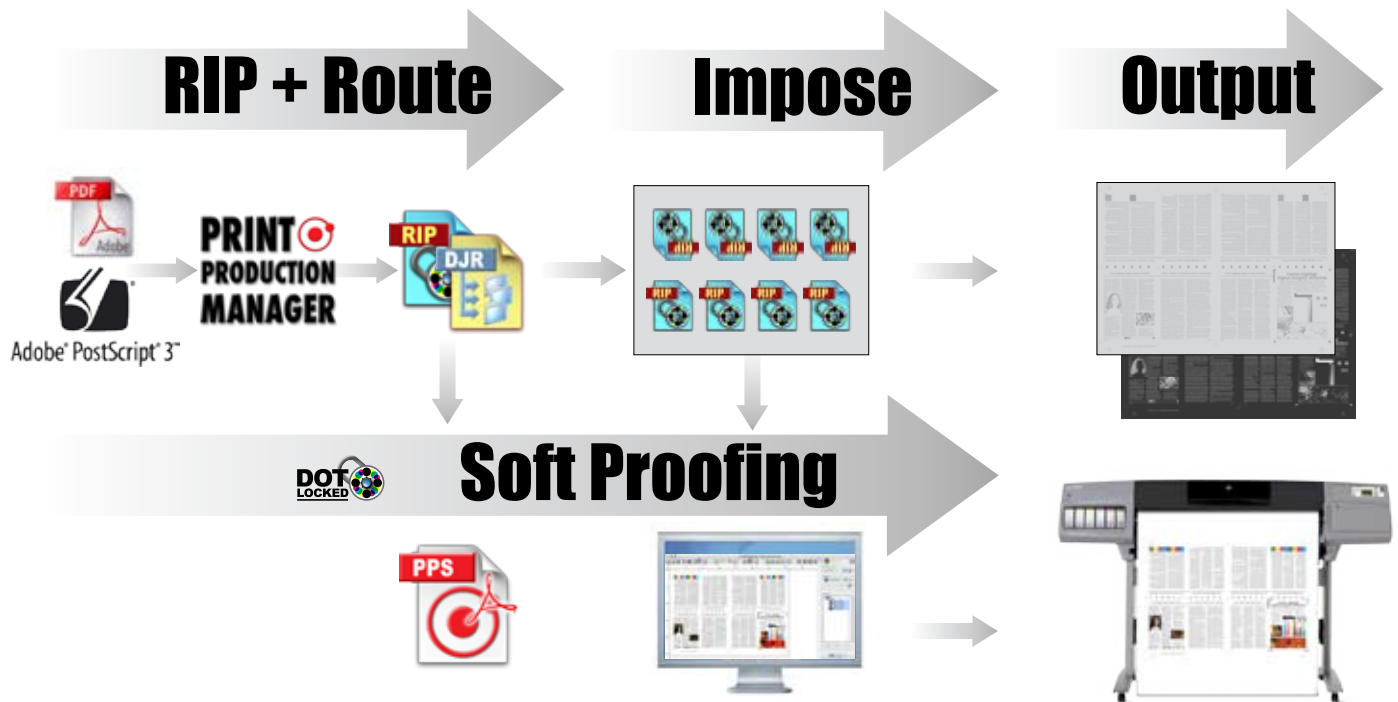
Fusion Workflow ESP is Simply Productive

In the business of printing, quality and control over time and materials is critical. Workflow automation is the key to success for every size job, be it multi-section daily newspapers, weeklies or any type of commercial work. With Fusion's Workflow ESP prepress automation and digital integrity quality control, you'll have all the tools necessary to keep production flowing and error free.

Print Production Manager Browser Based Workflow Management Console

PPM provides an easy to use, network wide interface for detailed job status reporting and a broad range of controls over output related tasks.

Easily access detailed information on job status from any local or remote workstation. See which flats are awaiting approval and which have been forwarded for final film or plate output.

Identify potential problems early to prevent time consuming bottlenecks, search for specific pages by name to review detailed file processing information and more.

Multiple users can quickly soft-proof ripped separations of any page or imposition flat without interrupting the rest of the workflow.

Automatic PDF File Pre-flighting

Now you can simply submit PDF files directly to the system to be automatically pre-flighted against an extensive list of built-in Enfocus PitStop rules. Files are automatically corrected for RGB to CMYK conversion and rich black to 100% black for text as needed.

