Fiery FS200 Pro and Fiery FS200 print servers

Product guide

This document represents the feature set typically included in Fiery® print servers. Actual feature set included may vary by specific Fiery models, as some features may not be supported due to specific project implementation characteristics or regional requirements. For information on a specific Fiery model's feature set, refer to that model's datasheet or ask your Fiery vendor. Nothing herein should be construed as a warranty in addition to the express warranty statements provided with EFI products and services.

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Introduction

The changing market for digital front ends

In a 2011 U.S. survey, *Digital Front Ends*: *Understanding Market Dynamics and Customer Requirements*, InfoTrends identified the key features that respondents look for in a digital front end (DFE) for print engines:

- Raster image processing (RIP)
  - Converting content specified in a page description language into raster images that a printer can read and process
- Job management / file handling
  - Receive, manage and prepare jobs for print production
  - Select media and finishing options
  - Release files into print production
- Prepress and makeready capabilities
  - Colour management
  - Imposition, preflighting and trapping
- Automation support (job ticketing)

The report further found that the reputation of the vendor is an important consideration for end customers, as are the following:

- Ease of use
- Consistent and reliable output
- High performance based on RIP speed
- Familiarity of interface and operational consistency

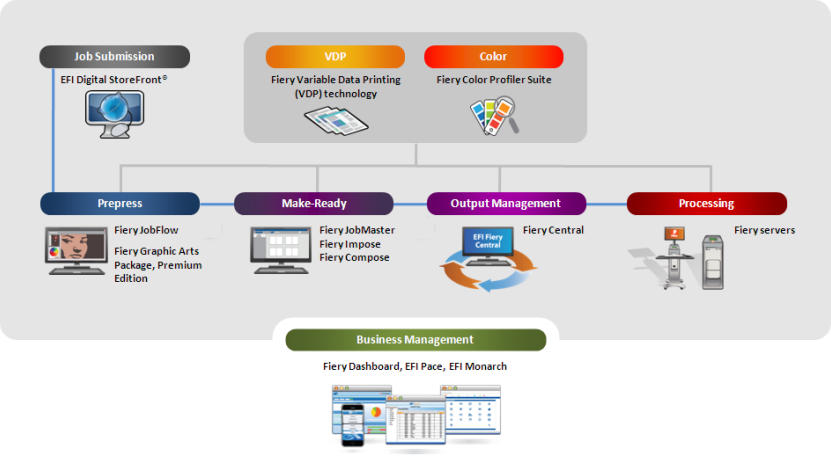
Finally, the survey showed that most print service providers use digital front ends to perform a wide variety of prepress, makeready and job management tasks, as well as to release jobs into print. InfoTrends also projects from the survey information that digital front ends will quickly become a key part of end-to-end, automated workflows and will integrate into cloud workflows. The survey report also notes, "As DFEs are becoming more tightly integrated, there is a need for wider job ticketing support, better integration with workflow or accounting solutions, and higher compatibility with traditional/offset workflows."

Fiery servers meet current and future needs

Fiery® digital front ends, or server, cover the entire digital printing spectrum. From light volume through high-production market segments, there's a Fiery DFE designed to meet every need. Fiery servers scale from proofing to production and are equipped with a consistent user interface that minimises learning curves, regardless of the complexity of the solution.

Fiery Workflow Suite

Fiery servers are a fundamental component of the Fiery Workflow Suite, a comprehensive set of integrated products that helps print facilities produce more from existing print engines with streamlined and automated workflows, quickly adapt to changing customer demands; and grow with new higher-profit, value-added services.



Fiery Workflow Suite is a comprehensive set of integrated products to accelerate business growth and profitability

For more information on Fiery Workflow Suite and to watch the overivew video visit the efi.com/fieryworkflowsuite.

Market-leading Fiery servers and workflow software excel in the following four categories:

Productivity

Fiery systems maximise productivity and automate workflows

To succeed in today's competitive environment, print providers need to offer customers more services, while increasing operational efficiency for higher profitability. To achieve both requires the processing power and capability of the Fiery digital front end.

Colour

Fiery systems deliver amazing, accurate, and consistent colour across applications and platforms

Fiery servers provide state-of-the-art imaging technology, combined with expert colour management tools, to deliver high-quality images with the accurate, consistent colour customers want.

Usability

Fiery systems deliver ease of use

Fiery servers have been recognised by the industry with multiple awards for their intuitive user interface, Fiery Command WorkStation®. With Command WorkStation, local and remote users, from Mac and PC client workstations, can manage Fiery servers, do colour management, submit jobs, prepare and preview jobs before printing, and more. The visual, intuitive interface lets operators get jobs done faster and with fewer keystrokes, saving time and money.

To increase operator productivity even further, Fiery Go allows control of a Fiery Driven™ printer on iOS and Android smart phone devices or tablets. Fiery Go allows operators to monitor the status of multiple Fiery Driven printers to manage print jobs from anywhere.

Integration

Fiery systems deliver seamless integration

Fiery systems continue to deepen and improve the integration from the production side of the house, adding features from an enterprise integration perspective. This offers easier maintenance and enhanced production tracking.

FS200 Pro's inclusion of the latest JDF standards enables the vast population of print provider sites that use EFI™ MIS and Web-to-Print products to seamlessly integrate EFI and third-party products with Fiery digital front ends, making Fiery servers the preferred choice for any type of print production facility. Fiery FS200 Pro,

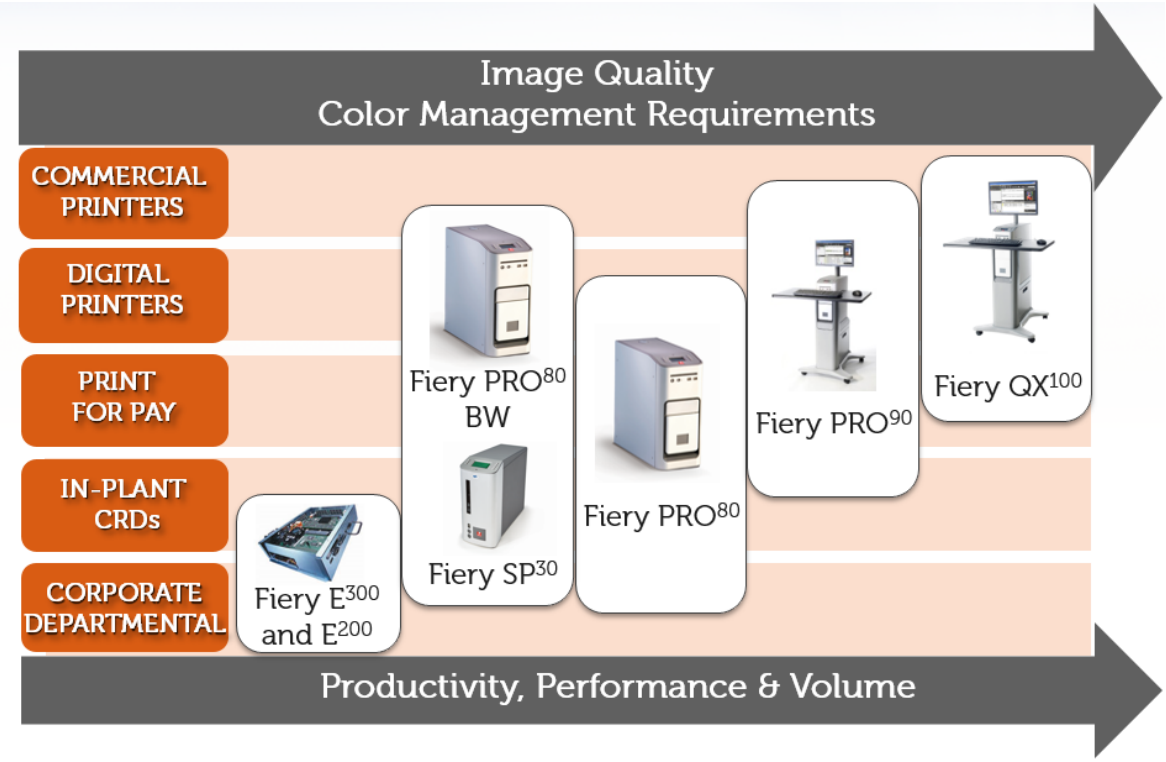
along with Fiery FS150 Pro, Fiery FS100 Pro, Fiery System 9 Release 2 and 10, are the first products to achieve the JDF1.3 Integrated Digital Printing Interoperability Conformance Specifications (ICS) certification by CIP4.

For more information, please visit the CIP4 website: fiery.efi.com/cip4-certified-experts

Range of Fiery DFEs

In addition, a wide range of Fiery server families gives print service providers all the choices they need to meet their particular business demands with features for production processes, from web submission to management, prep and production:

- Fiery QX^{100} — an extremely high-performance system geared toward high-level production and mission-critical users with high-speed engines
- Fiery PRO^{90} — a high-performance RIP for users who require quality, makeready capabilities, and performance
- Fiery PRO^{80} — a high-performance RIP for users requiring quality, performance, and scalability at an affordable price
- Fiery E^{200} and Fiery E^{300}— the ultimate document-publishing system that takes the pain out of producing complex colour documents, providing efficiency and ease for small/medium businesses and enterprise office users alike
- Fiery PRO^{80} BW and Fiery SP^{30} — outstanding performance, seamless workflow management, and superior image quality in black-and-white production printing environments with tight deadlines and high customer expectations



Fiery server families suit any digital print need and environment. Check the Fiery datasheet or contact your Fiery dealer for the standard and optional features for a specific Fiery server model.

Introduction to Fiery FS200/FS200 Pro

Fiery servers are constantly evolving to offer the best choice for every print engine and Fiery server combination in the market in terms of productivity, ease of use, colour quality and integration. Fiery system software platforms have version names to show its evolution over time. The following is the list of Fiery system software versions ordered from older to newer since year 2006:

For external Fiery servers	For embedded Fiery servers
Fiery System 8	Fiery System 8e
Fiery System 9	Fiery System 9e
Fiery System 9 R2	Fiery System 9e R2
Fiery System 10	Fiery System 10e
Fiery FS100 Pro	Fiery FS100
Fiery FS150 Pro	Fiery FS150
Fiery FS200 Pro	Fiery FS200

The Fiery FS200/FS200 Pro system is the most innovative, scalable, and integrated server solution for print engines, ensuring that customers obtain the highest return on their investment.

Fiery FS200 is available for embedded Fiery servers, and Fiery FS200 Pro for external Fiery servers.

Target markets

Production environments include the following: commercial printers, digital printers, quick printers, print-for-pay shops, in-plant commercial reprographics departments (CRDs), and marketing service providers.

Target applications

- **Marketing materials**: brochures, catalogues, stationery, direct mail and cards, tickets and coupons
- **Photo publishing**: photo books, postcards, and calendars
- **Corporate**: newsletters, presentations, proposals, and forms
- **Book publishing**: books and manuals
- **Packaging**: boxes, envelopes, and proofs
- **Variable data printing (VDP)**: direct mail, catalogues, and transactional promotional material

FS200 Pro and FS200 new features table

This product guide defines Fiery servers that include new features in Fiery FS200 Pro and FS200 system software with Fiery Extended Applications package 4.3 (featuring Fiery Command WorkStation v5.7) These new features provide substantial gains in productivity, deliver accurate and amazing colour, include impressive improvements in ease of use, and enhanced integration — helping print providers reduce costs and improve service.

Productivity	Colour/Image Quality	Usability	Integration
HyperRIP* enhancements: • HyperRIP mode for multiple jobs • Rush RIP • PDF/VT support in single job mode Auto-detect Composite Overprint Increased maximum number of jobs in printed queue	Enhanced gradient smoothing PANTONE® PLUS library updates Fiery Graphic Arts Package, Premium Edition and Fiery Productivity Package enhancements • ImageViewer enhancements • Control Bar Builder • APPE Postflight report	Fiery Command WorkStation 5.7 • Filtered View Tabs • Define date range • Job number Fiery Impose 4.7 • User Defined Finish Size workflow automation • Gangup finish-edge selection Fiery JobMaster™ 4.7 • Convert to Grayscale • Auto Tabs • Advance Page Numbering Fiery Compose 4.7 • Convert to Grayscale Shrink to Fit enhancement Enhanced support for offline finishing Print range support for Mixed Media Expanded language support	Fiery job description format (JDF) enhancements Fiery API Windows® 8.1 OS for external Fiery servers Debian 7 OS for embedded Fiery servers

* Only available on Fiery QX^{100} external servers

Note: Features vary by print engine model; please refer to the individual product datasheet to find out exactly which features are available.

Productivity

The following table list the productivity features available on Fiery servers and represent the standard configuration for each respective Fiery server platform and system version combination. *For information on a specific Fiery model's feature set, refer to the Fiery model's datasheet or ask your Fiery server vendor for the support of a specific feature.*

✓ Standard ⊙ Option - Not Available SFM = See product specific feature matrix

Feature name	QX[100]	PRO[90]	PRO[80]	E[200]/E[300]	PRO[80]BW	SP[30]
Performance technology						
HyperRIP (single and multiple job mode)	✓	-	-	-	-	-
Rush RIP	✓	-	-	-	-	-
Spool-Rip-Print simultaneously	✓	✓	✓	✓	✓	✓
Fiery SmartRIP	✓	✓	✓	✓	✓	✓
Optimised PDF and PostScript®	✓	✓	✓	✓	✓	✓
Auto-Detect Composite Overprint	✓	✓	✓	✓	-	-
Integration with Adobe® PDF workflows						
Adobe PDF Print Engine 3.0 (APPE)	✓	✓	✓	-	✓	✓
CPSI 3020	✓	✓	✓	✓	✓	✓
Advanced job management						
Force Print	SFM	SFM	SFM	SFM	SFM	SFM
Suspend on Mismatch	✓	✓	✓	✓	✓	✓
Rush print	✓	✓	✓	⊙[1]	✓	✓
Print/Process Next	✓	✓	✓	⊙[1]	✓	✓
Quick Doc Merge	✓	✓	✓	-	✓	✓
Sample Print	SFM	SFM	SFM	SFM	SFM	SFM
Schedule Print	✓	✓	✓	⊙[1]	✓	✓
Proof Print	✓	✓	✓	✓	✓	✓
Fiery Productivity Package	-	-	-	⊙[1]	-	-
Job submission automation						
Fiery Hot Folders	✓	✓	✓	⊙[1]	✓	⊙
Fiery Virtual Printers	✓	✓	✓	⊙[1]	✓	⊙
Job Presets	✓	✓	✓	✓	✓	✓
Server Job Presets	✓	✓	✓	✓	✓	✓
Fiery JobFlow Base	✓	✓	✓	SFM	✓	SFM
Fiery JobFlow	⊙	⊙	⊙	SFM	⊙	SFM
Variable data printing						
VDP Raster Preview	✓	✓	✓	-	✓	✓
VDP Resource Manager	✓	✓	✓	✓	✓	✓
PPML v 3.0	✓	✓	✓	-	✓	✓
Fiery Freeform	✓	✓	✓	✓	✓	✓
PDF/VT–2 support	✓	✓	✓	-	✓	✓
Define Record Length	✓	✓	✓	✓	✓	✓
Record and Set Level Finishing	✓	✓	✓	✓	✓	✓

Feature name	QX[100]	PRO[90]	PRO[80]	E[200]/E[300]	PRO[80]BW	SP[30]
VDP Record Range printing	✓	✓	✓	✓	✓	✓
VDP Multi-Up Booklet	✓	✓	⊙	⊙	⊙	⊙
Transactional printing						
Sequential Print	✓	✓	✓	-	✓	✓
Set Page Device Visual Mapping	✓	✓	✓	-	✓	✓

✓ Standard ⊙ Option - Not Available SFM = See product specific feature matrix

[1] May be offered in the Fiery Productivity Package. See product specific feature matrix.

Performance technology

Fiery servers are the fastest RIPs in the industry. The Fiery DFEs are powered by proprietary EFI application specific integrated circuits (ASICs) with RIPChip™ technology enabling them to take full advantage of custom-designed microprocessors, proprietary file compression algorithms, and efficient memory management to produce industry-leading performance.

As a result of unparalleled processing speeds, shops can get more data to print engines faster so that the engine stays away from moving into cycle down and warm up modes, losing valuable press time. A fast DFE helps meet tight turnaround times and reduce bottlenecks. The following features define this Fiery performance technology. This allows users to grow their businesses with more-profitable, timely, top-quality work, including higher-value, fully personalised jobs.

Fiery HyperRIP

Fiery HyperRIP is a proprietary EFI rendering technology, available on Fiery QX^{100} hardware platforms, that makes performance-leading Fiery servers even faster. HyperRIP dramatically improves performance by simultaneously processing print jobs up to 55% faster by optimising the use of the Fiery server's interpreter and rendering engines across multiple processor cores.

As files become more graphically complex and more jobs require personalization, a higher RIP capacity helps optimise the print engine capacity and get the most from the investment. Instead of adding hardware cost with more CPUs, Fiery HyperRIP software technology provides a more economical solution to print shop owners.

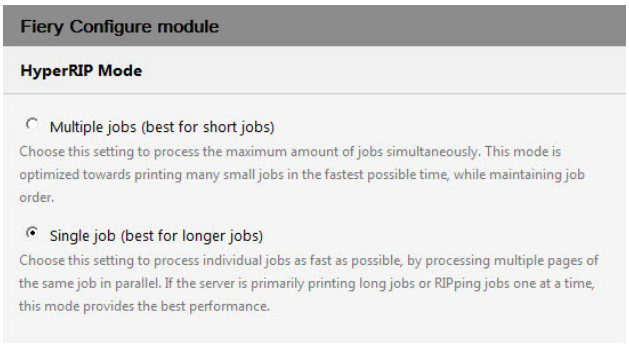
Watch the Fiery HyperRIP video at fiery.efi.com/hyperripvideo for a short overview of the feature.

Fiery HyperRIP offers 2 modes of parallel job processing:

1- Single job

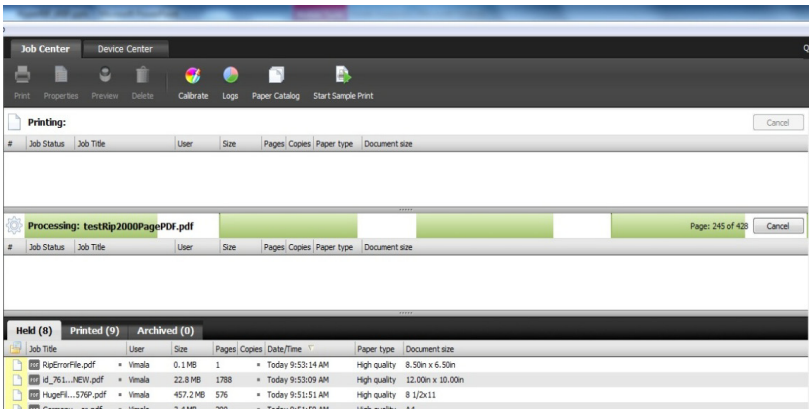
The single-job mode simultaneously processes a job across up to four RIPs and is useful for longer jobs of 20+ pages.

Single-job mode is ideal when printing long, multiple-page and VDP jobs, because HyperRIP processes those jobs faster to make the Fiery server available to process upcoming jobs.



HyperRIP modes are server settings found in the Fiery Configure module under the RIP selection. The single-job mode is selected by default.

The processing bar in Command WorkStation Job Center is split, showing four progress bars side by side — updating simultaneously and independently to track the HyperRIP progress.



A job split by HyperRIP to RIP on four processors.

File formats supported by HyperRIP in single-job mode

This table lists the file formats supported by single-job mode and limitations with some workflows and print settings. Once the Fiery server determines a file is not elegible for HyperRIP, it will route the job through the single RIP path.

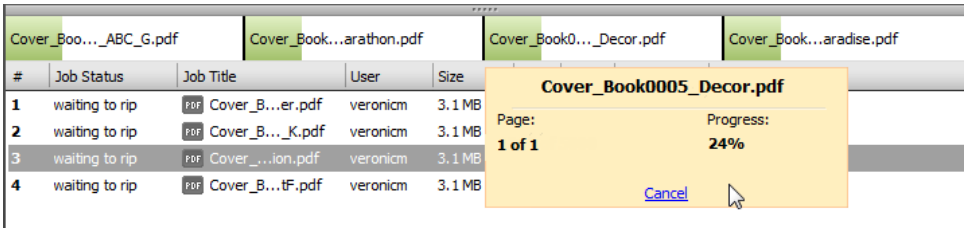
PDF type	Plain	Duplex	XObjects / Form Caching	Mixed Media	Control Bar	Post-flight	Print range	Impo-sition	Define Record Length	Direct Queue
CPSI workflow										
PDF	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes
PS	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
QuickDoc Merge	Yes	Yes	Yes	No	Yes	No	No	No	No	No
PDF/VT	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
PPML	Yes	Yes	Yes	No	Yes	No	No	No	No	No
VPS	No	No	No	No	No	No	No	No	No	No
VIPP	No	No	No	No	No	No	No	No	No	No
FreeForm	No	No	No	No	No	No	No	No	No	No
TIF	No	No	No	No	No	No	No	No	No	No
EPS	No	No	No	No	No	No	No	No	No	No
APPE workflow										
PDF	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes
PDF/VT	Yes	Yes	Yes	Yes	No	No	No	No	No	No
PCL Workflow										
PCL	No	No	No	No	No	No	No	No	No	No

HyperRIP in single-job mode now supports PDF/VT file format in both CPSI and APPE processing paths, enabling variable data printing files to take advantage of the blazing processing speeds offered by Fiery QX[100] servers.

HyperRIP can process PDF/VT jobs 55% faster than Fiery servers without HyperRIP.

2- Multiple jobs

The multiple-jobs mode simultaneously processes several jobs across up to four RIPs, and is ideal when dealing with numerous short jobs such as book covers, brochures, or flyers — or when a long job is being processed while other shorter jobs need to start printing.



Fiery Command WorkStation shows multiple jobs processing in parallel, with individual process indicators, and the ability to individually cancel RIPping jobs if necessary.

Jobs processed in this mode will print in the order they finished RIPping, meaning that smaller or shorter jobs will print before longer or bigger ones. If maintaining the print job order is important, this mode is compatible with the Sequential Print feature that requires jobs to output in the same order they were submitted to the print queue. Sequential Print is a server setting that is enabled in the Fiery Configure module.

Some file formats are not supported under the multiple jobs mode and will be processed using a single RIP path. Those are: PPML, VDP, VIPP, PCL, and Freeform.

After a HyperRIP job has finished printing, the job log and printed queue have the following optional attribute columns:

- Number of RIPs present: indicates the total number of RIPs available to the job during processing.

- Number of RIPs used: indicates the actual number of RIPs used to process the job. Not all jobs can use HyperRIP, and some will use a single RIP instead.

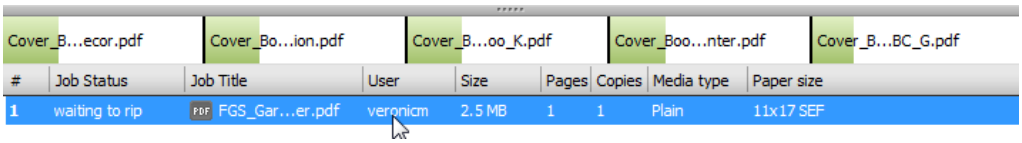
Benefits:

- Dramatic performance improvements by processing multiple jobs or multiple segments of the job simultaneously
- Faster throughput means less waiting for operators

Rush RIP

Rush RIP is a unique Fiery feature that works in combination with the Fiery HyperRIP multiple-jobs mode. It is only available for Fiery QX^{100} servers based on Fiery FS200 Pro system software.

Rush RIP offers the ability to immediately RIP a single job without interrupting other currently RIPping jobs. This happens when the first four Fiery RIPs are busy processing jobs. The Fiery server makes a fifth RIP available immediately upon request to process the rush job at the same time other jobs are processing. If yet another job is sent to RIP as a Rush RIP job, and all five RIPs are busy, the job will be processed as soon as any of the five RIPs is available.



The Fiery server makes a fifth RIP available immediately upon request to process the rush job at the same time other jobs are processing.

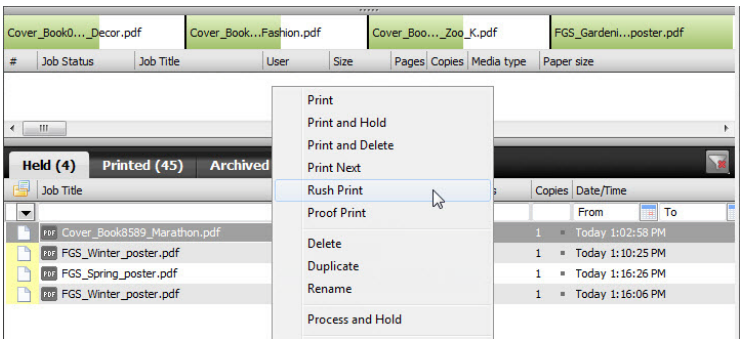
Operators activate Rush RIP when selecting the following actions from the right-click menu on Held Jobs:

- Rush Print

  When selecting Rush Print, the rushed job is sent to the top of the "waiting to RIP" queue. Once a Rush Print job finishes RIPping, it will interrupt a currently printing job and start printing.

- Rush Process and Hold

  When selecting "Rush Process and Hold," the job goes back to the Held queue as a processed job.



Rush RIP activates when selecting the Rush Print action from the right-click menu on held jobs

Benefits:

Rush RIP is a great print management tool for high-end production environments and gives operators even more control at the print queue by:

- Starting to process an urgent job without cancelling jobs currently being processed, or having to wait for those jobs to finish processing
- Being able to preview jobs quickly while other jobs are processing

Spool-RIP-Print Simultaneously

Over the years, Fiery servers have incorporated various innovative technology features to improve throughput, such as RIP-While-Print®, RIP-1-While-Receive, ECT Compression, RIPChip® technology, and Continuous Print. Designed to enhance the Fiery system's overall performance, these features are now unified as the Spool-RIP-Print Simultaneously feature. Users can now spool, RIP, and print a single multiple-page job, or multiple jobs simultaneously, using these Fiery technologies:

- RIPChip technology is the proprietary EFI application specific integrated circuits (ASICs) that enable Fiery servers to take full advantage of custom-designed microprocessors, proprietary file compression algorithms, and efficient memory management to produce industry-leading performance.
- ECT Compression: Provides flexible compression ratios and visually lossless image quality. Compression software decreases the amount of memory necessary to store documents during processing and enables faster printing of documents
- RIP-While-Print: Allows one page to be printed while subsequent pages are simultaneously processed
- Continuous Print: Enables processed pages to be stored in memory before printing, eliminating the need for the copier or printer to cycle down between unique pages
- RIP-1-While-Print-2: Allows the Fiery server to work simultaneously on two jobs for the RIPping and printing processes. Starts to RIP a new file while the previous file is printing
- RIP-While-Receive: Allows a job to be RIPped while it is still being spooled into the Fiery server for a much faster first and last page out. There is no need to wait for the entire job to spool before beginning to RIP the file

Benefits:

- Increases the Fiery server throughput by delivering faster output to the print device
- Increases productivity by having the Fiery server more available for processing jobs
- Reduces bottlenecks at the RIPping stage
- Helps maximise print device's capacity and shop productivity

Fiery SmartRIP

Fiery SmartRI P technology uses a combination of proprietary hardware and software that processes files faster and handles higher resolutions with ease for all Fiery configurations. SmartRIP helps accelerate colour, compression, and rendering by recognising file characteristics and using adaptive processing.

Users will especially notice the benefits of SmartRIP technology in the following instances:

- The combination of an Adobe Configurable PostScript Interpreter (CPSI) RIP with Fiery SmartRIP technology yields dramatically faster page processing by recognising file characteristics and using adaptive techniques to accelerate colour, compression, and rendering processes
- The improvements in overall throughput optimise the print time for merging of VDP jobs
- The efficient use of memory and hard drive space improves efficiency and predictability to support VDP

- The enhanced image processing allows operators to print composite overprints of CMYK and Fiery Spot-On™ colours. This key feature enables Fiery servers to pass the Altona Test Suite
- The Fiery system achieves higher performance and more efficient use of multiple processors while accelerating colour compression and rendering

Benefits:

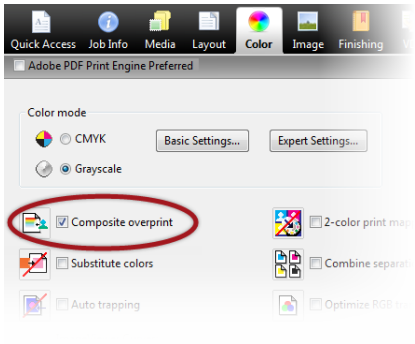
- Achieves RIP performance benchmarked at up to two times faster in a dual processor and one-and-a-half times faster in a single processor
- Improves efficiency and predictability in colour and VDP
- Produces visibly smoother edges and fine type at high resolution (1200 dpi and up). This is quite noticeable in Kanji fonts as well as in Roman faces with delicate, thin elements

Auto-detect Composite Overprint

A smart way to ensure that all jobs print with the correct overprinting and transparency effects is to enable Composite Overprint in Job Properties for all jobs going to print. With this selected, all pages are processed for overprinting and all jobs print correctly.

Jobs that do not require this extra treatment will process faster without going through the Composite Overprint step. A unique Fiery feature called Auto-detect Composite Overprint bypasses this step and processes the job at the highest speed.

Auto-detect Composite Overprint automatically detects whether or not a job needs composite overprinting and processes only those jobs that contain overprints with the extra processing.



Composite Overprint setting in Job Properties

Documents that are RGB-only PDFs, commonly used in the photobook industry, and CMYK documents that don't contain overprints, can gain up to 15% in processing performance. This performance improvement is guaranteed in Fiery external servers, since Composite Overprint is enabled as a default setting. For Fiery embedded servers, the Composite Overprint setting is available and turned off by default.

Benefits:

- With this feature, jobs will process as fast as possible while ensuring the overprinting and transparencies are rendered correctly every time.

Integration with Adobe PDF workflows

Optimised PDF

PDF XObjects are a way of describing objects such as text, images, and vectors within a PDF file. They are automatically generated by the application. XObjects store common information such as background, headers, and footers that can be drawn multiple times in a PDF document. Their content is stored only once in the PDF file to allow for greater efficiency.

When Optimised PDF is enabled on the Fiery system, XObjects are processed just once for the entire job. RIPped versions of these elements are cached to be used any time the XObject is needed in a page — allowing the Fiery system to reduce processing time.

PDF XObjects in a per-job basis

Operators can use XObjects and optimise a PDF job on a job-by-job basis. Just select the feature in Command WorkStation through Job Properties as Cache PDF and PostScript objects under the VDP tab, or use Fiery Hot Folders from a client system.

Benefits:

- Increases throughput by reducing the need to re-RIP the same image in the same file
- Improves the PDF workflow by successfully rendering PDF files containing XObjects

Adobe PDF Print Engine (APPE)

Adobe's PDF-based RIP, Adobe PDF Print Engine (APPE), enables direct PDF RIPping without conversion to PostScript, avoiding potential errors for PDF files that contain transparencies.

EFI and Adobe have partnered to offer industry-leading print solutions by integrating the APPE PDF-rendering technology with the Fiery server. By combining Adobe® interpreter technology with a proprietary EFI software rendering engine, the Fiery server yields dramatically faster processing speeds for even the most complex files.

This support offers users a native PDF end-to-end workflow and enables them to improve the consistency and flexibility of the printed output from design to print.

Fiery FS200 Pro servers provide support for the latest PDF-native rendering platform from Adobe. With the support of APPE v3.0 Fiery QX^{100} server platforms achieve the Adobe certification to satisfy Mercury RIP architecture standards, ensuring maximum efficiency and resource utilization, especially when running high-volume personalised print jobs. The v3.0 enhancements announced by Adobe can be found at: adobe.com/products/pdfprintengine.

Fiery servers offer an extended support for APPE to cater to professional print providers by passing the Perfect PDF standards defined by the VIGC group in 2012. In addition, Fiery servers provide support for sophisticated print settings such as:

- Print Gray Using Black Only — to print any gray component of a job using only black toner, saving money in unnecessary colour clicks.
- Applying different halftones for text, graphics, and images — to optimise the image quality to those particular types of elements
- Fiery HyperRIP — to achieve dramatic performance improvements by processing multiple jobs or multiple segments of the job simultaneously
- Substitute Colours — to match brand colours in Microsoft Office documents

The APPE interpreter support is offered in addition to the conventional Fiery CPSI PostScript interpreter.

This dual RIP configuration is offered standard for external Fiery servers shipping with Fiery Software System 9 R2 and above. This feature guarantees workflow interoperability and gives users the option to process PDF files using the APPE or conventional PostScript RIP with a simple click of the mouse and to meet the specific requirements of a printing environment or job.

Feature specifications at a glance:

- It supports PDF 1.3 and above; PDF/X-1a, 3, 4; and PDF/VT. (These formats also are supported in the PDF-to-PostScript converter with CPSI.)
- Job submission methods supported include Fiery Hot Folders and File/Import from Command WorkStation.
- CPSI and APPE workflows are simultaneously enabled, and users can choose between them.

Unlike other RIPs, the Fiery servers have been offering the benefits of APPE for many years. The Fiery CPSI interpreter incorporates extensive and unique PDF capabilities to address the issues that designers and printers face today in producing creative, effective, and accurate documents. Because of this support, there are few differences in the print results of APPE and Fiery CPSI interpreters. However, there are ideal print environments for APPE-enabled workflow, including the following:

- The print provider that uses a pure PDF workflow and requires PDF documents to remain device independent throughout the entire workflow
- The print provider that frequently prints designs containing transparency, especially when the transparency interacts with black backgrounds
- The shop that wants to unify offset workflows operating with APPE and with digital print workflows to ensure that the designer's intent is accurately reproduced on the press of both output solutions
- The print provider that prefers to perform job submission using Fiery Hot Folders or file/import to Command WorkStation.

	APPE	Fiery CPSI
Supported file formats	PDF 1.3 and above; PDF/X-1a, 3, 4, PDF/VT v1 and v2	Same as APPE, plus: PostScript, TIFF, EPS, VDP (PPML 3, VIPP 8, VPS 1.5 , PDF/VT v1 and v2 compatible)
Job submission methods	Fiery Hot Folders Drag and Drop to Command WorkStation FTP printing	Same as APPE, plus: • Fiery driver • Virtual Printers • Email printing
End-to-end PDF workflow	Yes	CPSI accepts PDF jobs and converts them into PostScript. Although the job format changes, Fiery CPSI provides "what you see is what you print" results.
Full fidelity desktop previewing	Yes It reduces unwanted surprises and disruptive, last-minute prepress fixes in digital and variable print workflows. Jobs that include transparencies, mixed colour spaces, and layers are accurately reproduced.	Yes The Fiery CPSI is a PDF/X-compliant RIP, which guarantees that the printed results are delivered under the PDF/X specifications. This feature ensures consistent print previews and proofs for VDP and non-VDP jobs.
PDF optimization for VDP and non-VDP jobs	Yes It supports PDF/VT, the emerging standard format for VDP file exchange (ISO 16612-2), and enables caching of repeating elements.	Yes It supports PDF/VT, the emerging standard format for VDP file exchange (ISO 16612-2), and enables caching of repeating elements.

	APPE	Fiery CPSI
JDF print processor	N/A	Yes The Fiery server in CPSI mode offers bidirectional JDF workflows, defining all details on how the job is processed, and leaving the content device independent.
JDF compatibility	N/A	JDF 1.1, 1.2, 1.3, and 1.4

Benefits:

- Offers a comprehensive solution for job management and job preparation tasks
- Guarantees consistency in preview and print by supporting native PDF workflow from creation to final output
- Saves time by eliminating the need to convert or flatten content prior to submitting the job to Fiery server
- Uses the same jobs for offset, digital, and VDP — allowing the same PDF print job to have a consistent output among print devices

CPSI 3020

Fiery FS200 and FS200 Pro servers provide support for the latest PostScript interpreter from Adobe.

Benefit

- Fiery servers keep customers up to date with support for the latest industry standards.

Advanced job management

A successful production printing operation depends on a very structured workflow, much like a factory assembly line; each step is dependent on the successful completion of the last. The Fiery system has many tools that manage jobs faster and minimise bottlenecks. A truly integrated solution, it also uses these features to give production print operators tremendous flexibility to alter aspects of the workflow without disruption:

- Force Print
- Suspend on Mismatch
- Rush Print
- Print/Process Next
- Quick Doc Merge
- Sample Print
- Schedule Print
- Proof Print
- Modify Default Queues
- Increased maximum number of jobs in printed queue

Force Print

If the paper attributes of the job do not match what is in the printer, the user can force the job to print using what's currently loaded in the printer, regardless of the job's status in the Print queue.

This feature is available through Command WorkStation if the connected server has Force Print enabled, and it allows the user to do the following:

- Force the job to print to any tray available at that time, while the job is in the Print queue
- Print RIPped files without re-RIPping or canceling the job first. If the new tray media is a different size, the resulting output may be cropped. Also, if the new tray uses a different colour profile, the job will be printed with the original tray's colour profile
- Use any tray (except bypass trays) with any paper size, media type, weight, or coating supported by the printer

Benefits:

- Saves time by printing the job immediately when holding a hard-copy version of the job is more important than making sure the job is perfect
- Can eliminate the need to resubmit jobs to the printer when there is no need to re-RIP the file

Suspend on Mismatch

To ensure faster throughput and the highest quality, operators can use Suspend on Mismatch to hold jobs when they have missing resources or a colour profile mismatch. Until the operator corrects the problem or applies Force Print to the job, it remains suspended and other jobs in the server will continue to print.

Benefits:

- Prevents one job from holding up all the other jobs that could be printing
- Avoids outages at the production line and decreases bottlenecks at the RIPping stage

Rush Print

The Rush Print feature provides advanced job management that allows the user to mark the job as urgent, process and print it immediately, and interrupt the currently printing job. The utility will apply a logical interruption to the job currently printing, either at the end of a set, or after 30 pages — whichever occurs first. Then, as soon as the Rush Print job finishes, the interrupted job will resume printing where it left off.

Benefits:

- Increases the flexibility to reprioritise and introduce last-minute changes in the processing and print stages
- Eliminates the need to stop and restart production when one job needs to be printed right away
- Prevents waste by allowing a job to be paused during printing, and then resumed and finished later, instead of requiring that the user cancel and discard the previously printed portion of the job

Print/Process Next

Print/Process Next lets operators pick the next job to process or print. It gives them the ability to make a job print or process immediately, following the completion of the job currently printing or processing. Depending on the engine behavior, the Fiery server may only be able to advance the Print Next job ahead of other jobs being processed on Fiery servers.

Benefit:

- Gives the operator a way to change the printing order of jobs based on last-minute, urgent demands

Quick Doc Merge

Quick Doc Merge allows the operator to quickly merge documents by combining them in a new job. The documents can be on the Fiery server or be imported from a browsable directory, separate from the Fiery server's job list. The system can also finish the entire job all together or apply the job's finishing options to each of the merged documents. Once documents are merged into a new job, the job will remain intact — even if some of the source documents are deleted from the held queue.

Benefits:

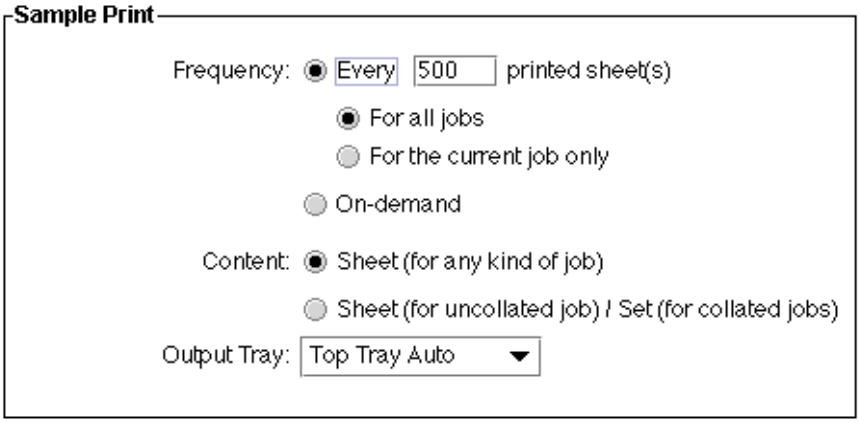
- Saves operator time by eliminating the need to merge PDF files before print submission
- Gives operators the flexibility to combine multiple jobs, without needing to open the file and manually merge pages

Sample Print

The Sample Print feature allows the operator to monitor engine output quality while the engine is in full production, and print extra pages to an easily accessible output tray during a long print job. This way, they can verify that the engine is performing as expected. If the output is unsatisfactory, the operator can take corrective action. While a job is printing, the operator can initiate a sample print from Command WorkStation using the Start Sample Print option under the Server menu.

This feature is most useful for engines with multiple output trays, and when one of the output trays is closed and not easy to access during printing — such as in a stacker unit.

The operator can also configure the Fiery server to print sample prints at a predefined interval that spans print jobs. This lets the operator print sample pages on a regular basis, either as a regular spot check, or as part of a process to create an archive of printed sheets to document the print quality at regular intervals.



Configure Sample Print to meet workflow needs.

The operator can print an extra sheet (or output set):

- On demand by selecting the Sample Print button from Command WorkStation
- Every preset number of sheets, the operator can instruct the Fiery server to stop printing sample pages once the current job is done, or to continue printing sample pages for all jobs until the operator manually stops the sample print function

Benefits:

- Performs quality control of the output while the engine is printing, avoiding production halts, ensuring quality of the output, and increasing overall productivity
- Makes it easy for users to take corrective actions before the job finishes printing, minimising waste and reducing clicks

Schedule Print

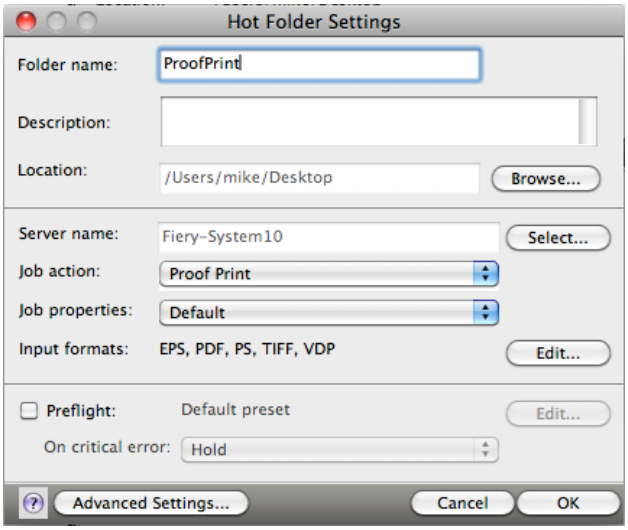
Schedule Print is an advanced job-management tool that allows the user to define when jobs will print by setting DATE/TIME parameters. The jobs will print as soon as the DATE/TIME conditions are met, the server is turned on, and the print engine is available.

Benefits:

- Increases automation of the production process, allowing for unattended printing, and eliminating the need to have attendants constantly on watch — thereby reducing overhead costs
- Provides the ability to plan the processing and printing stages in advance
- Facilitates balancing the workload and prioritising print production throughout the day to avoid peaks and bottlenecks
- Allows advance scheduling of batch jobs. For example, if there are jobs with the same media characteristics, the operators can schedule the jobs to print when the media is loaded in the printer

Proof Print

Proof Print allows users to produce a copy of any job in the Hold or Print queues with a single mouse click,. This eliminates the need to open the job in Job Properties, modify the job ticket, or change the copy count to print a copy for proofing.



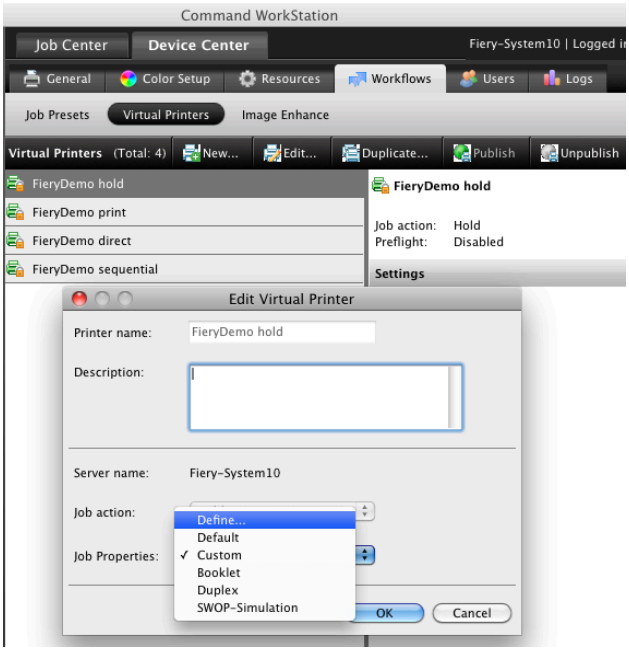
Request Proof Print from Hot Folders.

Targeted to Command WorkStation users, the Proof Print feature is particularly powerful in the Hot Folders workflow because Proof Print can be selected as a Job Action when setting up Hot Folders. After the system produces the Proof Print, the job moves into the Hold queue until it is released to print the full copy count.

Modify Default Queues

Operators frequently ask for a way to customise the default job properties of the Fiery server so they can set options such as duplex to be always on. Fiery servers provide the ability to change the default job properties of the Print and Hold queues.

Operators can do this through the Edit function in the Virtual Printers panel in the Command WorkStation Device Center. Users may assign any function available in Job Properties to the Hold or Print queues and lock the settings to prevent changes.



Change the default Job Properties of the Print and Hold queues through the Edit function in the Virtual Printers panel.

Benefit:

- Allows administrators to define the default job properties of the Fiery server to adapt to their particular printing needs, increasing workflow efficiencies and productivity

Users can even use Proof Print with VDP jobs. The feature prints one copy of the contents of the first record. If the VDP job wasn't RIPped, the raster is removed once Proof Print is completed, returning the job to the Hold Queue.

In the case of imposed VDP jobs, Proof Print produces a set associated with record number 1, printing all sheets that contain the first record.

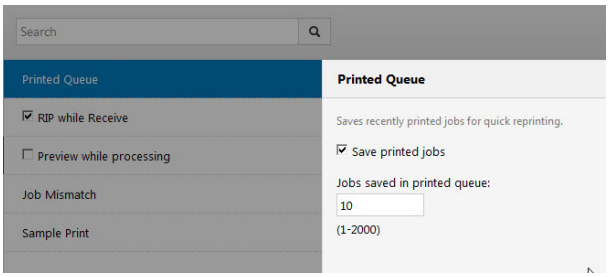
Benefit:

- Saves time and increases productivity by allowing users and operators to check the Proof Print at the printer and release the job to be printed for the actual copy count without risk of modification

Increased maximum number of jobs in Printed queue

The maximum number of jobs stored in the Printed queue has been increased for easier and faster access of jobs to reprint. The maximum number of jobs varies between embedded and external servers:

- Fiery embedded servers running FS200 software increased from 99 to 1,000 jobs
- Fiery external servers running FS200 Pro software increased from 99 to 2,000 jobs



The default number of saved jobs is 10, and can be modified by the administrator.

The default number of saved jobs is 10, but can be modified using Fiery Configure and Fiery WebTools.

Once the number of stored jobs reaches the number defined above, the Fiery server starts deleting the jobs in FIFO (first in first out) order.

Benefit:

- Easier and faster access of jobs to reprint

Fiery Productivity Package

The Fiery Productivity Package for Fiery embedded servers includes features that helps users meet tight turnaround times and increase overall productivity.

The set of tools included in a Fiery Productivity Package varies by Fiery server and print engine combination. Please check the engine-specific information for detailed features. For more information visit the Fiery Productivity Package web page.

The features that aim to boost productivity are:

- **Hot Folders:** Automates the job submission process, reducing errors, and automating repetitive tasks with a simple drag-and-drop operation. Input formats: PS, PDF, EPS, DOC, DOCX, XLS, XLSX, PPT, PPTX, PPS, PPSX, and PUB.
- **Virtual Printers:** Streamlines job setup times and eliminates print errors on repetitive print jobs by using predefined job settings in the print driver.
- **Graphic Arts Filters for Hot Folders:** Automates job submission for more file formats, including JPEG, EPS, TIFF/IT, CT/LW, PDF2Go, Export PS, and DCS2. Includes PDF/X preflight filter to verify the compliance of all PDF files with PDF/X-1 and PDF/X-4 specifications.
- **Rush Print:** Marks a print job as urgent so it can be processed and printed immediately, even interrupting a job that is printing.
- **Print/Process Next:** Queues a job to print immediately after the currently running print job completes.

Benefits:

- Eliminates bottlenecks and optimises production while maximising throughput
- Automates job submission to shorten setup times and decrease print errors

In addition to the above features, Fiery Productivity Package includes a set of tools for prepress operations. For a complete list of features visit the Prepress section in this product guide.

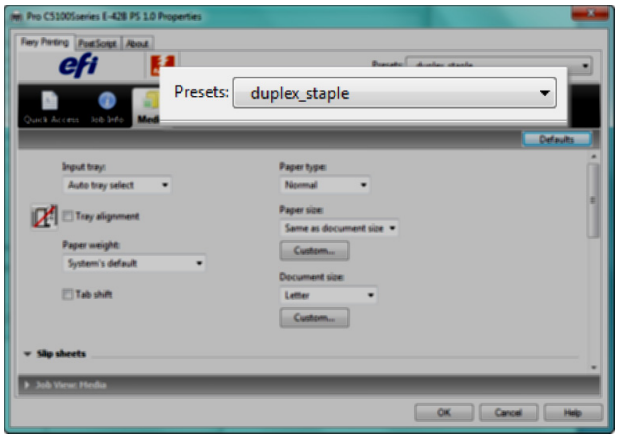
Job submission automation

It is critical to automate complex tasks and leverage all available resources in a production environment that regularly receives jobs from external sources. In-plant and CRD operations, as well as commercial organizations, look to digital workflows to capture as much formatting and direction from nontechnical users as possible, in order to shorten job preparations times, minimise errors, and speed up turnaround times.

Fiery servers offer the widest range of tools to streamline workflows from submission to output, are easy to use, and adapt to any type of automation needs.

Job Presets

Job Presets allow the user to save predefined print settings as a retrievable template from Fiery driver or Job Properties. The creation of several templates allows users to define settings based on their own common printing scenarios, and to streamline job submission with fewer clicks and errors.

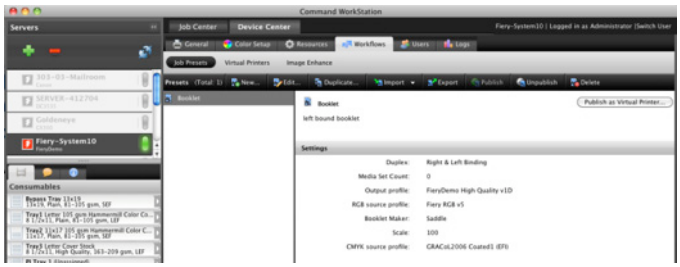


Job Presets in Fiery driver

Server Job Presets

Users can create local Job Presets which are available for use only on the user's client workstation. Administrators can create Server Job Presets to share Job Presets among all Fiery users to automate the selection of Job Properties for commonly used tasks, saving time and maximising productivity.

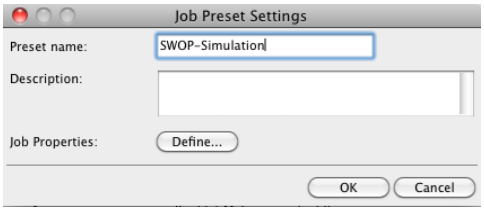
Administrators can save, edit, publish, and delete Server Presets from the Command WorkStation Device Center. They can also create Server Presets from Job Properties in the Command WorkStation, right after selecting the applicable job settings — simply provide a name and description. Other users can access the centrally stored presets through workflows such as Virtual Printers, Hot Folders, Job Properties, print drivers, and Fiery JobFlow.



Save, edit, publish, and delete Server Presets from the Command WorkStation Device Center.

Benefits:

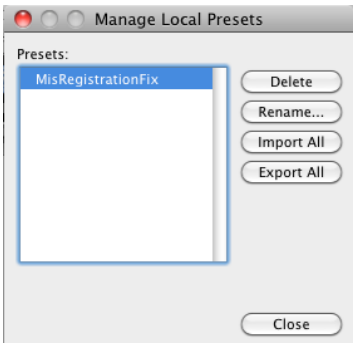
- Allows all users to access commonly used settings in all workflows
- Permits administrators to save and manage the most commonly used settings, and then easily publish them as Virtual Printers and Hot Folders



It is easy to create server Job Presets by providing a name and description.

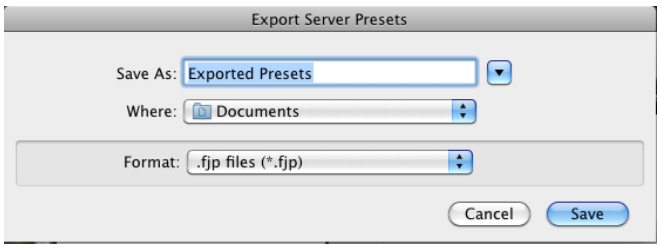
Import and export Job Presets

This feature offers the ability to import and export both server and local Job Presets. Local Job Presets can be exported and shared between users. Only administrators can manage Server Presets.