Select PDF Profiles

PDF/X-1a PLUS Commercial CMYK v1
PDF/X-1a PLUS Magazines v2
PDF/X-1a PLUS Newspapers v2
PDF/X-1a:2001 v2
PDF/X-1a:2001 v2
PDF/X-1a:2001 v4.5
PDF/X-1a:2001 v4.5 Verify
PDF/X-1a:2001 v4.51
PDF/X-1a:2001 v4.51 Verify
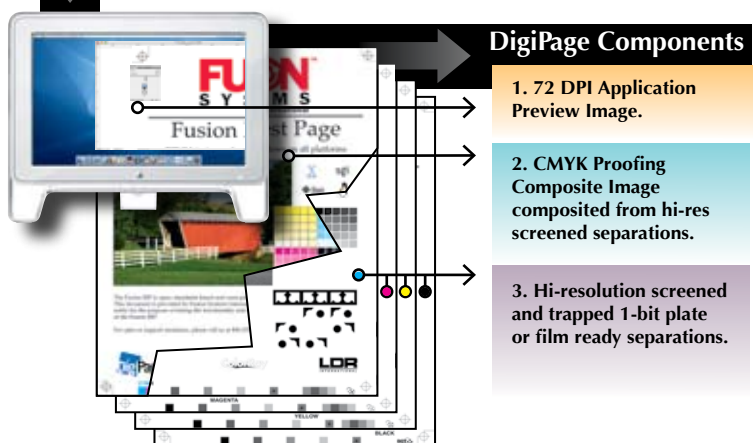PDF/X-3:2002 v2 Verification
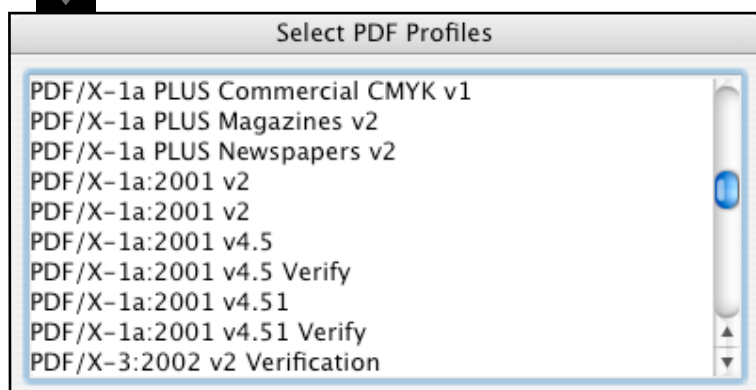
Combined with the DigiPage ROOM workflow, pages can be printed to the RIP at any time and in any order for early processing and automated post-RIP proofing, page pairing or imposition.

ROOM Workflow Digital Integrity

Files are automatically converted to Fusion DigiPage "digital film" files for secure post-RIP proofing, page pairing or imposition prior to output on final film or CTP imagers.

Each DigiPage file contains all the required production elements in a single workflow

DigiPage Components

1. 72 DPI Application Preview Image.

2. CMYK Proofing Composite Image composited from hi-res screened separations.

3. Hi-resolution screened and trapped 1-bit plate or film ready separations.

envelope. Built-in intelligence provides a broad array of automation and digital integrity proofing capabilities. DigiPage single page processing ensures early error detection and correction for perfect imaging.

Dynamic Job Routing™

DigiPages

Name
Region_1
  SJD
    Section_A
      SJD-102706_Pg001.eps
      SJD-102706_Pg002.eps
      SJD-102706_Pg003.eps
      SJD-102706_Pg004.eps
    Section_B
      SJD-102706_Pg001.eps
      SJD-102706_Pg002.eps
      SJD-102706_Pg003.eps
      SJD-102706_Pg004.eps
      SJD-102706_Pg005.eps
      SJD-102706_Pg006.eps
      SJD-102706_Pg007.eps
      SJD-102706_Pg008.eps
    Section_C
      SJD-102706_Pg001.eps
      SJD-102706_Pg002.eps
      SJD-102706_Pg003.eps
      SJD-102706_Pg004.eps
      SJD-102706_Pg005.eps
      SJD-102706_Pg015.eps
      SJD-102706_Pg016.eps
      SJD-102706_Pg017.eps
      SJD-102706_Pg018.eps

Crucial to reliable automation, this innovative feature ensures that ripped pages are named and numbered correctly, and intelligently routed exactly where they are supposed to go – every time.