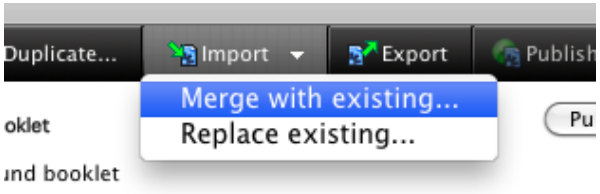


Users can export and import Server Job Presets.

Users can export and import Server Job Presets between Fiery servers of the same model, streamlining the process of programming multiple servers to behave identically.



Export Server Job Presets.



Merge or overwrite existing presets.

Benefits:

- Share and back up local Job Presets for safekeeping
- Easily and quickly make Server Job Presets available to multiple Fiery users
- Create automated workflows for any repetitive task, reducing the number of times a job needs to be touched during printing

Product-specific presets

Fiery servers include five server presets to help users quickly set up jobs with some frequently used print settings, including both layout and finishing options. This also promotes the use of server presets and workflows.

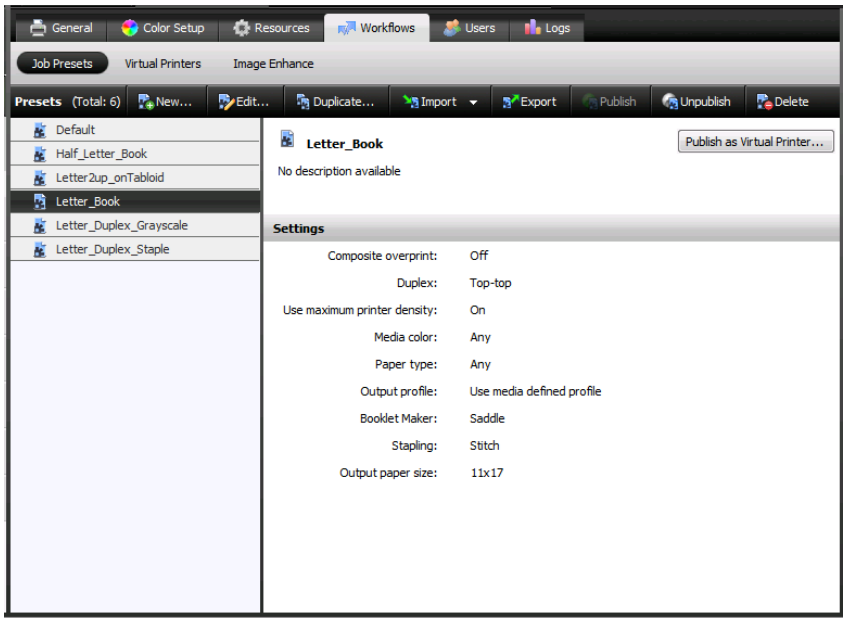
The server presets include:

U.S. presets

1. Half-letter booklet
2. Letter booklet
3. Letter duplex grayscale
4. Letter duplex staple
5. Letter 2-up tabloid

Metric presets

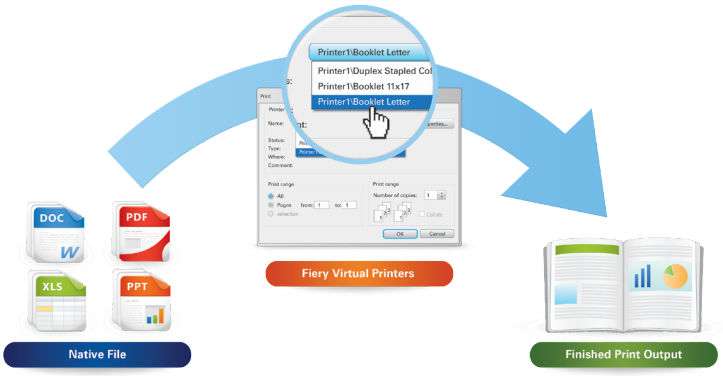
1. A5 booklet
2. A4 booklet
3. A4 duplex grayscale
4. A4 duplex staple
5. A4 2-up A3



Product-specific presets available to all Fiery users

Fiery Virtual Printers

Fiery Virtual Printers enable production print administrators to create a specific configuration for a print device containing all desired print driver settings and present it to users as a printer with a specific name. For example, a user who prints training manuals on a regular basis could simply print to a printer named "Training Manual," greatly reducing interaction between user and production while capturing pertinent data.



In comparison with Hot Folders, Virtual Printers are managed and configured centrally by a Fiery administrator. All settings are controlled at the Command WorkStation, where only an administrator can view and/or change the published Virtual Printers and details associated with them. Virtual Printers are also designed to be used direclty from a print driver.

Virtual Printers come standard with external servers and are an optional feature for some embedded servers.

The administrator has rights to the following functions:

- Create new virtual printers
- View the available virtual printers (and published queues)
- Publish, delete, or edit virtual printers

Key functions and features:

- Defines a combination of up to 252 Virtual Printers on a Fiery server
- Is easily accessible from any print driver — ideal for "driver-based" workflows
- Provides Fiery system actions such as hold, process and hold, print, and print and hold

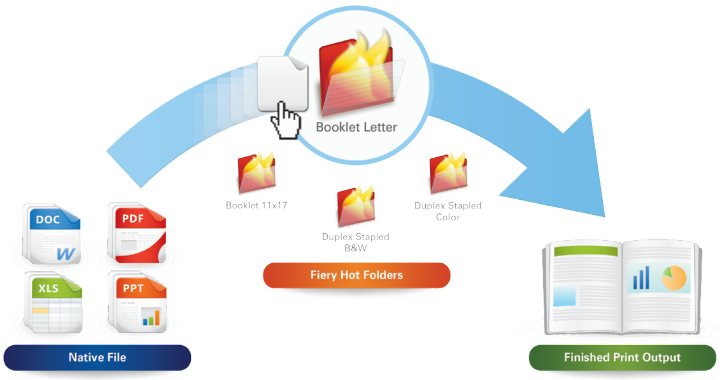
- Comes with imposition and override settings

Benefits:

- Automates workflow for all users, increasing productivity
- Reduces repetitive workflows for faster, error-free printing
- Ensures that print processes and company standards are maintained; relevant settings can be preserved as admin-lockable.

Fiery Hot Folders

Fiery Hot Folders let users do more work by automating the job-submission process with a simple drag-and-drop operation. Fiery users can publish and share Fiery Hot Folders with other users in their network for faster, error-free printing for everyone.. Users can copy or simply drop documents into Hot Folders which will then send them to a Fiery server with print settings. Hot Folders can set job properties, impose jobs, and merge jobs..



Hot Folders relieve the user of the repetitive task of configuring print settings for multiple jobs, and allows the direct printing of files without need for an application such as Adobe Photoshop®. Since Hot Folders appear as folders on a host computer and can be shared on networks, they provide a simple way to forward jobs without installing special utility software on each computer.

Included with Fiery Graphic Arts Package, Premium Edition is a set of expert-level filters designed for Hot Folders. These filters allow users to submit jobs in their native file formats without opening the native application. The result is that jobs can be routed to the Fiery server with predetermined settings attached — including PPD overrides, imposition attributes, and file format conversions.

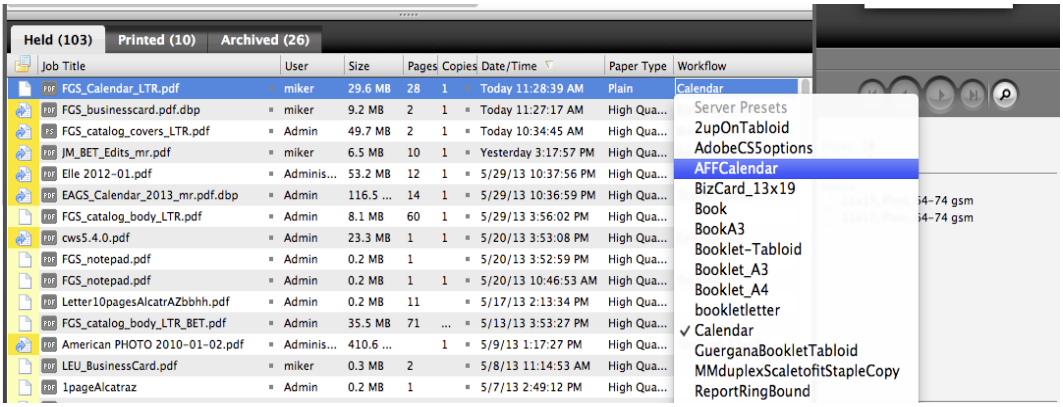
Hot Folders come standard with external servers and are an optional feature for some embedded servers.

Benefits:

- Automates workflow for all users, increasing productivity
- Reduces repetitive workflows for faster, error-free printing

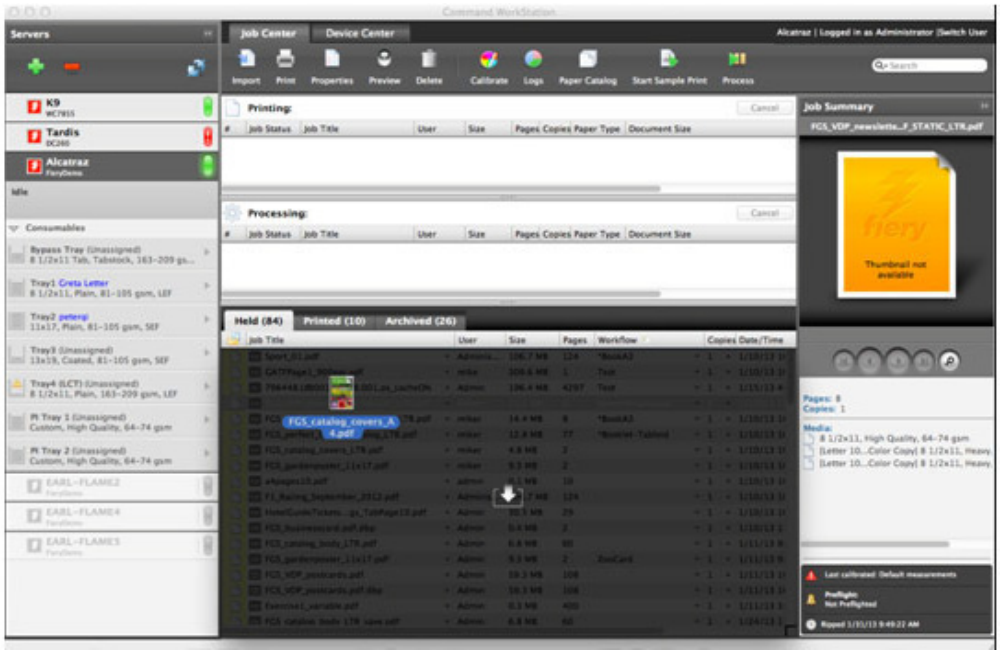
Fiery Command WorkStation

The Fiery Command WorkStation interface offers a way to automate job submission workflows by quickly selecting Server Presets after right clicking on a job. Fiery administrators can create and publish job submission workflows as easily as they can create a new Virtual Printer, and can publish the workflows to make them available to everyone accessing that Fiery server. The automated workflows require a Fiery server with Virtual Printers or Server Presets.



Make a Server Preset selection with a right click on a job.

The Drop Zones feature gives a new look and feel to the Fiery Command WorkStation by clearly indicating the areas open to drop files for printing. It also enhances the server list view by displaying an easy way to associate Server Presets and Virtual Printers while downloading the job onto the Fiery server; an enhanced view of the server list; and server information such as consumables, toners, alerts, and more.



Drop zone indicated on the Held queue

Benefits:

- Easy way of associating Server Presets and Virtual Printers while downloading the job onto the Fiery server
- Enhanced view of the server list and server information such as consumables, toners, alerts, and more

Fiery JobFlow

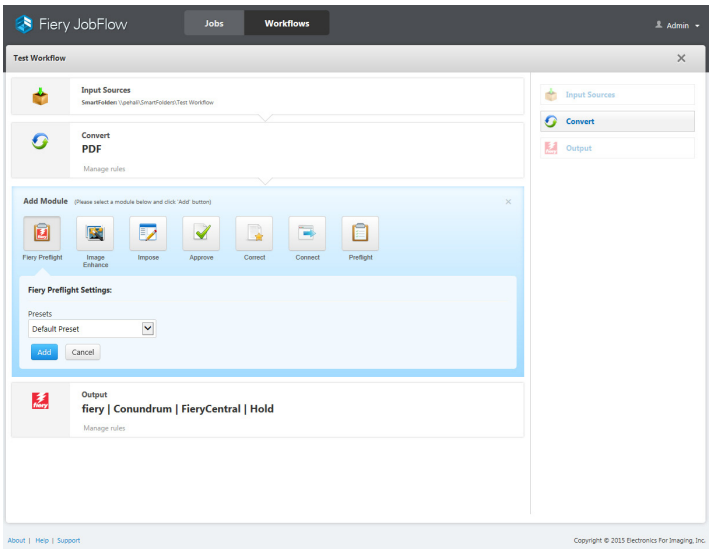
Fiery JobFlow offers automated prepress processes that are easy to set up and use, to minimise rework and boost overall efficiency on the print floor.

The Fiery JobFlow installer is included in the list of applications to download from the Fiery Software Manager on Windows® workstations. Users can access the browser-based Fiery JobFlow application from Mac or Windows client workstations. For external Fiery servers that are running on FS200 Pro, Fiery JobFlow Base comes pre-installed on the server itself.

Installing the Fiery JobFlow application enables the free version, Fiery JobFlow Base. Users need a paid license upgrade to unlock the full functionality of Fiery JobFlow.

Fiery JobFlow Base is used to configure automated workflows that consist of:

- Submission from multiple locations (Dropbox, shared folders, and FTP) or by a drag-and-drop operation directly to the workflow
- PDF conversion
- Job merging
- Fiery Preflight (requires Fiery Graphic Arts Package, Premium Edition)
- Image enhancement
- Document imposition (requires Fiery Impose)
- Job ticketing
- Archiving and output to multiple locations (Dropbox, shared folders, FTP, and Fiery external servers)



Custom workflow creation in Fiery JobFlow

The full version of Fiery JobFlow contains additional features:

- Rules-based workflows
- Advanced preflight (powered by Enfocus Pitstop)
- PDF correction (powered by Enfocus Pitstop)
- Cloud-based approval workflows

For more information on Fiery JobFlow, visit the product webpage at efi.com/fieryjobflow.

Benefits:

- Eliminates repetitive manual setup and produces ready-to-print files with the fewest touch points
- Detects and uses existing Fiery resources such as presets and templates, to avoid rework and speed up the print process
- Ensures consistency and higher efficiency when processing similar print jobs through the same workflow
- Allows internal and external reviewers to quickly and easily approve jobs remotely without interrupting the workflow

Note: if you own Fiery JobFlow, free elearning online courses are included with the product (English only). If you don't have the certificate that came with the product, fill out a form at fiery.efi.com/elearning-bundles to receive a free code to access the courses.

EFI Digital StoreFront

EFI's Digital StoreFront® is the award-winning flexible eCommerce solution that offers the industry-leading print buyer experience designed to grow your business.

The Fiery integration setup wizard helps establish a touchless workflow with EFI Digital StoreFront which saves time and eliminates errors — synchronising media libraries, job status and job configurations such as colour settings, layout and finishing.

For more information refer to the Integration section in this product guide.

Variable data printing

No matter what you call it — personalization, customization, versioning, transactional printing, variable information (VI), or simply variable data printing (VDP) — market research proves that personalised communications or targeted marketing can significantly improve a company's bottom line. Overall revenues and profits associated with personalised marketing programs are over 31% greater than those from general marketing. Personalised communications also garner measurable improvements in the size and value of orders. Customers are apt to respond more quickly and in greater numbers to personalised marketing messages. And personalised communications increase customer loyalty and retention by more than 47%.

Today's overall trend toward targeted marketing will only intensify in the future. For organizations with the right resources, marketing support, and business knowledge, VDP is more than just a powerful tool: it's a strategic necessity. But currently, there are no simple, off-the-shelf VDP solutions. Instead, VDP requires customised end-to-end attention to customer needs and budgetary constraints.

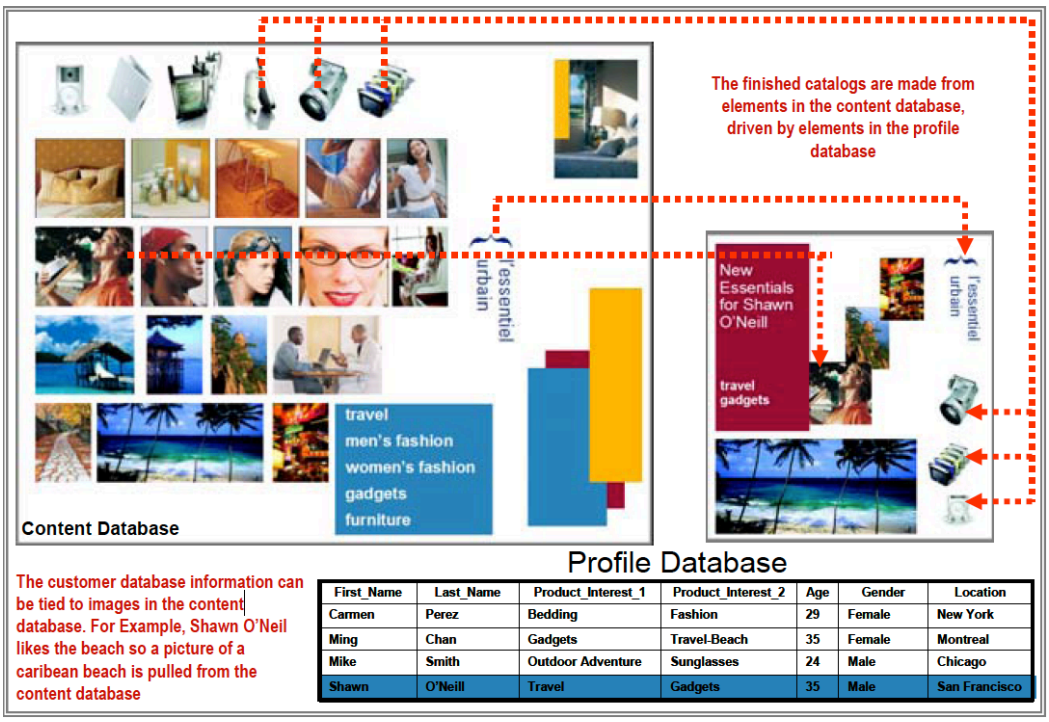
EFI Fiery VDP solutions are offered to fit into existing workflows so designers can easily develop customised marketing campaigns, regardless of their complexity, and add to their systems as their needs grow.

EFI Fiery technology delivers fast, industry-leading, adaptable VDP capabilities and allows Fiery users to choose any authoring tool to create static and variable elements with flexible and open, end-to end VDP solutions. EFI VDP solutions include the most comprehensive array of VDP languages, such as Fiery FreeForm™, the industry's open-standard personalised print markup language (PPML), PDF-VT, and a host of proprietary languages. EFI solutions enable print providers to take advantage of evolving VDP technologies, regardless of the brand of database management system, generator software, page-layout program, or print device.

The Fiery Command WorkStation interface manages the inputs and outputs for the most complex VDP jobs. This user interface allows operators to manage their Fiery servers and VDP jobs from one location. The VDP Resource Manager is a utility that enables print production shops to store, view, and reuse RIPped objects on networked Fiery servers. Used in conjunction with a high-speed printing device, the Fiery server eliminates production bottlenecks, and allows VDP jobs to print faster than ever before.

By drawing from its own and partner technologies, EFI delivers high-performance, open VDP solutions. EFI also continues to work with the most respected partners in the industry to enhance its integration with the latest solutions and existing VDP workflows.

For more information visit the Fiery VDP solutions web page.

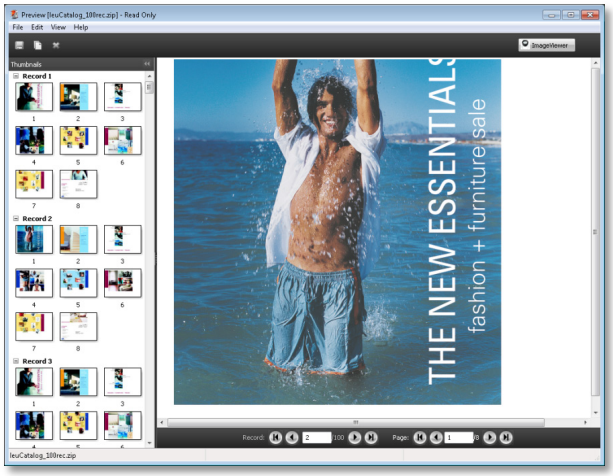


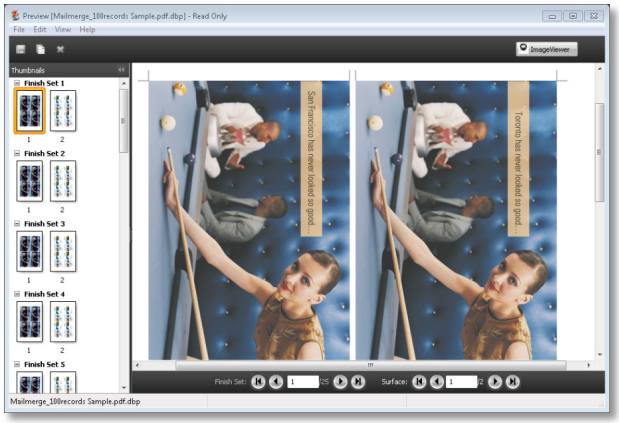
Fiery VDP Raster Preview

The Fiery VDP Raster Preview enables users to view the content of the job, organised by records or finished sets, and to navigate either by records/finished sets or by pages/surfaces. The job is displayed in actual size, and the user may use the scroll bars to see the whole image. With the Fiery VDP Raster Preview, users can now verify whether the record boundaries for imposed and non-imposed jobs are correct before printing the job. The feature is available when connecting to System 10/10e with Command WorkStation 5.4 or later.

Benefits:

- Enables users to verify record boundaries for imposed and non-imposed jobs within the raster preview, without the need to print the job — reducing potential errors and waste
- Displays records for non-imposed VDP and finished sets for imposed VDP jobs
- Saves time and eliminates waste because users do not have to guess how the job will print





Non-imposed job

Imposed VDP job

VDP file formats supported by Fiery servers

Fiery servers are compatible with all these file formats, so you can use any of them.

- PPML
  PPML was designed to support efficient job resource reuse. By allowing the printer to know early on which fonts, logos, diagrams, images, or other resources are needed at a particular point in the job; the system can rasterise that resource a single time and use it as many times as needed without redundant processing. Fiery servers are compliant with PPML as set forth by the Print-on-Demand industry initiative.
- Creo VPS 1.5
  A fundamental benefit of the Creo variable print specification (VPS) is its ability to specify which elements of a variable-data print job will be used multiple times. Once specified, the application will eliminate multiple downloads of repeating data elements to the printer or digital press. This prevents redundant data handling and helps variable-data print jobs to print at or near rated engine speed. The Fiery server's compatibility with the Creo VPS format enables users to RIP and print jobs in Creo VPS format for variable data printing.

- VI Compose (VIPP/VPC — available on Fiery servers driving Xerox print engines only)
  An open language from Xerox, this enables the highest-performance output in variable data PostScript documents.
- PDF/VT
  PDF/VT is a standard developed by the International Organization for Standardization (IOS) for VDP data exchange. Fiery servers are compliant with PDF/VT through both CPSI and APPE.
- FreeForm 1
  Fiery FreeForm 1 is a simple way to create page-based variable data jobs. Users need a software application that contains a database merge feature for authoring such as Microsoft Word and Adobe InDesign. Rasterised master background pages are created with specified variable content zones, and database information is merged into these zones. Granularity for the job is at the page level and limited to a single job master.
- FreeForm 2
  Fiery FreeForm 2 technology expands on FreeForm 1 by allowing a variable data document to individually access and reuse any page in a master document. Any page of the variable data file can be associated with any page of the master document. Conditional page printing from the application is possible through page-level commands.

  FreeForm 2 requires the use of a supporting third-party VDP authoring tool such as PrintShop Mail.

  Operators can use FreeForm 2 and Fiery Impose for imposed VDP set finishing (record-based finishing).

Benefits:

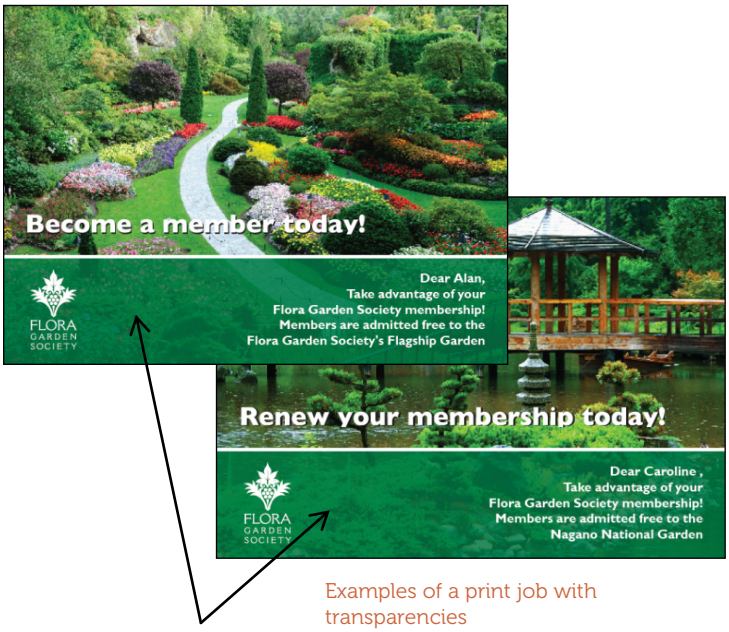
- Offers open VDP implementation, ensuring compatibility in all VDP workflows and complete flexibility
- Consistent Fiery workflow interface greatly reduces training curve for existing Fiery users, leading to fast adoption and higher productivity

PPML 3.0

PPML 3.0, the latest VDP standard, supports in-RIP transparency flattening. Flattening transparencies as late in the process as possible provides the best results. PPML 3.0 also supports transparency within the PDF layer and between layers. It enables users to print variable layers as designed, and supports the printing of drop-shadow PostScript masks and soft-edge TIFF masks. In addition, it lets users overlay a reusable JPEG image.

Benefits:

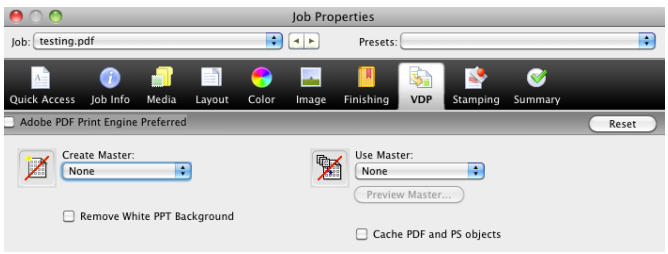
- Improves design flexibility and operator productivity
- Eliminates costly file rework



Examples of a print job with transparencies

Fiery FreeForm

Fiery FreeForm is an exclusive, built-in ,and simple-to-use VDP file format that supports a wide variety of source applications without the need for a third-party VDP composition tool. With FreeForm, print providers can enter the market for personalised marketing campaigns and support a multitude of customer requirements with ease. Fiery FreeForm is an ideal entry-level step that requires minimal skill,



Fiery FreeForm settings in Fiery driver and Job Properties

so there is no learning curve for users. It is available on virtually all Fiery servers and can create static data masters with any design application. Fiery FreeForm doesn't require an additional investment in VDP software, so it is a perfect entry strategy to begin producing VDP jobs.

The page length of the FreeForm master document defines each record in a FreeForm job. FreeForm maps the pages from the variable document to the record length defined by the FreeForm master until all the variable document pages are used.

FreeForm Multipage Previews — With bidirectional communication enabled, the EFI Fiery driver provides the user with multipage previews of FreeForm masters. This allows visual confirmation of selected FreeForm masters whose static content spans multiple pages.

Enhanced FreeForm

Prior to System 10/10e, if a page required no variable elements and there was not an exact one-to-one correspondence between the number of pages in the variable document and the number of pages in the master document, the user had to add blank pages to the source document to ensure that mapping was handled properly.

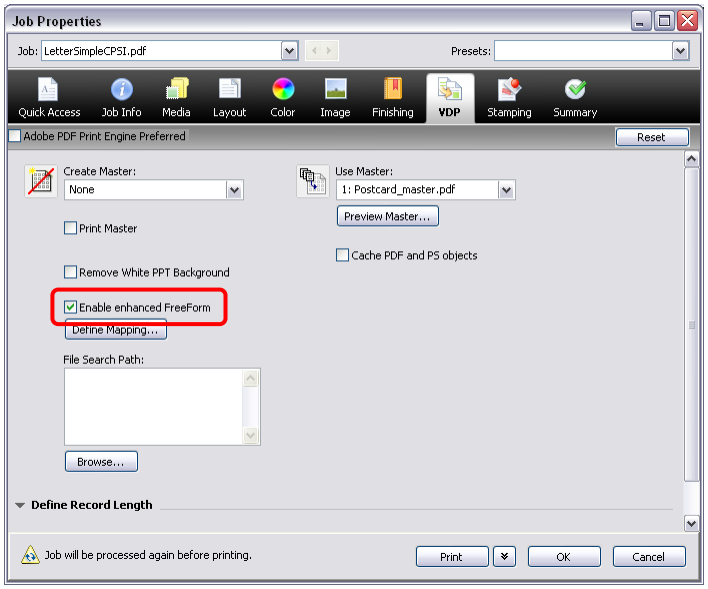
As an example, imagine a company needs to distribute a personalised newsletter to its customers. This newsletter has four pages, and only two of those pages — the front cover with the name of the customer and a personalised image, and the back cover with the mailing address and a custom ad — contain variable information.

Personalised four-page newsletter containing variable document with only two variable pages

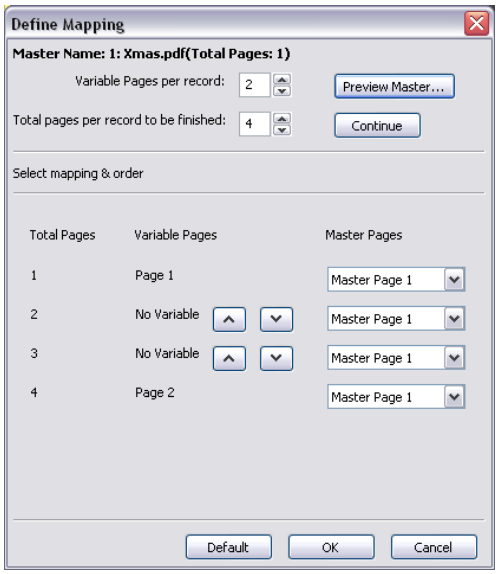
FreeForm has been enhanced to give the user control over the mapping between the variable and master documents. This provides several benefits. First, instead of adding blank pages to the source variable document, the user can ***map*** a blank page to a master page. Second, the user can pick and choose which master page a given variable page uses. And finally, the user can define the length of the record, instead of having to use the entire length of the master document.

Enhanced FreeForm is supported in Command WorkStation Job Properties, Virtual Printers, Presets, Hot Folders, and in Windows and Mac drivers.

Users can choose Enhanced FreeForm from the Job Properties VDP tab by selecting a master document from the Use Master drop-down menu.



Users can choose Enhanced FreeForm from the Job Properties VDP tab.



Using the Define Mapping table, users can associate the variable pages with the corresponding page of the master document.

Benefits:

- Simplifies creating and using VDP documents by allowing users to map variable documents to master documents without modifying the source documents
- Offers the flexibility to pick only a subset of pages from a master document, and use with the variable record in any order
- Allows print shops to print jobs without returning the variable document for revisions
- Enables users to create powerful personalised print jobs using standard tools, and without needing additional specialised VDP software

Fiery FreeForm Kit

The FreeForm Kit is a free download available at efi.com. With it, customers to get everything they need to create successful variable data printing (VDP) jobs quickly. The FreeForm technology is already in their Fiery server at no extra cost. It's suited to a wide range of VDP applications and is driver based, so it requires no specific VDP software application to work. Anyone can use the kit.

The FreeForm Kit comes with templates of typical Microsoft® Word and Adobe InDesign jobs in metric and inch versions that can be used "as is" or modified to produce marketing pieces such as real estate flyers, direct mail cards for retail, fundraising mailing cards, plus certificates and awards.

Download the Fiery FreeForm kit at efi.com/freeformkit

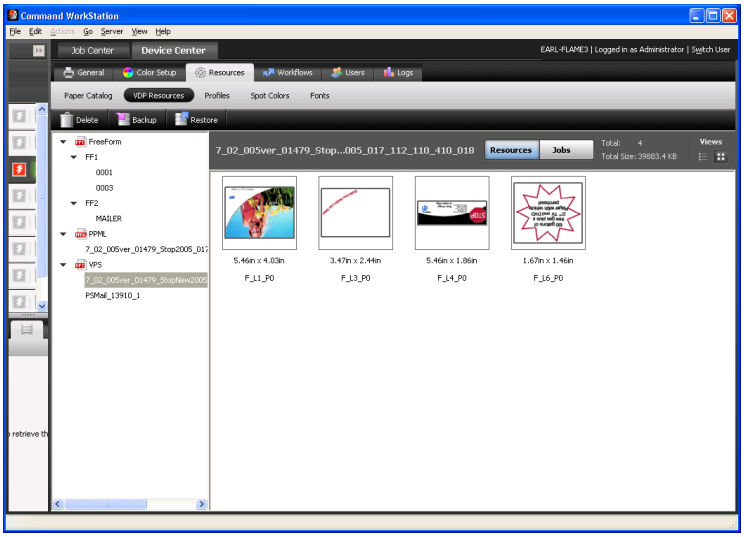
The kit also comes with sample databases in Excel spreadsheets with simple, step-by-step instructions on how to use and modify the templates. No other technology provider can offer you this built-in capability in such a simple, accessible way.

VDP Resource Manager

The Fiery VDP Resource Manager allows repeatable elements (source and cached) to be stored and managed for future use. These resources are listed in the VDP Resource Manager tab under the Device Center Resource tab for each format supported by VDP.

Key functions and features:

- Easy to navigate with its intuitive user interface
- View name, size, creation date of object, and originating environment
- Thumbnail or list view of global objects and FreeForm masters located at connected Fiery servers
- Archive or delete dated or redundant files
- Troubleshoot problem files and reduce production bottlenecks with a single view of all VDP resources on all of the Fiery servers in the production environment
- A choice of list or thumbnail view (thumbnail view provides a visual illustration of resources)
- The option to view a list of jobs in the Hold queue that are associated with a selected resource



VDP Resource Manager listing a thumbnail view of VDP resources

- An option to delete all the resources in that environment
- An option to back up resources
- Automatic refresh of stored VDP resources when a new VDP file is processed

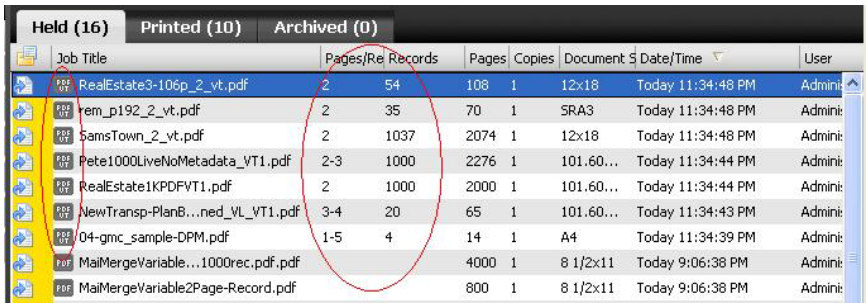
Benefits:

- Reduces the chance of operator errors, leading to increased throughput and higher-quality work
- Optimises RIPping with efficient cache and resource management

PDF/VT support

Efficiently driving complex VDP jobs in digital print environments requires support for multiple standards to ensure interoperability. Fiery servers are compliant with PDF/VT, a standard developed by the ISO for VDP data exchange, through both CPSI and APPE. Supporting PDF/VT brings the benefits of a PDF workflow to VDP, helping print providers increase production efficiency with capabilities such as late-stage exchange of critical variable content.

The system processes PDF/VT files the same way it handles other VDP files — by detecting records defined in the PDF/VT job and caching reusable XObjects — and displays a format icon for PDF/VT jobs on the Fiery Command WorkStation.



The format icon, as well as the quantity of records and pages per record, identifies PDF/VT jobs in the Command WorkStation.

Benefits:

- Folds seamlessly into existing PDF-based prepress operations, enabling a single common PDF print production workflow for all job types
- Easier to use, with a visual illustration of cached, reusable elements and easy identification of VDP jobs
- Increases productivity with support for users' existing workflow

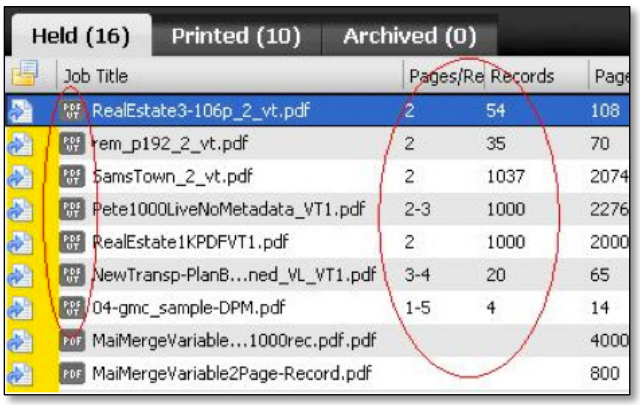
PDF/VT-2 support

PDF/VT is Adobe's variable data language, based on PDF technology. PDF/VT-1 support was introduced in Fiery System 10 servers, and PDF/VT-2 is supported on Fiery servers running FS100 Pro and above. The Fiery server recognises the new PDF/VT file type and shows a different icon in Command WorkStation for this format. It automatically extracts the records information and displays the number of records and pages per record, showing PDF/VT cached resources in the VDP Resource Manager. PDF/VT is supported for both CPSI and APPE interpreters. PDF/VT-2 gives users a performance improvement because PDF/VT files can refer to resources through a file search path so that they can be processed inline, but the overall PDF/VT file size being transferred is reduced. With PDF/VT-1, all of the resources had to be contained inside the file.

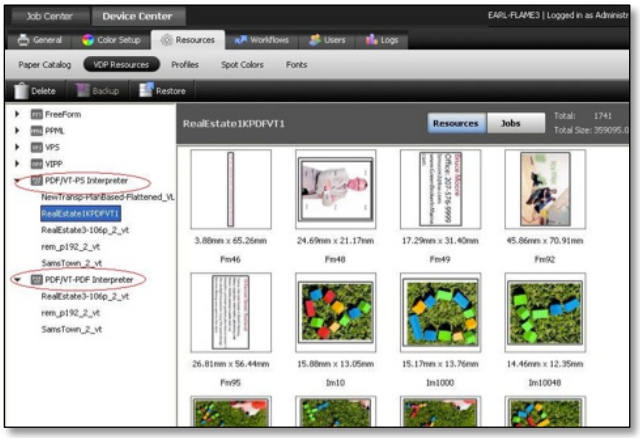
See this Adobe whitepaper for more details: fiery.efi.com/PDFVT-whitepaper-en

Benefits:

- Supports the latest VDP standard so that operators can confidently print any standard VDP data stream
- Adds flexibility to customer workflows



PDF/VT is displayed as a file type in Command WorkStation; the number of records and pages per record are also displayed.



PDF/VT file format under VDP Resource Manager

Hot Folders filter for PDF/VT support

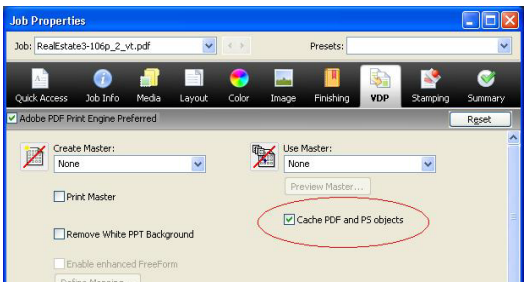
Fiery Hot Folders now support the latest VDP format on the market — PDF/VT. Selecting the PDF/VT checkbox grays out all other PDF options, ensuring that Hot Folders passes the PDF through to the Fiery server without any processing or modification, so the variable components are preserved.

Benefits:

- Adds flexibility to customer workflows
- Automates job settings in Command WorkStation without user intervention

Processing optimization for PDF and PostScript VDP files

Some customers use PDF or PostScript formats for creating VDP jobs. PDF uses XObjects, and PostScript uses Forms, to convey information about repeating objects in the file. Prior to System 10/10e, Fiery servers supported the PDF XObjects. Now, they also support PostScript files with Forms. Users can gain a huge performance boost by using the information from PDF XObjects and PostScript Forms to RIP the repeatable elements only once and then cache them.



"Cache PDF and PS objects" box in the VDP tab of Job Properties

This feature is available in both the CPSI and APPE processing paths through the VDP tab of Job Properties.

Benefit:

- Increases speed and performance while processing PDF and PostScript format files in VDP applications

Define Record Length

In VDP workflows where VDP applications generate PostScript or PDF files as output formats, print servers don't have a way to know the number of records within the job, or how many pages the records contain. Consequently, some finishing options such as VDP imposition or subset finishing with Mixed Media will not be fully functional.

In order for the correct finishing options to be available to such jobs, and to allow for PostScript and PDF files to be processed as VDP jobs, operators need to be able to define how many records are in a job and how many pages are in a record.

Define Record Length allows a user to define the fixed record length for a VDP job when it is provided in PostScript or PDF format. This Define Record Length setting can be found in the Fiery driver and Job Properties utilities. Two new columns display this VDP job ticket information on the Command WorkStation:

- Number of Records: Displays the number of records contained in the file
- Pages per Record: Displays record length information. Variable record lengths are displayed as a range, from smallest to largest

Benefits:

- Allows VDP jobs imported as PostScript and PDF formats to be correctly processed with the desired finishing requirements
- Reduces waste by allowing users to print a selected set of records
- Provides additional VDP job information, allowing operators to prepare and troubleshoot VDP jobs more efficiently

Record and Set Level Finishing support

Fiery systems support individual VDP set (record-based) finishing for VDP jobs. In such cases, finishing settings inside the Job Properties window will be applied at the record level, as opposed to the job level.

There are no special user-interface requirements for VDP set finishing. Finishing options previously applied globally to a job will now be applied to each individual record inside that job. All records inside the job will be treated identically. VDP set finishing is applied to all content between the start and end marks.

The following VDP file formats have native definition on the start and end of a VDP set, and therefore support subset finishing:

- FreeForm v1 and v2
- PDF/VT
- PPML
- VI Compose (VIPP/VPC — Xerox only)
- Creo VPS

Benefit:

- Increases automation of the output process and reduces the number of manual offline steps in production

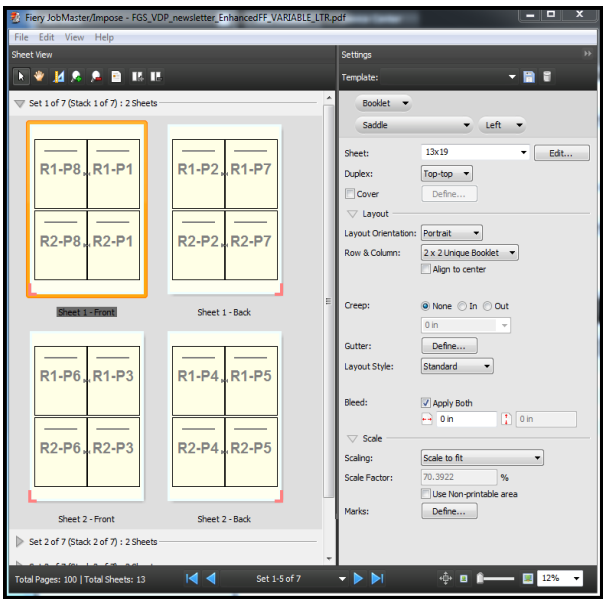
VDP Record Range Printing

Reduces waste and lost time by allowing the user to select a range of records to be printed from a VDP job as a Command WorkStation override. The Record Range Printing feature for VDP jobs is supported for both non-imposed and imposed VDP jobs in FreeForm v1 (record-based) and FreeForm v2, PDF/VT, PPML, VI Compose (VIPP/VPC — Xerox only), and Creo VPS formats. This ensures continuity, regardless of whether VDP is being used in the wider deployment of technology and solutions.

Benefits:

- Simplifies record reprinting. For example, if you need 4 of 100 records, you don't have to process the whole job to just print those records
- Reduces waste by allowing the user to print a selected set of records

VDP Multi-Up Booklet



The VDP Multi-Up Booklet is a Fiery Impose feature that allows two records to be printed on a sheet, reducing costs by printing on a larger sheet size for a single click charge. It is accessed through Fiery Impose, and users can save settings as an Impose preset that can be selected from Virtual Printers or Hot Folders for automated job submission.

For records of different lengths, blank pages will be positioned automatically — based on pagination requirements. If covers are not enabled, the blank pages should fall at the end of the job. Otherwise, with covers enabled, the blank pages could fall somewhere in the middle after the job is folded during offline finishing.

The VDP Multi-Up Booklet feature is available only for variable data jobs.

Benefits:

- Allows faster throughput by producing a job using fewer sheets and fewer clicks
- Reduces costs by printing two records on a larger-sheet size

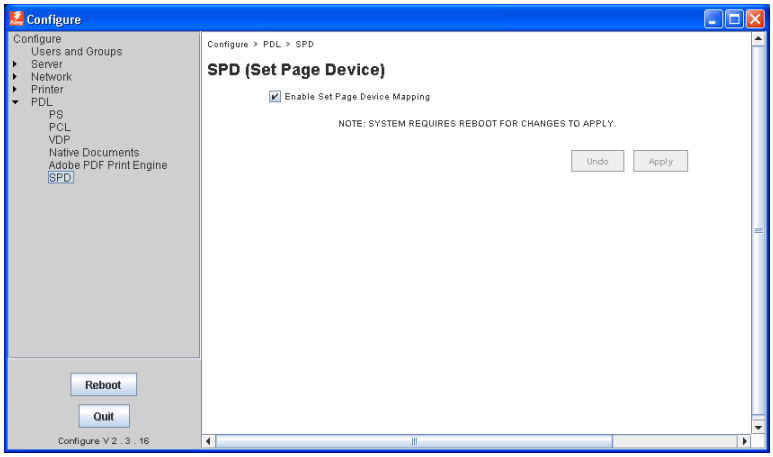
Transactional printing

Set page device support

The term set page device, also known as setpagedevice, refers to a group of PostScript commands that describe the printing characteristics of a file. This includes aspects such as paper attributes, finishing options, and number of copies. These commands are primarily used for specialised applications that require dynamic mixed media; or data-driven mixed media such as transactional applications that have a variable number of pages per document, where media requirements may be different for each page.

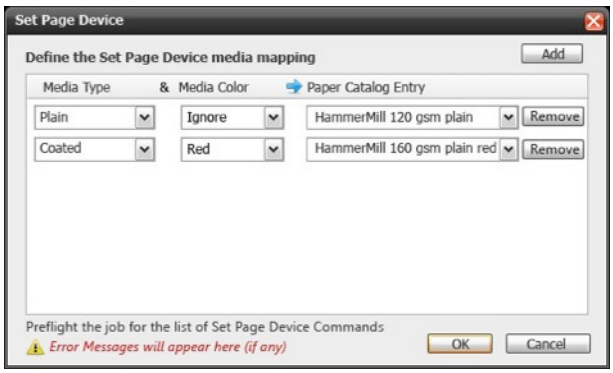
Set page device support enables Fiery servers to translate or map the paper attributes to the Fiery Paper Catalog, and finishing options to specific output bins. This eliminates the need for human intervention, saves time, increases productivity, and automates workflow.

Operators enable set page device in the Device Center so that it is selected in Job Presets, Virtual Printers, or Hot Folders for automation. Set page device commands are supported only in PostScript base languages (PS, VPS, VIPP) and are not device dependent.



Enabling set page device in Configure

Once set page device Media Mapping is activated, operators need to define the actual media and finishing mapping in Job Properties.



Defining media and finishing mapping in Job Properties

If print operators want to see and verify the embedded set page device commands in the PDL file, they can use Fiery Preflight to generate a report of the commands in the file.

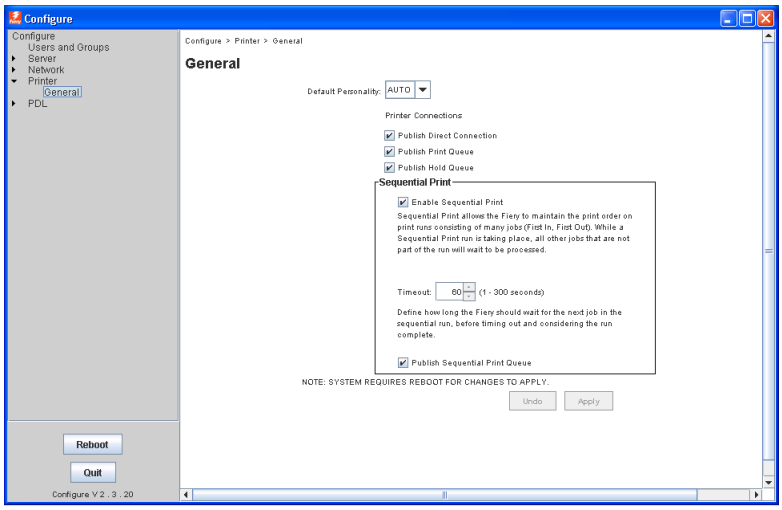
Benefits:

- Increases productivity with support for the user's existing workflow
- Automatically prints set page device embedded files without operator intervention, to save time and increase productivity

Sequential Printing

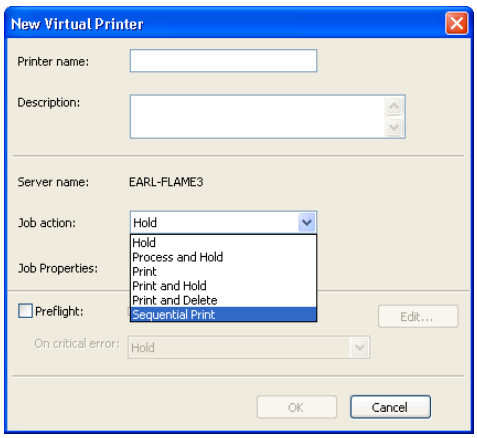
Sequential Printing guarantees that jobs print following one another in first-in, first-out printing order. For example, in transactional printing, jobs need to be printed and mailed in a certain order. Another example is chapters in a book. The Sequential Print queue feature guarantees that all jobs print in the order submitted, and prevents smaller jobs from skipping ahead of larger jobs that are still spooling.

Users enable a Sequential Print queue in the Configure Tool under Printer, General settings, as shown in the screenshot below. The configuration of a Sequential Print queue also requires the administrator to define a "time-out." The time-out defines how long the Fiery server should wait for the next job in the sequential run before timing out and considering the run complete.



Enable the Sequential Print queue in the Configure Tool.

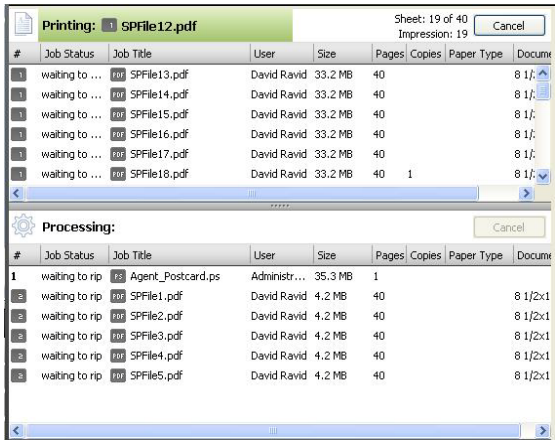
Once enabled, the system publishes a new default Print queue called Sequential Print. Users can add new Virtual Printers and Hot Folders using the Sequential Print queue, as shown in the screen shot below.



A new default print queue called Sequential Print is published.

Sequential Print jobs can be submitted through Hot Folders, Virtual Printers, Command WorkStation, or directly through a network protocol such as SMB, LPR, or Port 9100.

Sequential printing begins when the first file is spooled to the Sequential Print queue. Each Sequential Print run will display a unique group ID icon. When a Sequential Print run starts, other print jobs will wait to process until the Sequential Print run is completed.



Identification of Sequential Print jobs in Command WorkStation

While a Sequential Print run is taking place, the Fiery server will still allow the operator to select actions such as Rush Print, Process Next, Print Next, Suspend on Mismatch, Preview, Hold and Cancel. These actions will override and disrupt the Sequential Print run.