Unparalleled workflow automation is achieved using Workflow ESP's Dynamic Job Routing technology. Pages for jobs and publications can be submitted for processing, in any order at any time. Post-RIP tasks, such as hard proofing, email/web soft proofing are automated by built-in script processing. This allows for unlimited flexibility by Fusion Systems or customers alike.
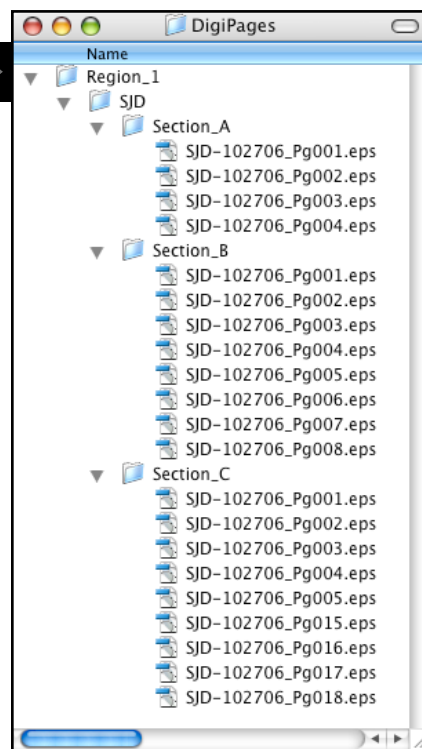
Automated Post-RIP Page Pairing and Imposition

Pages are automatically inserted into imposition signatures as soon as they arrive in their assigned watch folders. Completed flats are automatically queued and routed for final film or CTP output.

Automated and unattended imposition means increased productivity.

Employees can be freed to work on more complex and higher value tasks, such as interactive assembly to address unique imposition requirements easily and quickly.

Full-Resolution Plate Soft-Proofing

Quickly and easily soft-proof 1-bit TIFF separations of all paired pages for a final digital plate check. Client stations can easily view ripped data, zooming in and out dynamically to check fit, overprints, ink density, and more from anywhere on the network.
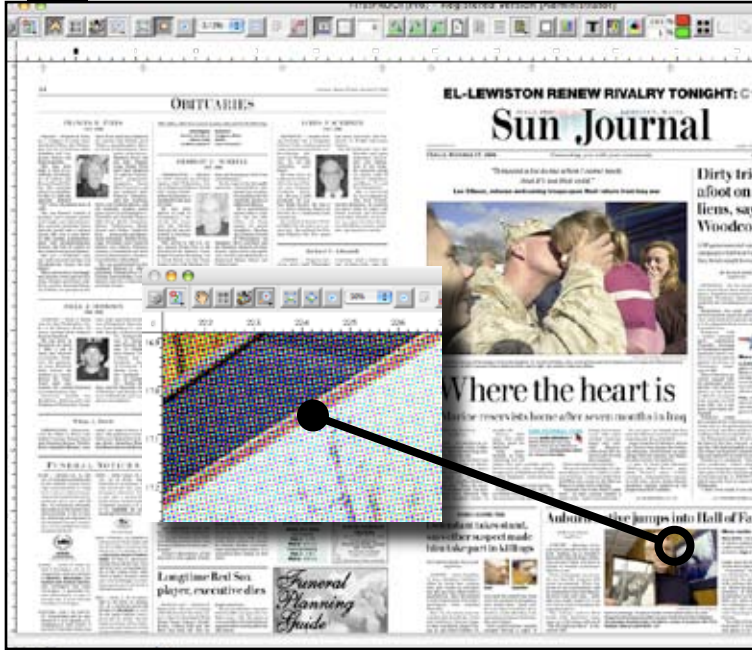