Benefit:

- Offers a way to ensure job production in a specific sequence, such as variable printing application for postal sort

Usability

Fiery servers have been recognised by the industry with multiple awards for their intuitive user interface, Fiery Command WorkStation. With Command WorkStation, local and remote users, from Mac and PC client workstations, can manage Fiery servers, do colour management, submit jobs, prepare and preview jobs before printing, and more. The visual, intuitive interface lets operators get jobs done faster and with fewer clicks, saving time and money. Updates to Command WorkStation are free, and can be downloaded by all Fiery server customers at efi.com/cws.

These are the standard configurations for each Fiery server platform and system version combination. ***For information on a specific Fiery server model's feature set, refer to the datasheet for that model, or ask your Fiery vendor about support for a specific feature.***

✓ Standard ⊙ Option - Not Available SFM = See product specific feature matrix

Feature name	QX^{100}	PRO^{90}	PRO^{80}	E^{200}/E^{300}	PRO^{80}BW	SP^{30}
Job and device management tools						
Fiery Command WorkStation	✓	✓	✓	✓	✓	✓
Fiery Ticker	✓	✓	✓	-	✓	✓
Fiery Go	✓	✓	✓	✓	✓	✓
Fiery WebTools	✓	✓	✓	✓	✓	✓
Fiery makeready solutions						
Fiery Impose	✓	✓	⊙	⊙	✓	⊙
Fiery Compose	✓	✓	⊙	SFM	✓	⊙
Fiery JobMaster	⊙	⊙	⊙	SFM	⊙	⊙
Job submission and settings						
Fiery driver	✓	✓	✓	✓	✓	✓
Fiery Job Properties	✓	✓	✓	✓	✓	✓
Fiery VUE	SFM	SFM	SFM	SFM	SFM	SFM
USB media server	✓	✓	✓	✓	✓	✓
Paper Catalog	✓	✓	✓	✓	✓	✓
Pad printing	✓	✓	✓	-	✓	✓
Fiery Remote Scan	✓	✓	✓	✓	✓	✓
Tools for technical support						
Fiery setup wizard	✓	✓	✓	✓	✓	✓
Fiery System Restore	✓	✓	✓	-	✓	✓
Fiery Clone Tool	-	-	-	✓	-	-
Fiery Configure	✓	✓	✓	✓	✓	✓
Fiery Integrated WorkStation	✓	✓	⊙	-	✓	⊙

Job and device management tools

Fiery Command WorkStation

Fiery Command WorkStation is the print job management interface for Fiery servers that makes printing more productive, powerful, and intuitive. It centralises job management, connects to all Fiery servers on the network, and improves productivity. The intuitive interface simplifies the prepatation of complex jobs, regardless of the level of experience of the operators. Full cross-platform Apple Mac and Microsoft™ Windows support maintains the functionality, look, and feel for all users.

The intuitive interface offers fully functional remote access, so multiple users get the same quality results as when they use a local connection to a Fiery server. The backward-compatible Fiery Command WorkStation also allows print providers to receive updates providing usability enhancements for current Fiery servers at no additional cost.

To download the latest version of Command WorkStation and get to know more about new features, visit efi.com/CWS.

The Fiery Extended Applications Package 4.3 includes the following versions of Fiery Command WorkStation and additional applications:

- Fiery Software Manager 3.0
  Automatically checks and downloads updates to all of the Fiery Extended Applications and other additional applications in the background.
- Fiery Command WorkStation 5.7
  Centralises job management and connects to all Fiery servers on the network for improved real-time productivity. The Fiery Command WorkStation download includes access to the following licensed prepress and makeready solutions: Fiery Impose, Fiery Compose, Fiery JobMaster, Fiery Graphic Arts Package, Premium Edition and Fiery Productivity Package,
- Fiery Hot Folders 3.7
  Automates job submission processes for repetitive tasks, saving time and reducing print errors with a simple drag-and-drop operation.
- Fiery Remote Scan 6.3
  Fiery Remote Scan is a TWAIN-compatible application that runs on Windows and Macintosh computers, allows clients to retrieve scans from a copier and save them to a computer, or import them directly into compatible applications.
- Fiery Printer Delete Utility 3.3
  Easily removes Fiery print drivers/files on Windows client workstations.

The Fiery Extended Applications Package 4.3 enables the installation of the following Fiery applications after installing the Fiery Software Manager on Windows client workstations or Windows-based Fiery servers:

- Fiery Integration Package 1.1
  Includes the latest version of Fiery JDF and the Fiery Integration Manager application that automatically updates the Fiery JDF version and Fiery API version on compatible Fiery servers. Administrators can configure the functionality of the Fiery JDF installed on the Fiery server. Users must select “Show additional features” in Fiery Software Manager Preferences to see the Fiery Integration Package listed for download.
- Fiery JobFlow
  Fiery JobFlow enables prepress workflow automation for streamlined job processing and printing. Start with the free Fiery JobFlow Base to manage workflows including PDF conversion, Fiery Preflight, image enhancement, document imposition; and flexible options for job submission, archiving, and output. Upgrade to the paid Fiery JobFlow version to add more intelligence with rules-based workflows, advanced preflight and PDF editing powered by Enfocus Pitstop, and cloud-based JobFlow approval process for maximum efficiency. Refer to the Fiery JobFlow section for more information.

New features in Fiery Extended Applications v4.3

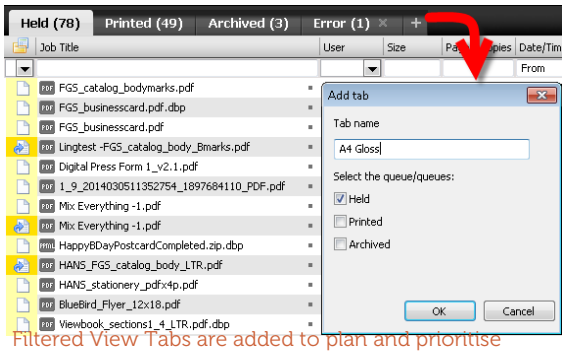
- Fiery Software Manager v3.0
  - Incremental updates
- Fiery Command WorkStation v5.7
  - Filtered View Tabs
  - Define date range in Filtered Views
  - Job Number
- Fiery makeready tools
  - Fiery Impose
    - Imposition automation based on User Defined Finish Size for Hot Folders
  - Fiery Compose and Fiery JobMaster
    - Convert to Grayscale
  - Fiery JobMaster
    - Auto Tabs
    - Advanced Page Numbering
- Fiery JDF v1.4
- Fiery API availability
- Extended language support
  - Korean
  - Traditional Chinese

Filtered View Tabs

Filtered View Tabs, a new productivity-boosting feature, increases production throughput.

Operators save Filtered View Tabs as additional tabs from the standard Held, Printed, and Archived tabs. This helps operators plan and prioritise print production by grouping jobs with similar characteristics and viewing Held and Printed jobs in a single tab.

With Filtered View Tabs, operators store their favourite search criteria in a separate tab that is dynamically refreshed as new jobs come in to the Fiery server.



Filtered View Tabs are added to plan and prioritise print production.

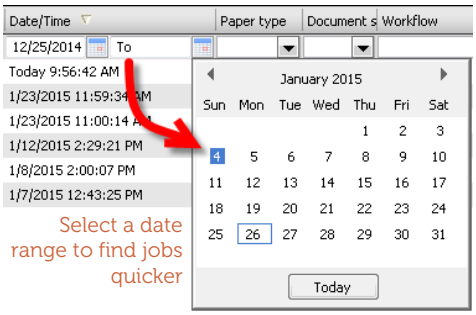
Users can create up to 10 tabs, in addition to the standard Held, Printed, and Archived tabs.

The feature can be useful in these and other scenarios:

- Create an "Error" tab to list all the jobs with an error job status, instead of displaying them mixed in with the printed jobs in the Printed tab.
- Create a tab called "Hammermill 105gsm coated" to filter just jobs that are ready to print, matching the media the operator has just loaded.
- An operator could create a tab called "Mike" that shows only the jobs under his username in both Held and Printed tabs.

Define date range in Filtered Views

Filtered Views allows users to select a date range in the Date/Time field so they can find print jobs faster and define new Filtered View Tabs.



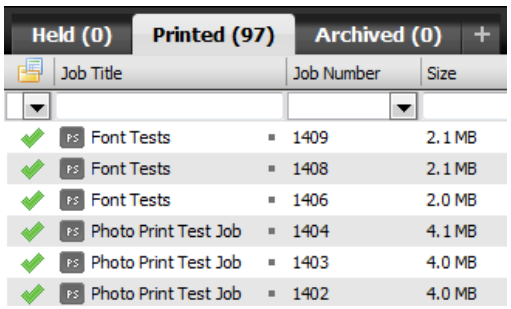
Select a date range to find jobs quicker

Job Number

The Job Number feature assigns a distinct number to jobs on the Fiery server for a quick job identification. The job number can be displayed on the columns of Held, Printed, or Archived queues; or in the Job Log.

The number assigned is a result of an abbreviation from a unique job-ID value.

This feature helps distinguish between jobs with the same name.



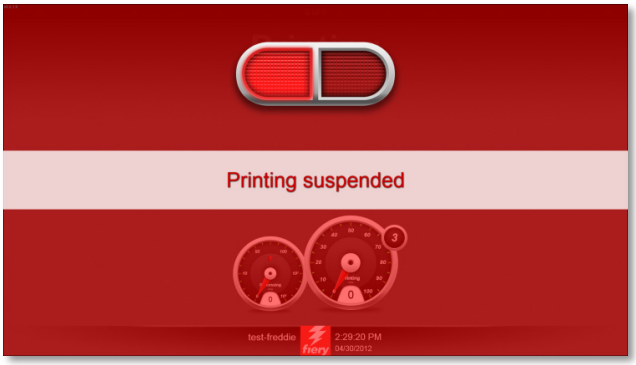
Job Number assigns a distinct number to easily differentiate jobs with the same job title.

Fiery Ticker

Fiery Ticker is a visual screensaver-type application that runs locally on a Fiery external server that is GUI enabled (also known as FACI enabled) using a monitor, keyboard and mouse.

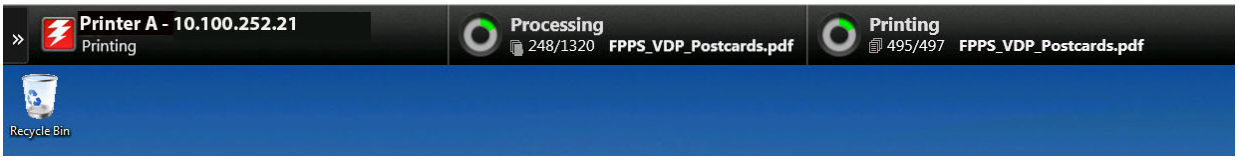
Fiery Ticker shows processing and printing speeds, pages remaining for the current job, error messages, and tray information. It is installed as part of the Fiery Extended Applications Package on external Fiery servers running System 9 and later. Fiery Ticker will run automatically, providing an at-a-glance view of the activity status of Fiery systems when an operator is not directly using the Fiery server. The operator can also initiate the Fiery Ticker view directly from the Command WorkStation.

Fiery Ticker progress



Fiery Ticker shows that printing was suspended.

Fiery Ticker integrates with the traditional Fiery blue bar on the top of the screen, adding quick access to Fiery applications such as Command WorkStation and Hot Folders, the ability to change the colour theme; and the capability to apply job and server management actions such as to cancel processing or printing, or server actions such as restarting the server.



Fiery Ticker bar showing Fiery server status at a glance

Fiery Ticker displays shortcuts to key Fiery applications and quick access to job management and server actions.

Benefits:

- Allows production monitoring from a distance, giving operators greater flexibility
- Gives operators a quick visual look at what the Fiery server is doing, allowing them to perform other tasks at the same time, and boosting productivity
- Increases operator productivity, offering quick access to the most frequently used Fiery applications and information

Fiery Go

Fiery Go allows operators to monitor and manage Fiery Driven™ printers using their smart phone or tablet devices from anywhere. Using Fiery Go, operators can perform multiple job actions such as importing, printing, deleting, previewing, and defining job attributes. The app sends alerts about consumable status, errors in the print job, paper jams, and more — so that operators can take immediate action.

Fiery Go provides more flexibility and allows operators to multitask for a more efficient workplace and higher productivity. The app is simple to use, takes just minutes to deploy, and is free.

To download Fiery Go and get additional information, visit Apple iTunes store at https://itunes.apple.com/us/app/fiery-go/id672206364?ls=1&mt=8 or Google play store at https://play.google.com/store/apps/details?id=com.efi.fierygo

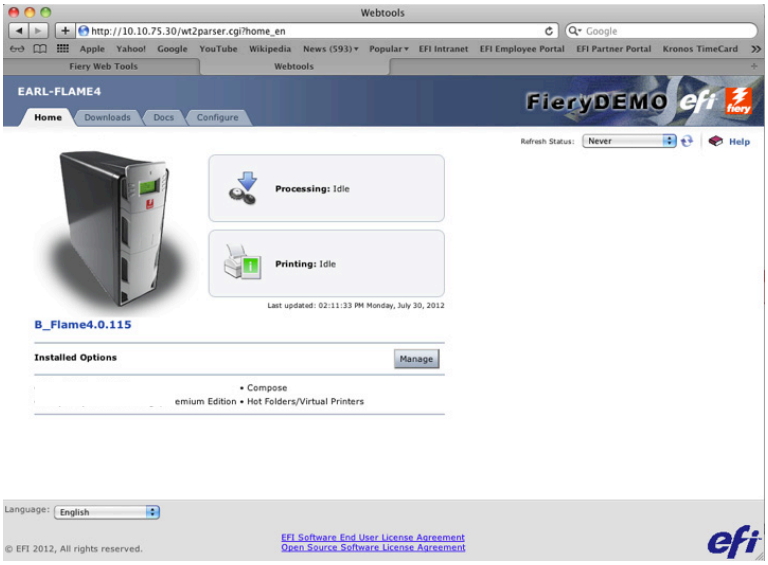
For additional information on technical requirements and a video tour, refer to http://fiery.efi.com/fierygo

Benefits:

- Allows operators to manage the jobs on Fiery servers from anywhere
- Offers the flexibility to multitask for a more efficient workplace

Fiery WebTools

Fiery WebTools™ delivers basic browser-based device monitoring and management functionality for users who don't need Command WorkStation sophistication. WebTools is hosted on the Fiery server and can be access with any web browser by entereing the Fiery server's IP address. It delivers pertinent information on print and printer status at any web-capable client workstation. It also allows users to do the following:



- Download — install print drivers and applications on the client workstation
- Access documents — user-authenticated access to jobs in mailboxes, ability to download print jobs to the Fiery server, and basic job management
- Configure — allows the administrator to configure the Fiery server

Benefits:

- Empowers administrators and operators with complete and flexible control, from complex production runs to individual print jobs
- Gives access to any client workstation without requiring additional software installation.

International support

Language support

Fiery servers running Fiery FS200 and FS200 Pro system software come localised for the following languages: English, French, Italian, German, Spanish, Brazilian Portuguese, Dutch, Russian, Polish, Turkish, Czech, Japanese, traditional Chinese, simplified Chinese, and Korean. Check your Fiery server's datasheet or ask your Fiery vendor for a list of the supported languages.

Dynamic Language Change

The Dynamic Language Change feature allows technicians and administrators to change the Microsoft Windows language without having to reload Windows. This feature saves time during the installation and Fiery setup process. Administrators and technicians can switch the language using the Fiery Configure application, and the new language is displayed after the Fiery server reboots.

In addition, this feature improves the behavior of Fiery Configure and other related applications in a mixed-language environment. Such environments could include using English Fiery software with systems of non-English client workstations The handling of double-byte file names is also improved, enabled by the addition of UTF-8 support. In Command WorkStation, users can specify language preferences after the installation.

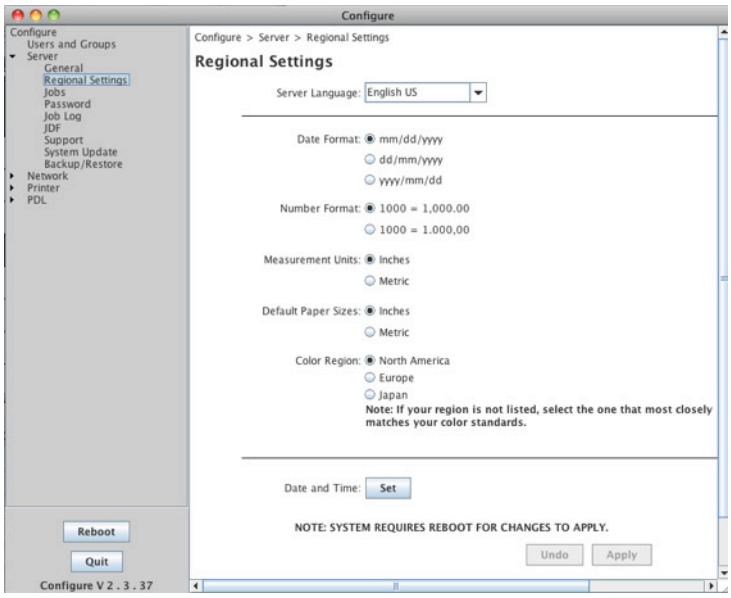
Benefits:

- Improves productivity at installation and in the initial setup
- Improves the display of mixed-language environments and double-byte characters in file names, such as those of the Chinese, Japanese, and Korean languages

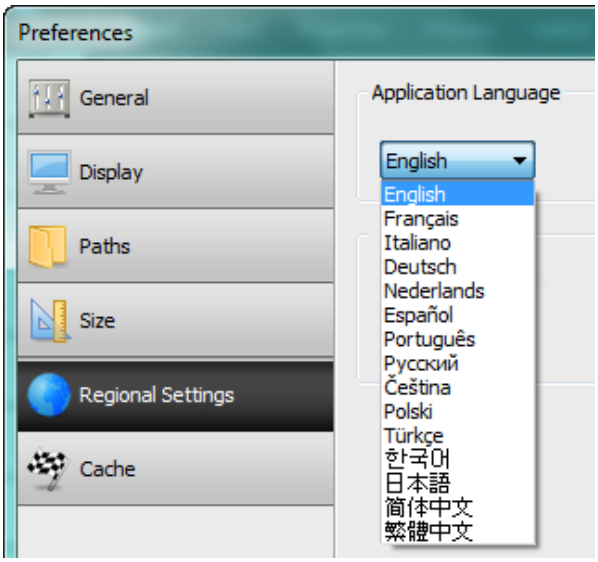
Improved international support

Users can change the language in Command WorkStation and Hot Folders — independent of the Fiery server. Each user can run Command WorkStation on a client workstation in the preferred language by simply changing it in Preferences.

The Command WorkStation print job interface can also display the appropriate format for date, numbers, units of measurement, default paper sizes, and colour profiles for European and Asian regions.

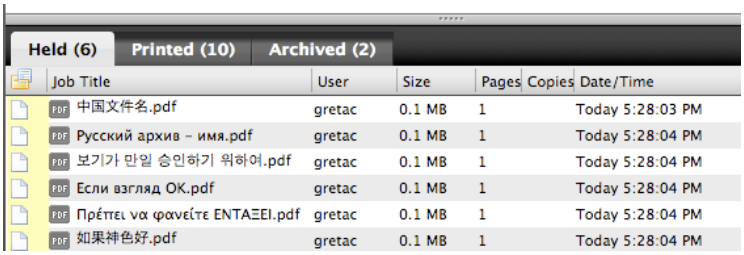


Configuring regional settings



Setting language preferences in Command WorkStation

Fiery servers now also recognise double-byte file names. Print providers printing files with double-byte characters, such as those used in Chinese, Korean, Japanese, Hebrew, Turkish, and Russian character sets, will now find their file names preserved correctly in Command WorkStation and the Job Log.



Double-byte file names on Command WorkStation

Benefits:

- Displays regional paper sizes and dates for a more user-friendly experience
- Improves productivity during first-time language setup of server and Command WorkStation client workstation
- Provides flexibility to use Command WorkStation in the user's preferred language, regardless of the Fiery server language
- Improves usability in double-byte font environments

Global Units

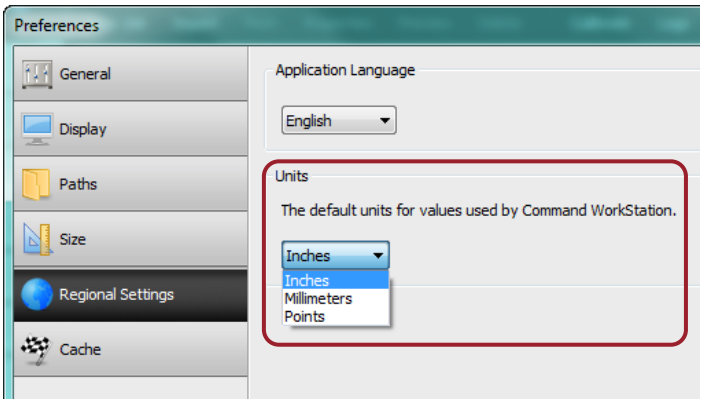
Global Units adds a new item to the Command WorkStation preferences, allowing the user to specify preferred units of measure as millimeters, inches, or points.

This setting then influences the default units displayed for all purchased software products in the Job Properties and Command WorkStation 5 user interface. Users can still override the selection inside Job Properties if they wish to specify a value in a different measurement unit. This feature also enforces consistency across unit boxes (For example, each control presents two integers and two decimal places, such as "12.05").

This feature is a Command WorkStation client-based selection only; each connected Command WorkStation client workstation could have different settings.

The areas affected by the Units preference include the following:

- Job Properties — all items that allow a measurement unit to be specified
- Image shift
- Custom page sizes
- Margins
- Trim
- Booklet Maker
- Impose
- JobMaster
- Compose
- Paper Catalog
- Tray alignment



Global Units preference setting in Command WorkStation

Benefit:

- Allows users to set their measurement preference in one place and have it reflected across the whole user experience

Fiery Workflow Suite: Makeready solutions

Producing manuals, calendars, personalised cards, business cards, newsletters, tickets and coupons, forms, and catalogues can help printers build their business and offer value-added services. These higher-profit jobs help printers differentiate services from competitors, and from what customers can do on their own.

But, in order to ensure a profitable and efficient operation, printers need a solution that's easy to use, adapts to their environment, and protects their profit margin by reducing errors and waste.

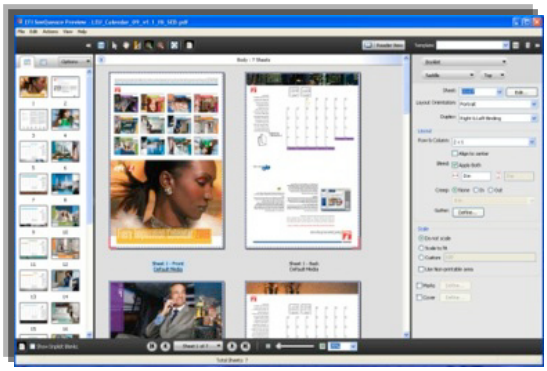
Fiery Workflow Suite includes the following Fiery makeready components: Fiery Impose, Fiery JobMaster and Fiery Compose. These plug-in applications put robust document imposition and composition tools under one visual interface, right at prepress user's fingertips, using the Fiery Command WorkStation interface users already work with.

Fiery makeready tools offer printers a flexible solution that can be available to either, the local press operators or the remote prepress specialists without the need of investing in a dedicated desktop client. The unified working space for all document layout simplifies labour-intensive document preparation activities and shortens job setup times of even the most complex jobs.

Fiery makeready solutions feature set comparison

Fiery makeready solutions	Fiery Impose	Fiery Compose	Fiery JobMaster
Fiery Command WorkStation plug-in (Mac/Windows)	✓	✓	✓
Centralised WYSISYG view	✓	✓	✓
Include Adobe Acrobat and Enfocus Pitstop	✓	✓	✓
Paper Catalog integration	✓	✓	✓
Job export for printing on any device	✓	✓	✓
Gangup and booklet imposition	✓		
Variable data printing support	✓		
Mixed finishing sets programming		✓	✓
Chapter creation		✓	✓
Tab insertion		✓	✓
Convert to grayscale		✓	✓
Scan image import and cleanup			✓
Advanced page numbering *(includes custom header, footer, and date stamping)*			✓
Page editing (masking, rotation, size)			✓
Bleed-edge tab creation			✓
Auto tabs			✓
Tab sets creation with images			✓
Tab conversion and insertion in one job			✓

Fiery Impose



Imposition errors in complex jobs are costly and drain time from tight production schedules. Fiery Impose streamlines and automates the imposition process, making production more efficient. The flexible Impose software option launches on Command WorkStation 5, so it can run on the user's desktop or locally at the Fiery server.

Fiery Impose is an intuitive and fully visual solution designed for production environments. It provides a flexible layout imposition solution that can be available to either, the local press specialists or the remote prepress operator without the need of investing in a dedicated desktop client.The robust toolset delivers a fast, automated approach to tedious, time-consuming tasks that leave operators open to errors. It extends the driver-based imposition capabilities offered by Booklet Maker and includes content-editing capabilities without modifying native files or adding/deleting pages. With Impose, variable data jobs with multiple records of varing length can be imposed in specific sequences to produce a variety of applications and materials, including booklets, books, coupons, and business cards. Plus, productivity features streamline workflow and leverage automation. Users can create unlimited user-definable imposition templates and can apply imposition templates from Job Properties, Virtual Printers, and Fiery JobFlow. Fiery Impose has a quick and easy way to view thumbnails and full-screen previews of actual page content in the imposition signature. Users are also able to manage the production of imposed jobs with mixed-media requirements. Impose offers page and sheet views of the imposed job.

Features of Fiery Impose:

The solution works with the Fiery Command WorkStation® 5 interface, and a wide array of imposition tasks can be done at the Fiery server or remotely on Windows or Macintosh clients.

- **Unlimited imposition templates:** Creates and saves custom templates for reuse, eliminating redundant tasks and reducing errors
- **User Defined Finish Size:** Honors the designer's intent by automatically detecting the trim and bleed boxes defined in the source document
- **Document assembly and edit:** Allows viewing of thumbnails and full-screen previews; adds and deletes pages; offers last-minute text and image editing
- **VDP workflows:** Includes raster preview, sample proof printing, and control strip for quick identification of spoiled sheets
- **Unique cut and stack:** Enables users to start cutting, sorting, and packing before jobs finish printing
- **PDF archive:** Archives imposed jobs as PDF files for easier reprinting
- **Gangup styles:** Has traditional unique and repeat, and other gangup styles available for VDP and non-VDP jobs
- **Nonprintable area indicator:** Detects overlap of image and nonprintable area to adjust layout before RIPping
- **Define scaling factor:** Provides increased control over scaling options
- **Delivery options:** Changes the output sequence to optimise the finishing process
- **Cover setup:** Changes pagination dynamically by inserting the required blank pages for front and back cover inside pages
- **Mixed Media:** Specifies media assignment from interface with visual reference to final content, reducing errors
- **Paper Catalog definition:** Defines custom media and adds them to the Paper Catalog to make media specification faster and easier

- **Booklet Maker support:** Supports driver-based imposition through Booklet Maker, allowing jobs to move between Impose and Booklet Maker
- **Measurement tool:** Determines the distance between two reference points on a sheet
- **Creep adjustment:** Adjusts for creep to deliver straight, aligned text throughout a multipage document
- **Customizable trim and fold marks:** Defines the colour, length, width, and type of trim and fold marks independently
- **Add, delete, and duplicate sheets:** Inserts custom text for blank pages and adds, deletes, or duplicates imposed images without going back to the source document
- **Multi-up support:** Offers imposition styles of up to 25 rows and 25 columns to optimise paper use for small items. Saves on click charges with page double-up feature

For additional information on Fiery Impose, visit efi.com/fieryimpose.

Benefits:

- Provides a flexible makeready solution that can be available to either, the local press operators or the remote prepress specialists without the need of investing in a dedicated desktop client.
- Reduces print errors and saves significant time with job previews of printed output
- Minimises the complexity of imposing VDP documents
- Includes booklet imposition and mixed-media settings preview for a more accurate softproof, ensuring imposed jobs are printed correctly the first time
- Handles last-minute text and image editing with powerful PDF editing capabilities
- Simplifies page merging with drag-and-drop ease

User Defined Finish Size

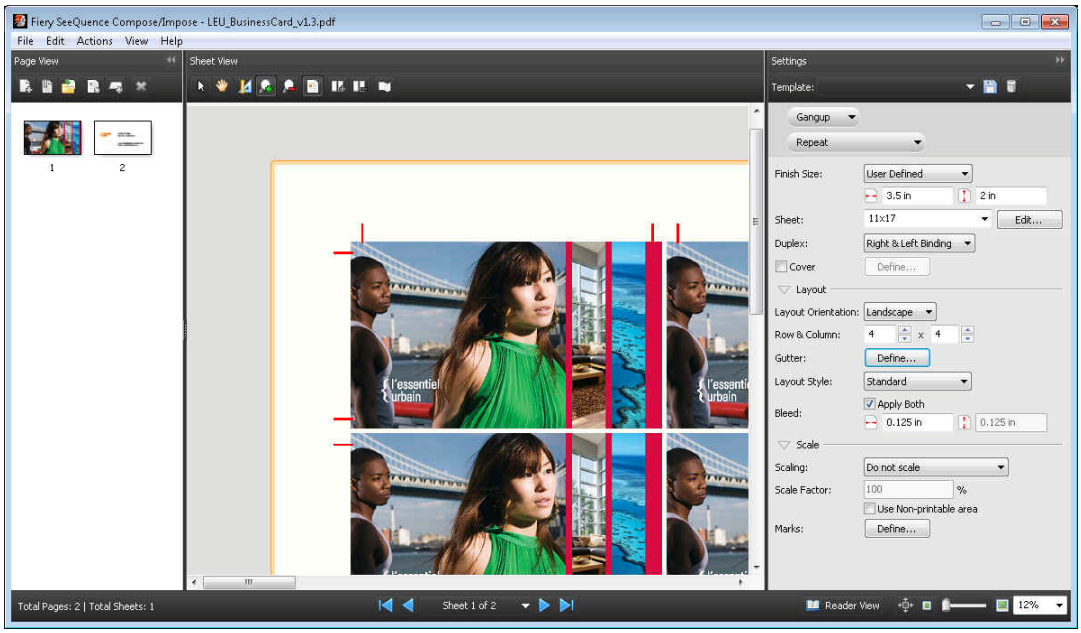
Designers typically design documents to be printed based on their final finished, or trimmed, size. This finish size is often smaller than the sheet size on which they are printed. The PDF definition of the final finish size is the "trim box." In addition, designers may define content to bleed beyond the final finished size. This bleed box value gives the operator and finishing equipment some latitude in finishing the document to prevent unexpected white space between the specified finish size and actual trimmed size. The imposition of the job, including placement of trim marks, is based on the finish size of the job.

Previously, operators had to set up files for imposition by using Fiery Impose bleed values to set the finish size. Additionally, operators or designers sometimes needed to modify original files and define a custom page size to define a bleed, which affected the positioning of content on the page.

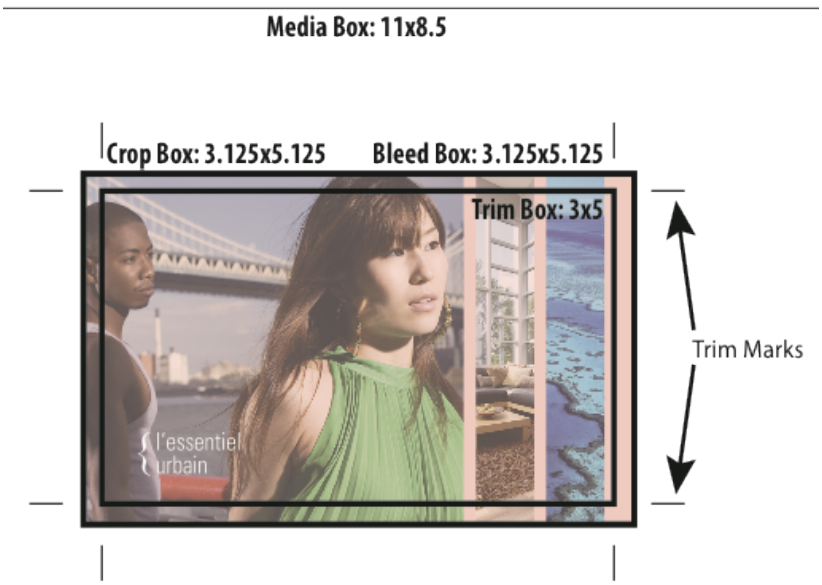
With Command WorkStation, Fiery Impose takes advantage of the designer-defined trim box and bleed box information incorporated in the file. The operator can select "User Defined" as the Finish Size setting. This maps the trim box value in the file to the Impose Finish Size setting. The system also reads and applies the bleed value defined in the document.

Support of designer-defined trim and bleed definitions means the print operator does not have to spend time determining the finish size and bleed size in Impose, or make modifications to the original file to impose and print the file. With the User Defined Finish Size feature, Impose automatically imposes the job based on the designers' finish size definition.

Additionally, Impose can accurately impose and print jobs composed of several PDF files with unique trim and bleed sizes, and page (media box) sizes.



User Defined Finish Size controls



PDF definitions for bleed and trim marks

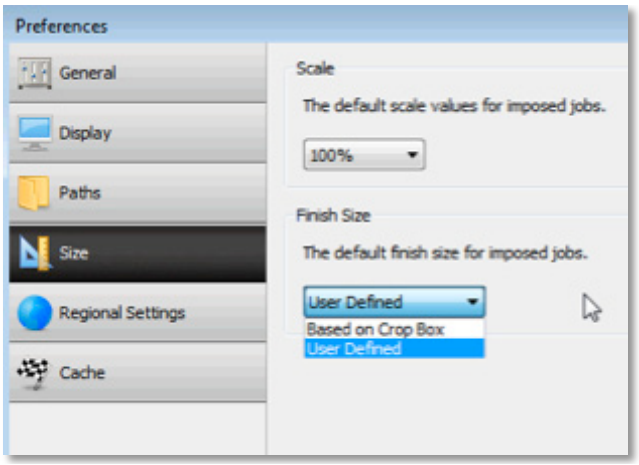
Benefits:

- Improves usability, as the designer defines the desired trim and bleed sizes in the document. Plus, imposition jobs can be done from files containing different trim and bleed sizes
- Eliminates the need to modify original documents for faster imposition job setup and a tighter focus on production
- Saves time and money by reducing miscommunication and print errors

User Defined Finish Size preference

With the User Defined Finish Size preference in Fiery Impose, operators who always want to impose jobs based on the user-defined finish size (trim box), rather than on the default crop box, have a way to specify either crop box or user-defined finish size for all jobs opened in Impose. This gives users two options for imposing jobs: the crop box and the trim box. The new preference allows operators to choose a default imposition method.

User Defined Finish Size is compatible with Fiery System 9 Release 2 and higher.



Choose the defaults for Fiery Impose.

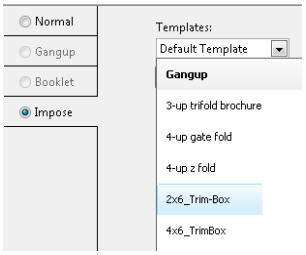
Benefits:

- Provides additional flexibility
- Allows the user to select a setting in Preferences and maintain that setting, never having to change it in Impose again

User Defined Finish Size workflow automation

The User Defined Finished Size feature in Fiery Impose honors the trim-box finish option in PDF files. With this enhancement, Fiery FS200 Pro users can create Fiery Impose templates with User Defined Finished Size settings, and use those templates in any job submission method or workflows including Fiery Hot Folders, Virtual Printers, Job Properties, Server Presets, and Fiery JobFlow.

The Fiery Impose license must be activated at the client workstation and/or at the Fiery FS200 Pro (Windows-based) server when setting up a workflow with User Defined Finish Size.



Select imposition based on trim box from Fiery Job Properties.

The following table explains where the Fiery Impose license needs to be activated:

	License activation		Supported workflow				
Fiery system version	Server license	Client license	Job Properties	Server Presets	Virtual Printers	Hot Folders	Fiery JobFlow
FS200 Pro	✓	✓	S (*1) (*3)	S (*3)	S (*2)	S (*3)	S
	✓		S (*1)	S	S	N/S	S
		✓	N/S	N/S	N/S	S (*3)	S
			N/S	N/S	N/S	N/S	N/S
FS200, FS150 Pro, and earlier Fiery servers	✓	✓	N/S	N/S	N/S	S (*3)	S
	✓		N/S	N/S	N/S	N/S	N/S
		✓	N/S	N/S	N/S	S (*3)	S
			N/S	N/S	N/S	N/S	N/S
	✓= License required		S = Supported - N/S= Not supported				

- (*1): When the User Defined Finished Size template is created on the Fiery server, a Server Preset must be created in order to have access from Job Properties.
- (*2): Virtual Printer workflow is only available if the User Defined Finish Size template is created on the Fiery server.
- (*3): When Job Properties, Server Presets, and Hot Folders workflows based on User Defined Finish Size are set up on a client workstation, these workflows can only be accessed on that client workstation.

Benefit:

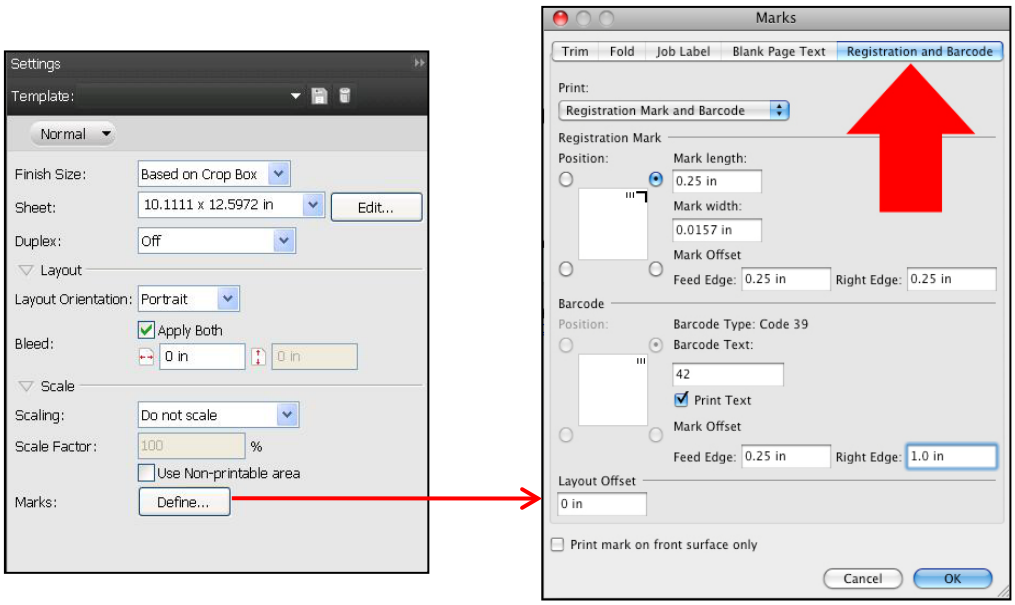
- Create new custom imposition templates for future reuse, to eliminate redundant tasks and reduce errors.

Duplo support for barcode and registration marks

Fiery servers support Duplo USA's DC-615, DC645, and DC745 offline finishers. Fiery servers can print preconfigured barcode and registration marks in the upper right corner of a sheet. The barcodes and registration marks instruct the Duplo finisher on how to position its blades, cutters, and creasers to finish the document appropriately. This feature also allows operators to offset the sheet contents away from the Duplo registration marks to prevent the trimming of job content.

Duplo DC-645 Slitter/Cutter/Creaser

Barcode reader automatically sets up preprogrammed jobs.



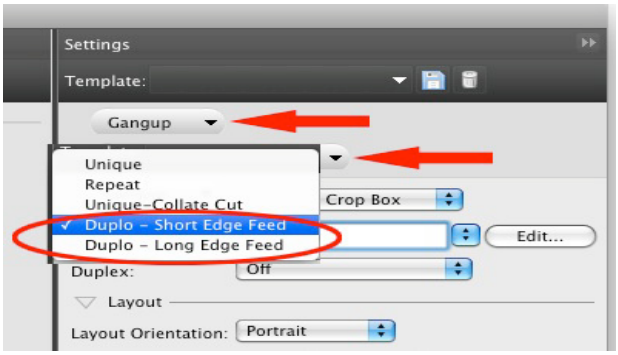
Impose settings include definition of registration mark and barcode.

Benefits:

- Increases productivity by working with Duplo's industry-standard finishers
- Saves times and minimises waste with automatic positioning of Duplo finishers

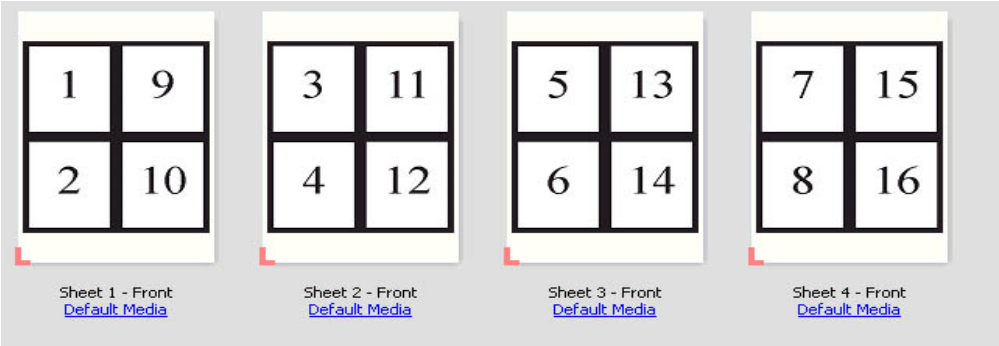
Duplo imposition layout options

The new Duplo imposition layouts are intended for post-processing with a Duplo offline finisher. The new layouts handle the PDF formats most commonly finished with a Duplo offline finisher.

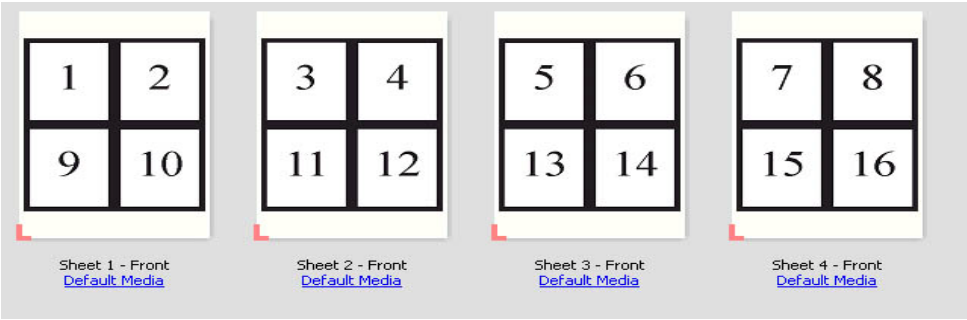


The new selections are Duplo long-edge and Duplo short-edge impositions for non-VDP PDF and PostScript files.

The Duplo — short-edge feed imposition layout orders pages sheetwise in line with columns or rows perpendicular to the shortest sheet edge. This optimises page layout to fill the rows and columns on a sheet.



The Duplo — long-edge feed imposition layout orders pages sheetwise in line with columns or rows perpendicular to the longest sheet edge,. This optimises page layout to fill the rows and columns on a sheet.



Benefit:

- Extends Duplo offline finisher support to non-VDP jobs

25x25 gangup

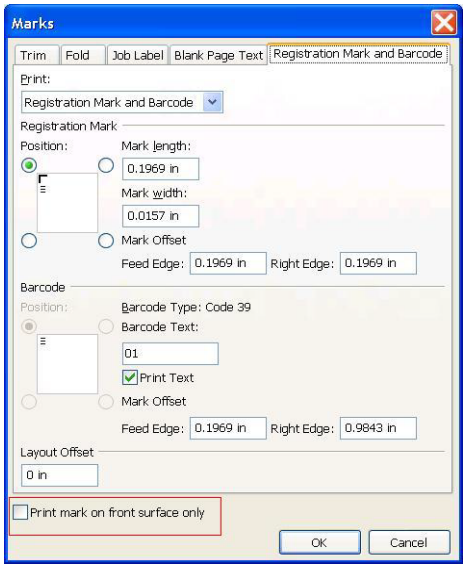
The Fiery Impose gangup row and column repeat limit has been extended from 10x10 to 25x25. An added wireframe preview provides fast previews for gangups over 10x10. Printers often request this feature, especially for printing stamps, tickets, and thumbnails on one page.

Benefit:

- Saves paper and click count with higher gangup repeats on one larger sheet of paper

Print marks on front surface only

The checkbox "Print marks on front surface only" (located at the bottom of the "Marks" window of Fiery Impose) prevents the printing of trim and fold marks, job labels, and blank page text on the back of a page when shops are using duplex printing. Because trim marks are necessary only on one side of a page, this feature prevents unwanted marks on the second side of a duplex page.



Setting up print marks for surface only

Benefit:

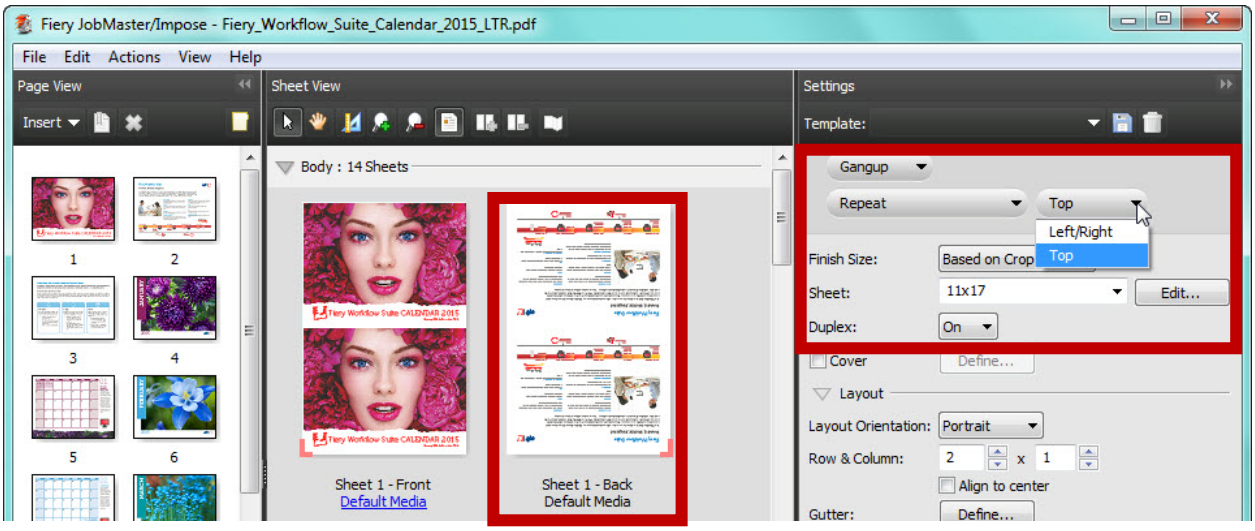
- Prevents unwanted marks in the event that the marks don't line up exactly on both sides of a duplex page

Gangup finish-edge selection

Applications such as wall calendars and some financial statements that are imposed for top-bound finishing, require all back pages to rotate 180 degrees in order to show the correct page orientation for the finished spread.

Before, designers could manually rotate the back page for individual sheets when producing the file to print. This new feature makes this rotation automatic for all back pages in a gangup imposition. Just choose the new "Top" binding edge selection when imposing a job with a duplex gangup-repeat, unique-collate cut ,or Duplo styles.

Calendars using gangup repeat imposition style and top binging edge



Gangup finish-edge selection is enabled when choosing Gangup, Repeat, and Duplex: On settings. See how the pages in the back of sheet 1 were rotated 180 degrees.

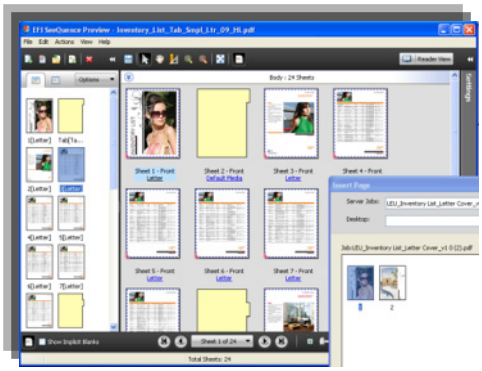
Benefits:

- Improves operator productivity and throughput when using preset-based workflows such as Hot Folders, Virtual Printers, and JobFlow
- The settings can be saved as a Fiery Impose template so that operators can automate page rotations for upcoming regular or VDP jobs that require duplex with top finished edge

Note: if you own Fiery Impose, free elearning online courses are included with the product (English only). If you don't have the certificate that came with the product, fill out a form at fiery.efi.com/elearning-bundles to receive a free code to access the courses.

Fiery Compose

Fiery Compose provides centralised document assembly, page-level ticketing, content preview, and powerful editing features including a tab creation interface. The Compose is designed to be the core toolset that operators use to prepare documents for printing. Because Compose launches from Command WorkStation 5, it is flexible enough to run on the user's desktop in prepress or locally at the Fiery server.



Compose provides Fiery servers with an advanced preview and editing environment. Its wide range of sophisticated document composition tools and advanced visual user interface improve document verification, speed up composition, and enable less experienced operators to perform complex document functions. In addition, sophisticated tools with familiar Fiery user interfaces reduce training requirements and increase the operator's resource base.

From a single integrated window, operators manage tabs and specify mixed media, taking advantage of the fully automated digital printing process to produce finished documents with minimal operator intervention. Integration with the Paper Catalog's centralised paper warehouse database also makes it intuitive for operators to apply media specifications on a per-page or per-chapter basis, and improves paper management across the entire production environment.

For flexible document assembly, users can drag and drop files from the desktop and select pages from jobs anywhere on the network, or from the Fiery job list. Operators can use a unique working space for all document layout tasks by adding Fiery Impose software. With it, users can incorporate visual and intuitive document imposition. Impose and Compose work together to simplify labour-intensive document preparation activities and shorten job setup times of even the most complex jobs.

Compose provides centralised document assembly, page content preview and editing. Functionality includes:

- **Page view:** Simplifies document setup and navigation in large jobs. Enables users to view entire document — including inserts, tabs, and chapter starts — and visually confirms media colour information.
- **Page-level ticketing:** Processes complex documents with a visual content display, decreasing potential for error.
- **Chapter definition:** Offers quick and easy setup of page ranges within documents, and application of media attributes for page ranges.
- **Document navigation:** Simplifies document setup and navigation in large jobs. Enables users to view entire document, including inserts, tabs, and chapter starts; and visually confirms media colour information.
- **Preview modes:** Reviews different page layout output modes and verifies complex document pages quickly, easily, and accurately.
- **Tab Printing:** Provides intuitive tab printing functionality, allowing tabs to be inserted, added, or removed. Offers visual tab text editing. Manages up to 100 tabs, and tab banks of up to 15 cuts.
- **Direct PDF insertion:** Provides simple merging of PDF pages within documents or between documents.
- **Late-stage PDF editing:** Integrates Enfocus PitStop and Adobe Acrobat for quick and easy last-minute PDF changes.
- **Convert to Grayscale:** Provides a way to easily specify any page or sheet surface to print in black and white during the makeready stage and save on click charges.
- **Mixed finishing sets:** Streamlines the assembly process to produce a fully finished job. With inline finishers attached to the print engine such as stapler, hole punch, or z-fold; users can select multiple options applied to subsets in a job.
- **Fiery Compose supports the following job formats:**
  - *PDF*
  - *PostScript*
  - *VDP*

For additional information on Fiery Compose, visit efi.com/fierycompose.

Benefits:

- Provides a flexible makeready solution that can be available to either, the local press operators or the remote prepress specialists without the need of investing in a dedicated desktop client
- Processes complex documents with a visual job display, decreasing the potential for error
- Reduces training requirements with sophisticated tools using a familiar Fiery user interface
- Enables quick and easy setup of page ranges and chapter definitions
- Simplifies page merging with drag-and-drop ease
- Allows users to create tabs and specify mixed media from a single integrated window, and also produces finished documents with minimal operator intervention.

Note: if you own Fiery Compose, free elearning online courses are included with the product (English only). If you don't have the certificate that came with the product, fill out a form at fiery.efi.com/elearning-bundles to receive a free code to access the courses.

Fiery JobMaster

Fiery JobMaster provides advanced PDF-based makeready functions. In addition to all features included in Fiery Compose, Fiery JobMaster offers fully visual tab insertion and design, advanced page numbering, scanning, and powerful late-stage editing features. Users launch Fiery JobMaster by selecting a job from the Fiery Command WorkStation user interface. It can run on a PC or Mac client workstation in a prepress department, or locally at the Fiery server. Users can add Fiery Impose to integrate all makeready tasks in a single application. Built with the familiar Fiery user interface, operators can be up and running quickly,

producing high-value jobs. Fiery JobMaster allows users to easily prepare complex jobs inside a single application and comes with Adobe Acrobat Pro and Enfocus PitStop Edit.