Web-based Post-RIP Raster-PDF Proofing

The Fusion Publication Proofing System is a secure Web-based post-RIP proofing system. Both internal production and external clients can easily see how jobs or pages will look prior to publication.
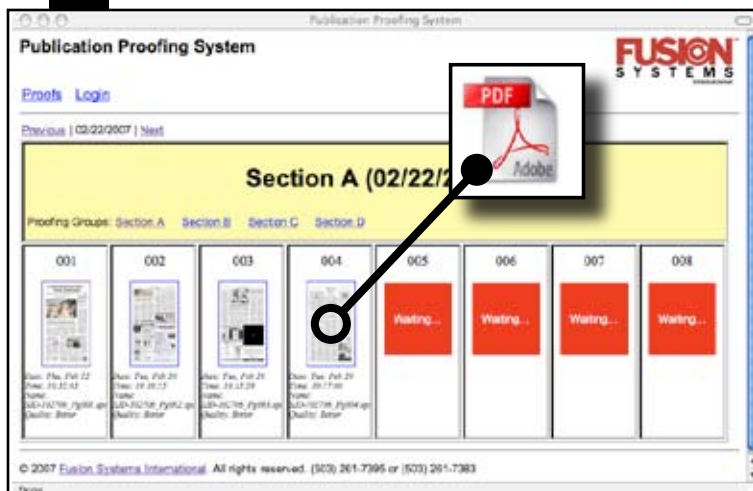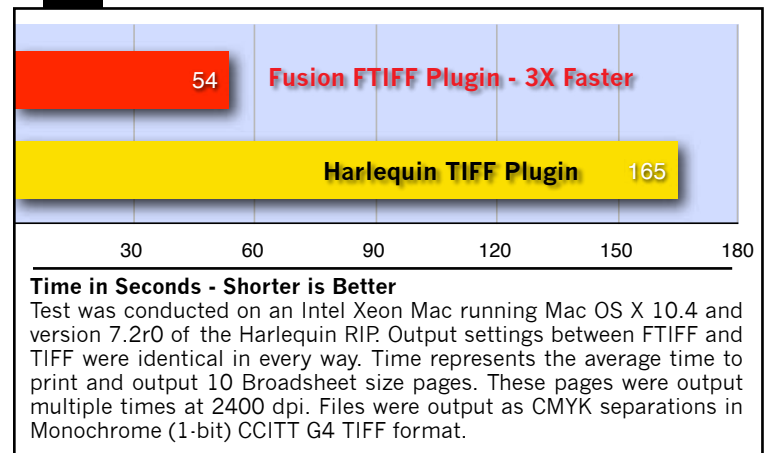

The Publication Proofing System dynamically posts JPEG page images that are linked to halftone-dot PDFs to deliver 'Dot-Locked' accurate digital proofs. Pages are automatically displayed by publication, and section, as pages are processed.

The Publication Proofing System can also be configured as a collaborative internet-based display-ad proof solution. Acrobat commenting and approval workflow can be used with the Publication Proofing System. Advertisers and Ad Agencies can easily view halftone dot PDF proofs over the internet. PDF proofs can be downloaded or emailed for remote printing as well.

Cross-Platform and Multi-Processor Aware
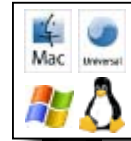
Fusion Workflow ESP is a Universal Binary for Mac OS X. Fusion Workflow ESP is also available for Linux and Windows. The workflow is multi-processor aware, to harness the horsepower of the latest hardware available.

Fusion FTIFF Plugin - 3X Faster — 54
Harlequin TIFF Plugin — 165

| 30 | 60 | 90 | 120 | 150 | 180 |

Time in Seconds - Shorter is Better
Test was conducted on an Intel Xeon Mac running Mac OS X 10.4 and version 7.2r0 of the Harlequin RIP. Output settings between FTIFF and TIFF were identical in every way. Time represents the average time to print and output 10 Broadsheet size pages. These pages were output multiple times at 2400 dpi. Files were output as CMYK separations in Monochrome (1-bit) CCITT G4 TIFF format.

Ink Keying Information

The Fusion PPF (CIP3) feature provides press ink keying data in accordance with the standards set by the International Cooperation for Integration of Processes in Prepress, Press and Post-press CIP4 . CIP4 is an international standards body whose purpose is to encourage computer-based integration of all processes involved in graphic arts workflows by specifying and publishing standards.

Load Balancing

Regulating data flow to multiple imaging devices is easily accomplished with the addition of the FusionQ. This network spool controller can directly interface to any number of devices for unattended automated operation. FusionQ has many features and ensures that all queues have similar loads, increasing efficiency and reducing idle time.