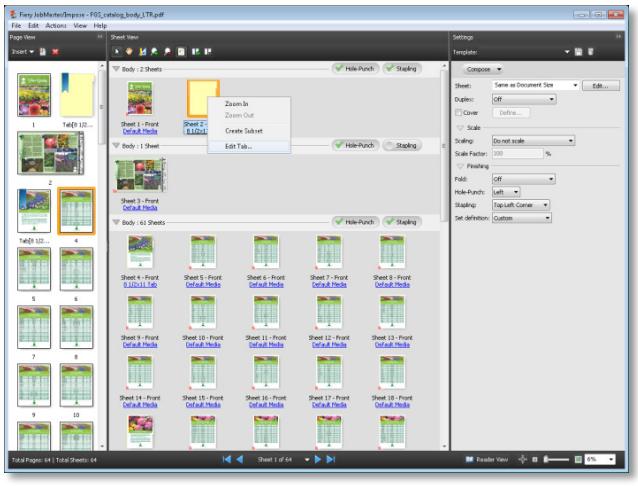
Additional features in Fiery JobMaster:

- **Advanced tab creation with visual content preview:** The preview changes dynamically as users specify tab ear settings and content that can include images, colour background, logos, and formatted text.
- **Integration of hard-copy pages:** Users can de-skew and de-speckle scanned documents; edit images for brightness, contrast, and sharpness; make pages fit to the desired media size for a uniform appearance on every page; mask out staples, hole-punch marks, or page content.
- **Page editing:** Operators can redefine crop and trim box sizes and mask unwanted content such as preexisting page numbers. Edits are non-destructive and can be removed or modified at any time before production.
- **Page numbering and stamping:** JobMaster adds page numbers anywhere on the page, can skip page numbers for inserts and tabs, and includes page-number templates for predefined numbering styles.

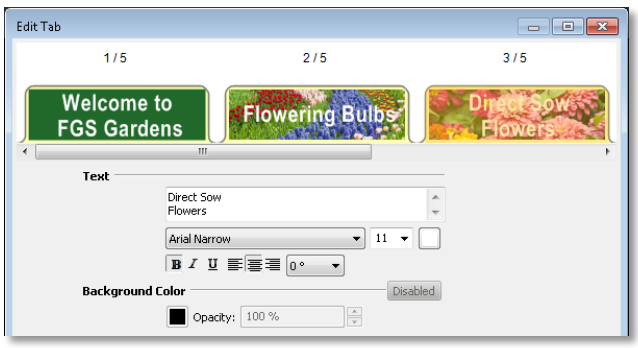
Benefits:

- Provides a makeready solution that is fully integrated with Fiery Impose into the existing Fiery workflow
- Provides a flexible makeready solution that can be available to either, the local press operators or the remote prepress operator without the need of investing in a dedicated desktop client
- Offers the ability to edit a job by adding scanned pages and visual tabs, and by removing and adding page numbers
- Allows operators to cost-effectively produce complex jobs efficiently and inline
- Supports both black-and-white and colour workflows

For more information on Fiery JobMaster, please visit efi.com/FieryJobMaster.



Fiery JobMaster visual interface



Fiery JobMaster tab editor interface

Bleed Edge Tabs

The Bleed Edge Tabs feature in Fiery JobMaster allows users to produce fully finished long documents with well-defined sections, without the need to use special tab media.

This feature automatically applies bleed-edge tab settings to all pages in the chapter, incrementing the tab position for each successive chapter. In order for the tab ears to show the colour at the edge of the page, the finished job needs to be trimmed at the edge of the book.

Benefits:

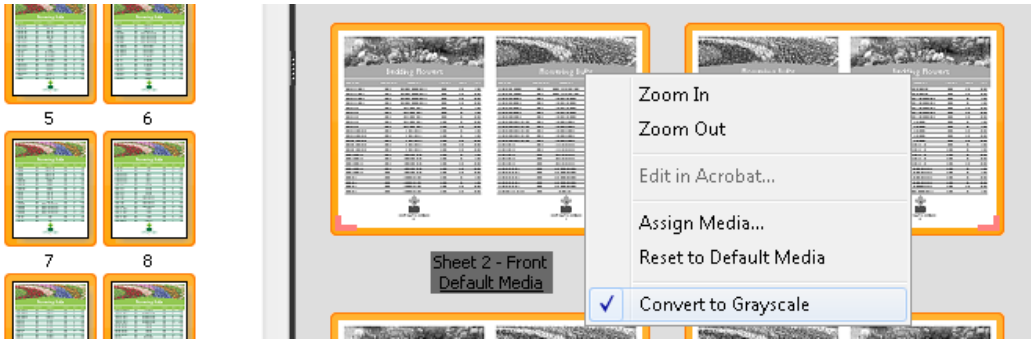
- Helps produce fully finished jobs with well-defined sections, without the use of special tab media
- Offers printers a new and different type of value-added application to provide their customers

Convert to Grayscale

This feature is available on both Fiery Compose and Fiery JobMaster.

Operators can easily specify any page or sheet surface to print in black and white during the makeready stage.

The Convert to Grayscale feature saves on click charges and easily fulfills the designer's intent for a printed piece. Applying grayscale conversion at the sheet level ensures click savings for imposed documents such us booklets or gangups.



Convert to Grayscale takes place either in the Page View or Sheet View panels. Once the selected pages or sheet surfaces are converted, changes are reflected in the Sheet View panel.

The conversion is non-destructive. This means that once the job has been saved back to the Held queue, operators can apply further edits to reverse the conversion if necessary.

This feature is useful in these example scenarios:

- A long manual that is heavy on text has blue hyperlinks throughout the document. The operator can turn all body sheets into grayscale in Sheet View after laying out the booklet to save on clicks.
- A customer wants the back of her business card printed in black and white. The operator selects the back page in the Page View panel and converts it to grayscale.

Auto Tabs

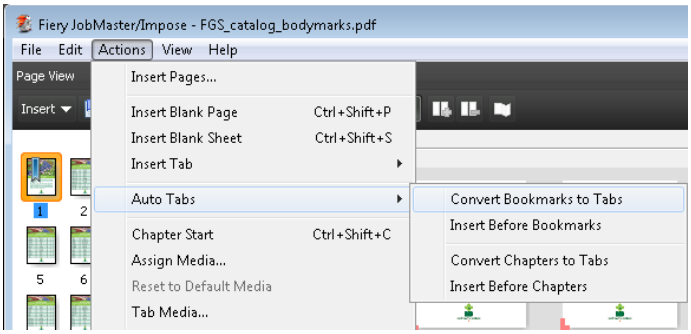
The Auto Tabs feature creates tab sheets, places them in the right location, and populates the tab ear content automatically by using text from the bookmark links of PDF documents.

It streamlines makeready and reduces errors that can happen during manual assembly of tab jobs.

With Auto Tabs, users can also reduce the time to prepare a tab job from 20 to 50 minutes to less than 5 minutes.

Auto Tabs is especially valuable for long documents that require well-defined chapters or sections, such as training manuals, reports, or course packs.

This feature is useful in these scenarios and more:



Auto Tabs uses text from bookmark links in the PDF, or places tabs automatically at the chapter start page

- The print buyer provides a PDF file for each section of a training manual. The operator combines those files into one document using Adobe Acrobat, which merges each section into a single PDF file and automatically creates bookmarks at the beginning of each section. Bookmarks retain the names of their PDF files.
- The print buyer includes all tab information in the PDF print file, rather than creating tab instructions and tab ear content in a separate document.

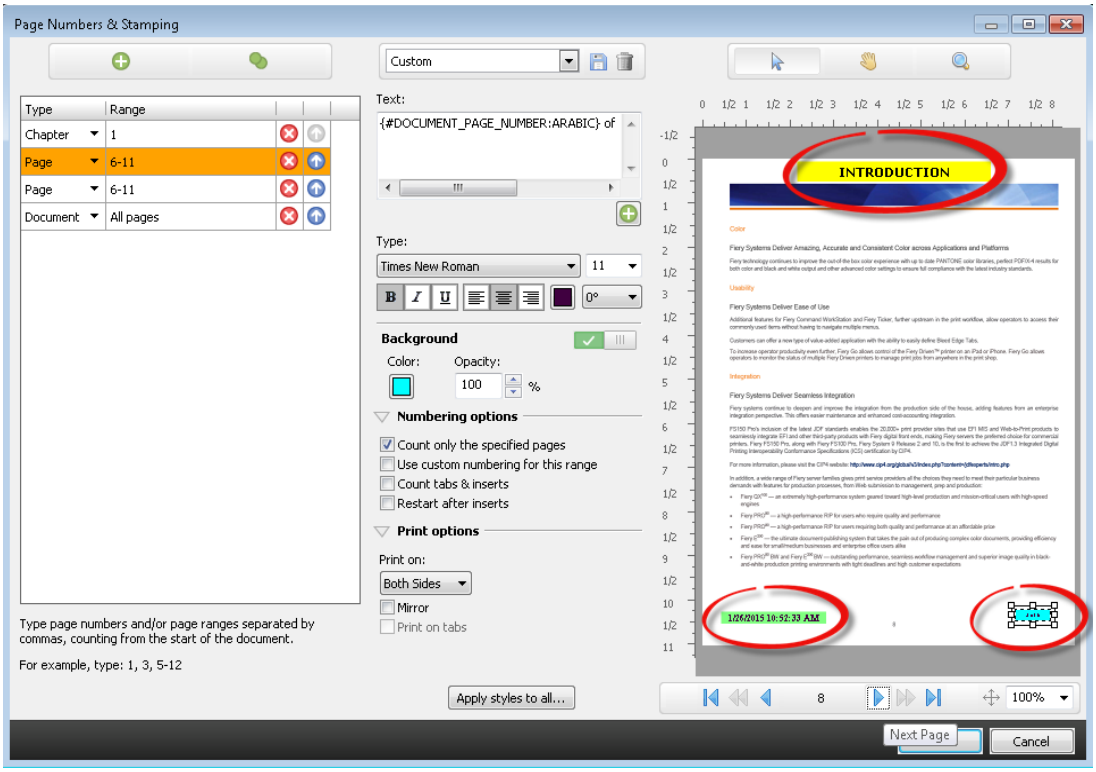
Advanced Page Numbering

Makeready of long, complex jobs requires the ability to apply different page number sequences or formats to the multiple sections within a document. The expanded page numbering tool in JobMaster includes advanced capabilities to cater to these demands.

Advanced Page Numbering offers ease of use and flexibility to meet various document numbering requirements in long documents. It allows users to create unique numbering sequences for one or multiple sections, using a combination of custom text, formats, and macros.

Useful scenarios for this feature include:

- A technical manual contains an appendix and a main section, each requiring a different format. An appendix might call for Roman numerals (i, ii, iii), while the main section uses Arabic numerals (1, 2, 3). With Advanced Page Numbering all page numbering formats can be defined at once.
- A job requires restarting page numbering because of inserts and dividers that should not be numbered. Advanced Page Numbering can automatically detect chapter starts to skip and restart numbering.
- Another job needs all pages to display the chapter name on top as a header, and the page number on the bottom of the page. Advanced Page Numbering can add both macros to the same page without returning to the native files to add chapter names.



More than one page-numbering sequence can be applied to a single page.

Note: if you own Fiery JobMaster, free elearning online courses are included with the product (English only). If you don't have the certificate that came with the product, fill out a form at fiery.efi.com/elearning-bundles to receive a free code to access the courses.

Job submission and settings

Fiery driver

The ability to easily and accurately submit jobs to the Fiery server is one of the most important features for users. The Fiery driver provides a printing interface that offers a simplified user experience, highlighting the basic printing options most commonly required in an office environment. With the Fiery driver, features and functionality are consistent across different Windows and Mac operating systems, as well as in the Job Properties user interface.

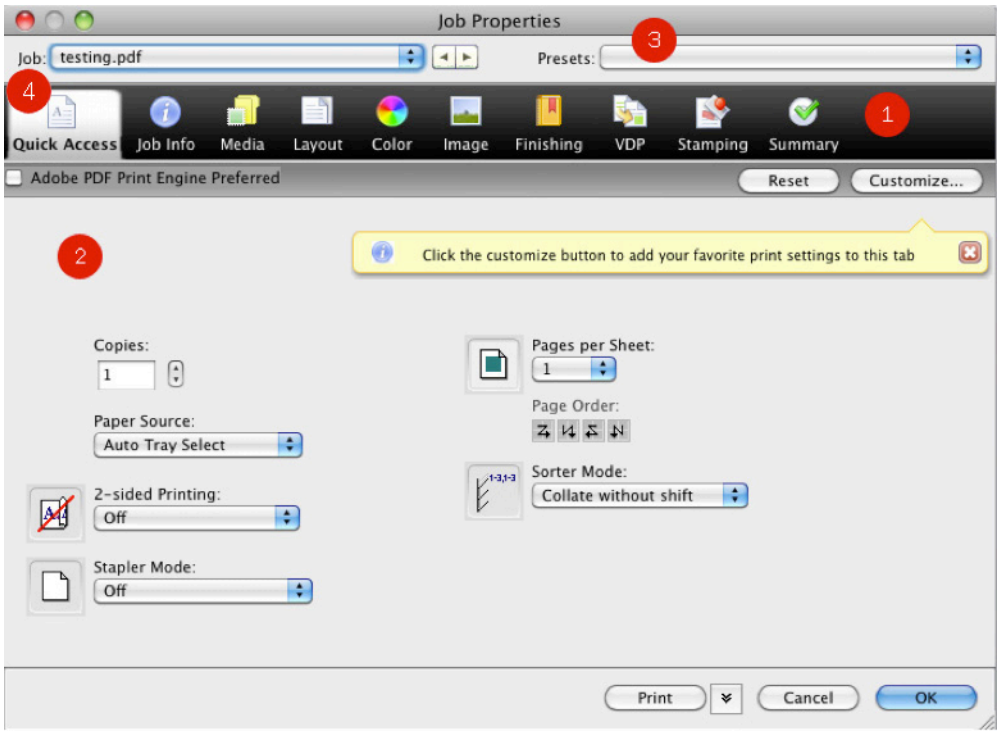
User interface

The simple-to-use user interface (UI) highlights the basic printing options most commonly used in a distributed print environment. For the more advanced users, the printing options are categorised based on an operator-centric model.

Fiery server tabs allow easier navigation of all the available settings.

The Job Properties tabs are for the most frequently used printing functions. The customizable tabs enables users to determine their preferred predefined PPD (PostScript Printer Description) options.

- Clicking on any of the icon tabs (1) displays the options for that PPD category in the main active area (2). Up to eight options can be displayed at any time. When a category has more than eight options, a scroll bar is displayed to show all the available print options.



- Presets (3) allow the user to save predefined print settings as a retrievable template. The templates allow users to define settings based their own common printing scenarios. Administrators can choose to create Server Presets and share those settings across Fiery users.
- Customizable quick access tab (4) gives the user the ability to customise this tab so they can quickly and easily access the most commonly used PPD settings in their particular workflows.
- Available for Windows and Mac platforms, Fiery drivers provide consistency across all supported platforms.

Section 508 usability

The driver is designed to be Section 508 compliant. Navigation can be done through the tab key, and selection of different tabs can be through Alt + number, which is displayed with a mouse-over.

(NOTE: Section 508 was enacted in the United States to eliminate barriers in information technology, and to make new opportunities available for disabled people.)

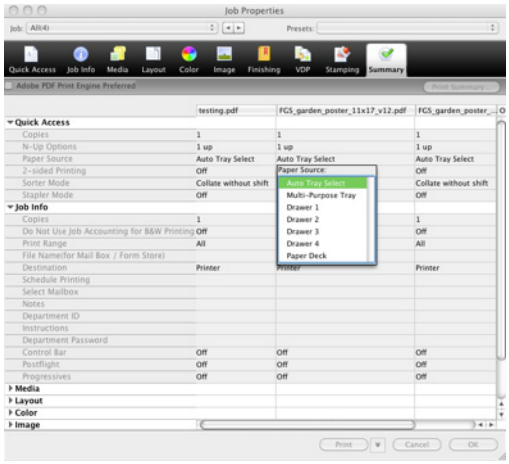
Benefits:

- The interface is extremely intuitive, with automation capabilities that reduce training and increase productivity
- The end user experience speeds up the process of job setup and submission
- It is simple to use, with UI suited for both types of end users:
  - For the user in a distributed print environment, the interface offers basic printing options with more intuitive and faster access to PPD options
  - For the skilled operator, the interface provides visual feedback of the output when selecting advanced settings such as Mixed Media and Booklet Maker
- Full bidirectional capability dynamically shows connected engine options and status feedback. This feature also eliminates the need for the user to walk up to the printer to check engine status

Fiery Job Properties

Fiery applications use the Job Properties module to set attributes for jobs. While behavior between modules varies, depending on the intended workflow (configuring a Virtual Printer, creating PostScript with a print driver, setting attributes on a job already on the Fiery server, etc.), all Fiery applications use the same module, the same graphics and, where the workflow allows, the same behavior. The Job Properties module controls the implementation for specific workflows.

In the Fiery servers, the print actions from Job Properties have been extended to include print and hold, print and delete, process and hold, and proof print. This enables users to accomplish the required steps with fewer clicks.



See the summary of multiple job settings and make modifications in a single user interface

Benefits:

- Shortens the learning curve by allowing users to set up jobs once, and create a process that works for similar jobs
- Minimises operator errors and increases productivity with an intuitive and flexible user interface to set up jobs
- Simplifies job submission with fewer steps in Command WorkStation
- Saves time and clicks for regularly performed actions

Mixed Media settings

Fiery Mixed Media offers a robust architecture — a single, consistent workflow for all jobs and comprehensive integration with other features such as VDP and Fiery Impose.

Users select the Mixed Media settings directly from the Fiery driver and Job Properties, and specify various finishing options and media types for certain sections or chapters.

Benefits:

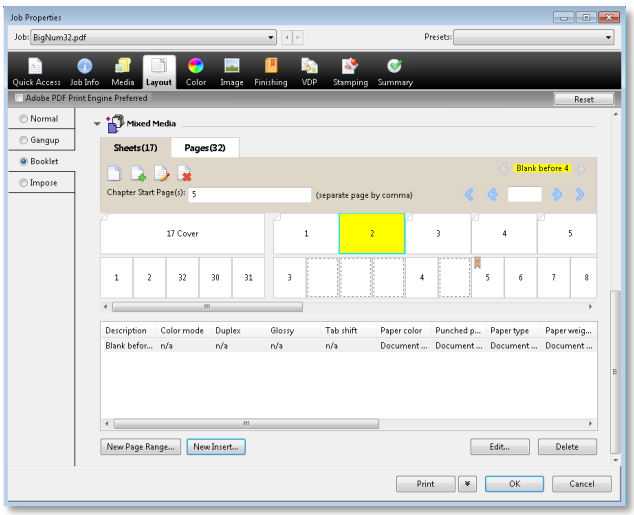
- Tools are easy to use and integrated with the entire Fiery workflow, reducing bottlenecks and operator errors
- Fully automated process digitally prints finished documents with minimal operator intervention using Mixed Media, subset finishing and tabs
- Consistent workflow for traditional and VDP jobs

Mixed Media viewer for perfect binding

Mixed Media viewer for perfect binding gives operators visual feedback of page-level operations such as duplex, media, insert, and spine settings for a perfect-bound job. With this, operators will understand the pagination implications of specifying these settings.

It allows users to specify multiple types of media for perfect-bound books. Plus, pagination is handled automatically and intuitively so that the perfect-bound jobs with different media print as expected. It shows users how a spine is included as the last page of the document.
It adds a mixed-media interface directly in the perfect-binder user interface, and a wireframe mode to the perfect-binder mixed media interface — giving operators quick and easy visual feedback.

Mixed Media viewer for perfect binding is available as long as the engine has a perfect binder option installed.



Mixed Media viewer user interface

Benefits:

- Gives the user precise controls over pagination
- Provides quick and easy visual feedback about the following settings:
  - Which page in the document is used for the spine
  - The reading order of the rest of the pages of the document (when page-level duplex settings are used)
  - The desired pages that are affected by a media definition

Print Range support for Mixed Media

Print range support for Mixed Media allows a specified page range to print when Mixed Media has been previously defined.

Benefits:

- Use the Print Range and Mixed Media features together for more convenience

Tab Shift

Most applications allow only a single page size within a document (Word, Acrobat, and InDesign are exceptions). The Fiery system provides the ability to shift certain pages one-half inch horizontally. This makes it possible to print the predefined tab text on the tab ear when tab pages are already included in the source document.

The user must precisely orient the text on the page, predict the ear position, and specify the page number that should be shifted. The Tab Shift option is in the Mixed Media settings in Fiery Compose.

Benefit:

- Makes it possible to print the predefined tab text on the tab ear

Insert Tabs

In digital production environments, each user tends to perform specific tasks in a digital document "assembly line." Typically, in this type of setting, the same user makes media and tab placement decisions at the same point in the workflow.

With this in mind, the Mixed Media windows and Insert Tabs functions are tightly integrated into one workflow for ease of use and maximum user productivity.

Insert Tabs allows the user to create and insert tabs directly into documents on the Fiery server. The operator inputs the text for each tab and specifies the location of the tab within the document.

This feature is standard for all Fiery external servers.

The user can define the following:

- Number of tab ears in a bank. A single document can use multiple banks; a bank is typically composed of all the tabs necessary to run the length of the edge of the media.
- Operators can define the tab media by selecting the media type, paper size, paper source, and paper catalogue.
- Tab sequence (forward/reverse), specifies whether the first ear of the tab bank is the first ear printed on (first to last), or the last ear of the tab bank is the first ear to be printed on (last to first).
- First tab indent specifies the distance (up to 4.000 inches or 101.6 millimeters) between the edge of the media and the edge(s) of the first (and last) tab ear in the tab bank.
- The output destination for unused tab ears in the tab bank. All unused tab ears in a bank are ejected to this output destination.
- Multiple sizes of text in a tab ear.

Print facilities that require additional features to provide visual feedback and advanced tab insert functionality can upgrade to Fiery Compose or Fiery JobMaster. For more information visit efi.com/fieryjobmaster.

Benefits:

- Enables users of digital print engines to take advantage of fully automated digital printing processes, producing finished documents with minimal operator intervention, and reducing the need for additional resources while increasing capabilities and overall productivity.
- Allows users the flexibility to add tabs (and text in tabs) at the last possible stage in the print submission process.
- Increases productivity by outputting documents ready to continue the finishing process. Shops don't need to manually discard unused tabs in each document set. (Device-dependent feature)

Define covers

Selecting the define cover button on the Mixed Media tab in Job Properties gives users the ability to quickly define the front and/or back cover of the document without knowing the total page count of the document. Users can specify whether to apply the same settings to both the front and back cover or to use separate settings for each. The settings for covers are available in the page/page range media dialogueue box, and (engine-dependent) the Cover Page Mode option.

The Cover Page Mode offers three options:

- Print on outside: A document page prints on the outer surface of the cover, while the backside of the cover (the inner surface facing the body page) is left blank.
- Print on inside: A document page prints on the inner surface of the cover, while the outer surface of the cover is left blank.
- Print on both sides: The cover is treated as a normal duplex sheet.

Benefits:

- Provides a quick way to make additional customization at the last possible production stage
- Increases productivity by shortening the job setup and applying automation to complex job definitions
- Decreases waste by automating complex finishing settings

Media Defined Profiles

Fiery servers offer various properties for selecting the output profile in Expert Settings from the Fiery driver or Job Properties on Command WorkStation 5. If the Output Profile option is set to "Use Media Defined Profile," the Fiery system's unique Media Defined Profile feature automatically assigns colour profiles. For mixed-media jobs, it determines which profile to use for each media from the media settings in Job Properties.

When the user selects media in Fiery Paper Catalog, the feature automatically applies the correct profiles for the media. It also supports media with different profiles per sheet surface, specifying the correct profiles for front and back.

Benefits:

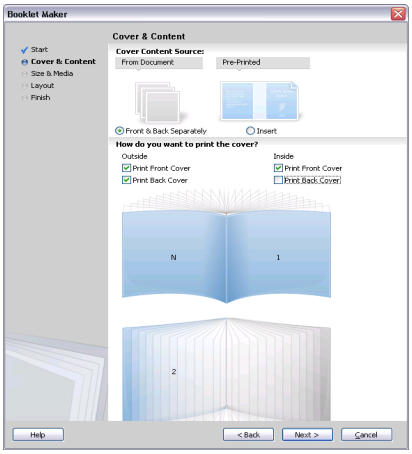
- Provides the most accurate colour output for mixed-media jobs with media-driven colour profiling
- Offers easy-to-match colour profiles for each media through the simplified interface, for best quality colour output

Booklet Maker

The Fiery Booklet Maker is the imposition tool in Job Properties that allows users to print multiple pages of a print job, from any application, in a booklet style — without the need for more advanced imposition programs.

The interface in Booklet Maker is interactive and intuitive to help users achieve the expected printed output every time.

Booklet Maker provides a visual and interactive way to specify the page number of the source document for cover pagination, enabling it to correlate the correct page numbers with the correct cover pages.



Easy-to-use Booklet Maker interface

Benefits:

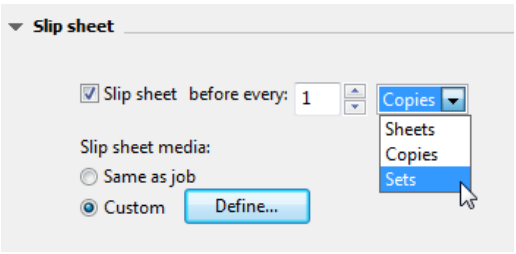
- Produces sophisticated results with a simple operation
- Intuitive UI minimises training requirements. A graphical and intuitive wizard-based interface guides the user in setting up professional-looking booklets more quickly and with fewer errors
- Supplies basic user's imposition requirements with an upgrade path to Fiery Impose for experts

Enhanced support for offline finishing

Fiery FS200 and FS200 Pro servers offer more flexibility by adding three settings in Job Properties that define online finishing options on a per-job basis.

Slip sheet

The slip sheet setting enables users to inject blank or preprinted sheets in between sets, or within sets as separator sheets. The slip sheet is typically pulled from a tray loaded with different media to make it easier for operators to see the desired breaks in the job. This feature also handles interleaving of various media including transparencies.



Slip Sheet setting in the Finishing tab of Job Properties.

Operators can choose from these slip sheet boundary options:

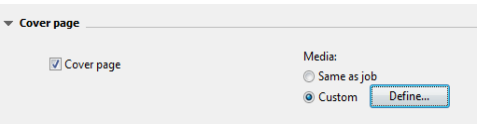
- Sheets – inserts a sheet before a set number of sheets
- Copies – inserts a sheet before a set number of copies
- Sets – inserts a sheet before a set number of variable data printing (VDP) records, subsets, chapters, or uncollated copies (for example, 10 copies of page 1) of a job

Job cover page

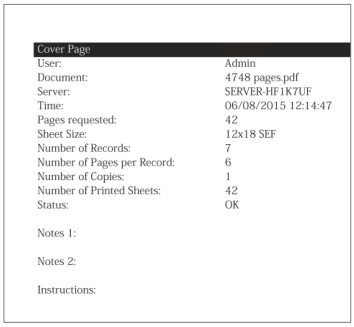
The job cover page prints a cover page containing job information after the last sheet of the job. This gives users another way to better identify the boundaries of the job and additional job details.

This feature is also available in Fiery Configure, in case administrators require all jobs to print with a cover page.

The job information in the cover page is predefined cannot be modified by the administrator.



Cover page setting in the Finishing tab of Job Properties.



The job cover page includes useful job information for better identification of the final output.

Offset by sheets, copies, or sets

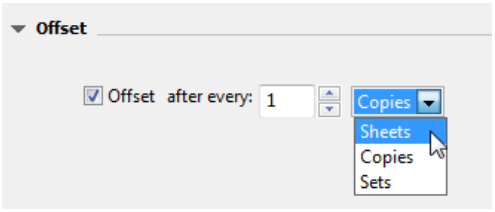
The Offset feature shifts the placement of the output of a job during printing, so that the job may be separated into multiple parts more easily after printing.

The output can be offset for copies, sheets, or sets:

- Sheets – offsets after a specified number of sheets
- Copies – offsets after a specified number of copies
- Sets – offsets after a specified number of VDP records, subsets, chapters, or uncollated copies (for example, 10 copies of page 1) of a job

This feature is also available in Fiery Configure, in case administrators require all jobs to be offset between jobs.

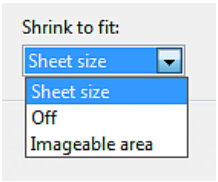
This feature is only available for print engines that have an offset option at the inline finisher,



Offset setting in the Job Properties' Finishing tab.

Shrink to fit enhancement

The "Shrink to fit" setting in the Layout tab of the Fiery driver and Job Properties ensures that the entire image on a page fits on the printed sheet. This enhancement offers users a choice when selecting "Shrink to fit" from the Fiery driver and Job Properties.



Shrink to fit setting options found in the Fiery driver and Job Properties under the Layout tab for gangup and booklet styles

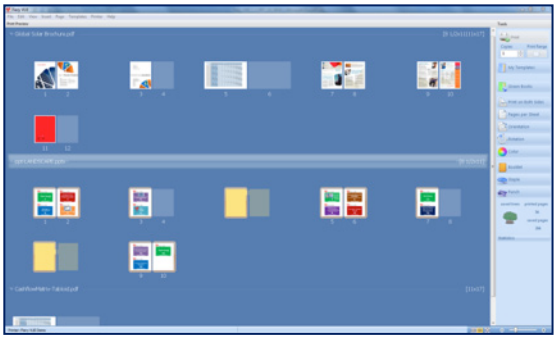
- Sheet size: scales the image to the sheet size of the selected media
- Imageable area: scales the image to the printable area of the sheet

Benefits:

- Helps users better define shrink-to-fit parameters
- Avoids missing image data from printed output

Fiery VUE

Fiery VUE is a free visual print application that produces professional-looking, finished print materials quickly, easily, and cost-effectively from desktop PCs. The interactive application comes with a user-friendly 3D interface that visually guides the user through document creation with intuitive layout and finishing tools. The environmentally friendly solution also reduces the eco-footprint by minimising waste and using Fiery VUE Green Statistics to monitor the ways a job can be produced to be more "green."



Fiery VUE is a client application that runs on users' Windows PCs and submits print data to the Fiery server. The documents developed in the Fiery VUE application can only be printed on a Fiery Driven print engine that is Fiery VUE certified.

If the Fiery Driven printers are managed in the corporate reprographics department (CRD) or in-plant printing facility, Fiery VUE can submit print jobs with instructions to the facility to meet even more complex production requirements.

The workflows are targeted at a specific Fiery Driven engine selected by the user, and only the printing and finishing options available on that engine will be presented for use.

For more information, visit efi.com/fieryvue.

Benefits:

- Offers the most intuitive and innovative way to create professional-looking documents right out of the box with a visual user interface for power office users
- Drag and drop to combine or re-order Microsoft Office files and pages with an intuitive interface for easy document assembly.
- Saves time and money with desktop document controls that produce customised materials in a short time
- Reduces eco-footprints with the interactive 3D preview mode, the Green Books auto-templates for booklets, and the new Green Printing Statistics which allows users to track paper savings by weeks and months

USB Media Server

USB Media Server provides an easy way to connect USB storage devices to the Fiery server and print files stored on those devices. New folders can be created on the storage device for automated printing.

KEY FEATURES:

- Connect USB storage devices, including the following:
  - USB thumb drives
  - USB adapters for removable media (such as compact flash, smart media, and memory stick)
  - USB hard drives
- LCD browsing capabilities such as the following:
  - Selecting file — Any supported file on a USB storage device can be selected.
  - Submitting file — Menu options below are available for submitting files after the user is in the "Selected File" mode.
    - Send to Hold Queue
    - Send to Print Queue
    - Send to Direct Queue
    - Send to <virtual printer queue name>

Benefits:

- Increases overall flexibility and enables walk-up users to easily print jobs directly at Fiery servers
- Allows guest printing without network connectivity
- Provides a number of easy and flexible ways to print files from USB devices

Paper Catalog

Digital document production tools demand a robust approach to paper management across the entire production environment. The ability to have an all-encompassing view of paper stock with automated access, is essential in a successful document-production facility.

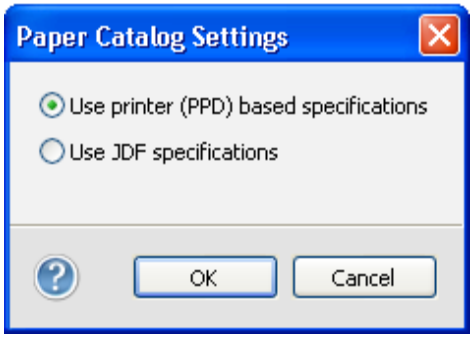
The Fiery Paper Catalog is a centralised paper database that stores attributes of the media stock at the production site. Operators can access the feature from applications such as Command WorkStation, but the database resides on the Fiery server, where it is protected against server reboot or clear server actions.

Instead of defining media for each job (with attributes such as size, media type, tray, media weight, colour, etc.), Paper Catalog provides a mechanism to define each media in the shop just once and then select that one definition for each job.

Paper Catalog uses the industry-standard job definition format (JDF) media attributes to define media, rather than printer/copier-specific media attributes. This makes automatic mapping of media definitions from modern job-submission workflows much more accurate. In addition, many of the attributes can be read directly from media packaging, making it very easy to define new media on the system. This reduces the number of times operators need to configure the same media for the same job in different workflow steps. It also allows management information systems (MIS) to automatically collect production data from the Fiery server, tracking precisely how many sheets of which paper(s) were used to produce a job.

The media stock entries are stored in a database that does the following:

- Defines a name for each media attribute combination
- Facilitates media selection at job submission by doing the following:
  - Associating trays with loaded media stock
  - Using colour profiles easily and automatically for each media (Media Defined Profiles)
  - Facilitating a centrally maintained paper catalogue
  - Allowing PPD-based jobs and Paper Catalog–based jobs to coexist in the server



Paper Catalog settings use PPD specifications.

Key features include the the ability to:

- Use printer (PPD)-based specifications mode
- Publish/unpublish selected entries
- Highlight what's loaded in the tray, plus display tray number and paper levels (Windows only)
- Integrate printer/copier catalogue into Paper Catalog
- Export or delete selected entries
- Associate colour profile for printer/copier catalogue entries
- Improve alerts and notifications

Benefits:

- Simplifies media selection at job submission, reducing both manual steps and material waste resulting from incorrect media usage
- Provides interactive feedback to reduce mistakes when associating paper stock to paper loaded in the trays, increasing overall production

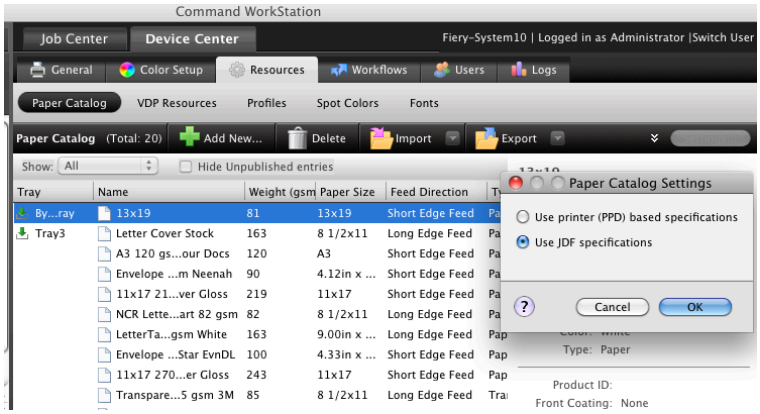
- Offers easy-to-relate colour profiles for each media through a simplified interface, for the best quality colour output
- Translates the paper selection to the shop's classification system for paper stock, helping keep inventories up to date and reducing obsolescence
- Creates an open-architecture environment, with an engine-agnostic approach to paper catalogue management
- Integrates use of Fiery JDF to reduce the number of times an operator needs to configure the same media for the same job in different workflow steps

Paper Catalog based on PPD specifications

Paper Catalog on the Fiery server is a saved collection of attributes associated with specific media. Most frequently used attributes are paper type, paper weight, paper size, and colour profile.

JDF media specifications can have over 35 different attributes per media entry in the Paper Catalog. However, customers can now also use Paper Catalog with non-JDF workflows.

In this case, Fiery servers provide users with the choice to create a Paper Catalog based on the engine's media attributes or PPD definitions. This means users see only a few choices that are specific to their printer when adding and viewing Paper Catalog entries. This new simple mode is designed to make Paper Catalog faster and easier to use.



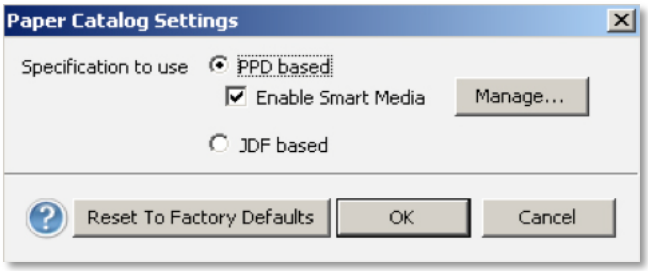
Operators have the option to choose a simplified mode to input new entries in Paper Catalog.

Benefits:

- Engine-driven media offers faster, easier setup
- Setup is easier for non-JDF workflows
- Paper Catalog for embedded servers enhances productivity
- Administrators can now define some options when adding entries in Paper Catalog to enhance ease of use

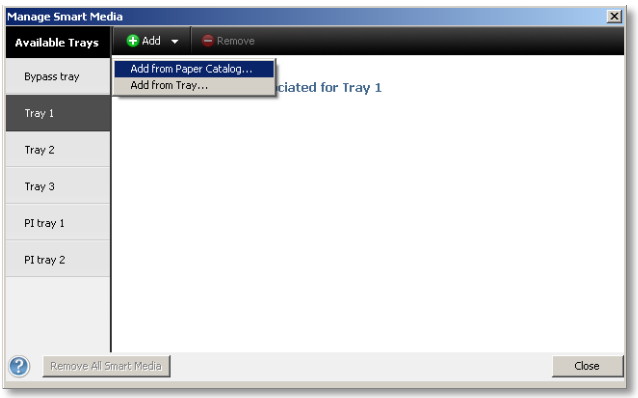
- Job Properties and bidirectional drivers can show which Paper Catalog entries are loaded in the printer trays

Paper Catalog Smart Media



Smart Media is available when Paper Catalog is using PPD-based specifications.

Smart Media is a feature designed to automatically assign a Paper Catalog entry based on the characteristics of the media loaded in the tray. This feature is most beneficial for customers with a specific workflow that usually uses the same paper in the trays. Often, users stick the paper labels onto the trays to remind the operators which paper to load. Smart media allows the Fiery server to remember these favourite papers and perform an automatic tray association when any media with the same attributes is loaded in the tray. Smart Media "Add from Tray" pre-populates all properties for a new Paper Catalog media, using the tray attributes set by the end user. With this new enhancement, the user just has to load media into the tray and to name that media in the Paper Catalog. It's that simple. For the majority of users with a limited paper stock, automatically assigning media when loaded in a tray reduces the number of errors and improves media-based workflows. For office environments, for instance, users can now set up Paper Catalog so that tray 1 always assigns the correct Paper Catalog entry when a plain letter-sized media is loaded.



Add Smart Media to a tray so it will be automatically assigned next time media with the same attributes is loaded.

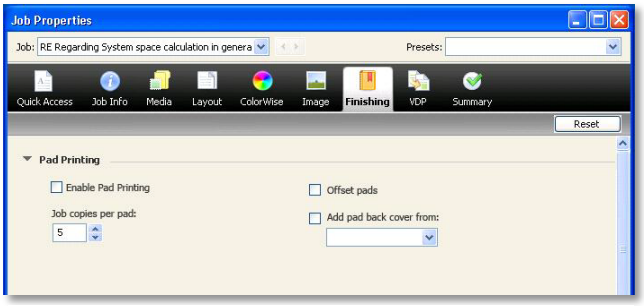
Benefits:

- Streamlines and simplifies the process of adding new media to Paper Catalog and saves valuable time
- Requires no additional steps to add a paper when a favourite (smart) media is loaded in a tray
- Increases reliability for media-driven workflows: minimises errors when setting up media and operator intervention

Pad printing

Pad printing gives operators the ability to print multiple copies of a job without having to perform unnecessary mental calculations or multiple steps. Previously, the operator had to multiply the number of pages in the pad by the number of pads, manually separating the pads after printing.

Job Property controls in the Finishing tab now let the operator specify pad-printing parameters. The operator can define the contents of each pad, including the number of times the job repeats within a pad. It duplicates a single page job as many times as defined in the Pad Printing settings to create one finished/merged pad. Users can even add a back cover/slip sheet between each pad. Pad printing also allows operators to simply assemble printed pads with a back cover, similar to sticky notes. Operators can use the Number of Copies control to specify the number of pads in the job. Pad copy packs are offset in the output tray for easy separation for offline binding. The feature is available for FS100 Pro (and later) Fiery servers.



Users can select the number of copies per pad

Benefits:

- Simplifies and streamlines pad printing
- Enables the user to create a pad easily from a single-page job
- Minimises manual collation of the printed output

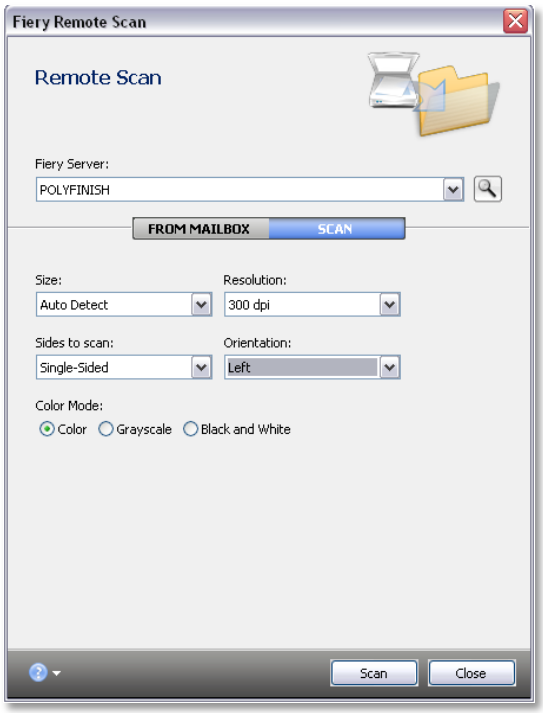
Fiery Remote Scan

Nearly all new documents today exist in digital form. Most corporate and print production workflows are designed to handle digital documents efficiently. However, there are still substantial volumes of hardcopy documents that users need to include in their digital workflows. Scanning technology is readily available in most commercial print shops or corporate in-plant and reprographics departments, but is not typically available to corporate workgroups where most of the content providers work.

The Fiery Scan utility brings document scanning capability to workgroups through any compatible output device with copier capability that is connected to a Fiery server. Windows and Mac users can create high-quality scans and specify destinations for the scanned files across a network.

The Fiery Remote Scan plug-in allows users to control the Fiery scanner/document feeder configuration remotely from a client workstation. The TWAIN-compatible application runs on both Windows and Macintosh operating systems and allows the user to initiate new scans and import them into TWAIN-compatible applications such as Adobe Photoshop®.

All scans are initiated at the Fiery server and stored on the Fiery hard drive, so they are available for use and accessible from Fiery mailboxes. The Fiery server can also be configured as an input device for document-management systems.



Fiery Remote Scan auto discovery

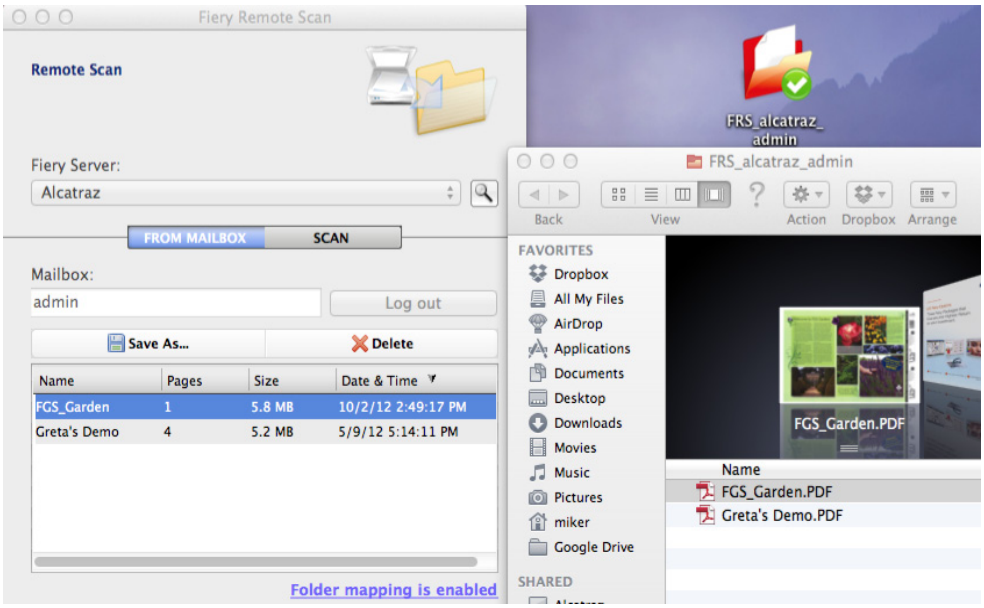
Benefits:

- Turns any Fiery-connected device into a high-quality scanner
- Leverages digital workflows, eliminating bottlenecks and reliance on outside services
- Reduces the need to store and track hardcopy documents, decreasing overhead costs and improving efficiencies
- Provides flexible scan initiation options, including the copier LCD scan, Fiery Remote Scan TWAIN plug-in, and Fiery WebScan

Fiery Remote Scan incorporates auto discovery, making it easy to add Fiery servers. Users can save files to their local hard disk drive with a single click. Fiery Remote Scan supports all the new scan file formats that can be generated by print engines.

Folder Mapping

Folder Mapping replaces the Fiery Bridge application that was only available for Windows clients. It allows users who scan from the Fiery server to synchronise the Fiery mailbox contents with a local folder. Folder Mapping is available on both Windows and Mac workstation clients. With this feature, the scan jobs going to a mailbox automatically appear in a folder on the user's computer.



Fiery mailbox contents are displayed on the Mac client.

Benefits:

- Faster retrieval of scanned jobs
- Windows and Mac support without the need to install additional applications

Tools for technical support

Fiery Setup Wizard

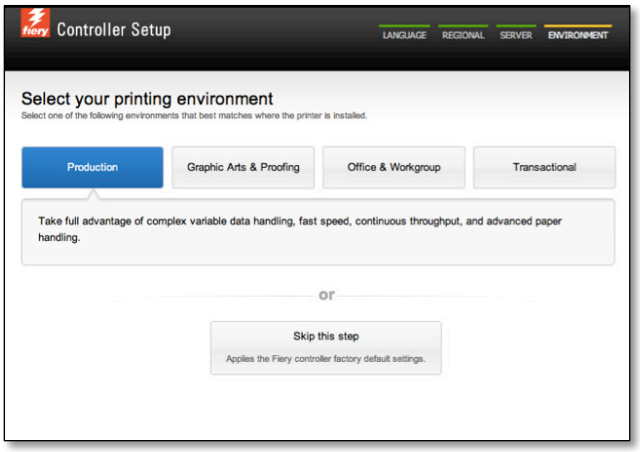
Fiery Setup Wizard optimises settings for a particular printing environment during the install process. It allows the administrator to quickly and easily specify basic Fiery server settings such as language, region, server, and environment (a group of standard settings). The available environments are:

- Production
- Graphic arts and proofing
- Office and workgroup
- Transactional

By presenting a simple wizard with four screens, Fiery Setup Wizard makes the setup process easier and more accurate. Fiery Setup Wizard is compatible with FS100/FS100 Pro or later Fiery servers based on Linux or Windows operaring systems.

The Fiery Setup Wizard is available from the following locations:

- Command WorkStation
- WebTools



Settings are customised for each printing environment.

If users do not initially configure the Fiery Setup Wizard from the Fiery Advanced Server Interface, it is still available from
WebTools > Home and from Command Workstation > Configure.

Benefits:

- The Fiery server is correctly set up for the user's environment and language
- Best out-of-box experience for users and administrators
- Faster installation for technicians

Recommended settings per environment

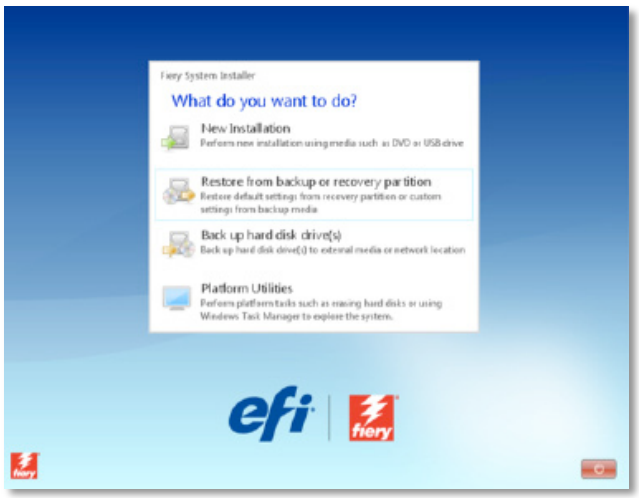
Settings	Production	Graphic arts & Proofinga	Office and workgroups	Transactional
Job Log (Auto Export)	√	√	√	√
Enable System Updates	√	√	√	√
Enable Remote Desktop		√	√	√
Enable Adobe PDF Print Engine (APPE)		√		
Enable Printed Queue	√		√	√
Enable Job Mismatch	√			√
Sample Print	√			√
Enable JDF	√			√
Cache PDF and PS Objects	√			√
Enable Set Page Device (SPD)	√			√
Enable Sequential Print	√			√
Enable RIP While Receive				√
Enable Fiery Hot Folders			√	
Enable Secure Erase			√	
Allow Users to Print without Authentication			√	
Enable LDAP			√	
Enable USB Port			√	
Enable Scanning			√	
Enable SNMP			√	
Enable Direct Mobile Printing			√	

Fiery System Restore

Fiery System Restore is available on external Fiery servers only. It supports the new Unified Extensible Firmware Interface (UEFI) hardware platforms and offers the ability to:

- Back up and restore to network drives
- Back up Fiery jobs
- Restore to a factory-default system image
- Create a bootable USB recovery device

RECOMMENDATION: EFI strongly recommends a full backup of the system image on a regular basis. This back up should be stored offsite.



Fiery System Restore enables users to back up/restore to network drives.

Benefits:

- Gives administrators the flexibility to quickly back up and restore a Fiery system image
- Eliminates the need for a separate application
- Allows analysts and customers to easily and conveniently restore a customer system

Fiery Clone Tool

The Fiery Clone Tool for embedded servers creates an identical copy of the entire Fiery server to an image file, with the exception of previously created clone image files and any print jobs in the print queues. This image file can then be used for a fast and easy system recovery. This feature is intended for use by technical service representatives only. The Fiery Clone Tool for Embedded Servers can be used on any identical Fiery server model. There are no restrictions on the Fiery software products included on the clone.

The Fiery Clone Tool for Embedded Servers supports System 8eR2 and later on Linux operating systems only. The tool will display an error if used on an unsupported Fiery server. For more information, refer to the user guide available in the EFI Download Center.

This tool is booted and launched from a USB drive prepared by the USB Prep Tool version 1.3.4 or later. The minimum size for the USB drive is 4 GB.

The Fiery Clone Tool for Embedded Servers software can also be downloaded from the Download Drivers page of efi.com. Click the Application Software and Tools tab to select Fiery Clone Tool for Embedded Servers.

Benefits:

- Achieves an effective cloning process with simple and intuitive steps
- Delivers easy and fast recovery of the Fiery embedded server. Restores the system to production mode in minutes.

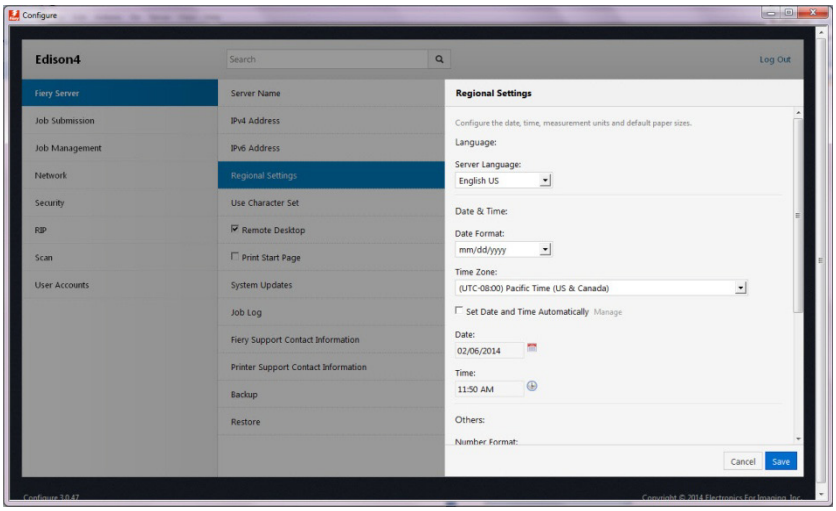
Fiery Configure

The Fiery Configure feature allows the Fiery administrator to configure the Fiery server for a specific print environment. When the administrator selects the Configure button, Fiery Configure displays a browser-based user interface with:

- The current Fiery configuration and access to the Edit button to enter modifications
- A check for the Product Updates button to open a list of available software updates for that Fiery server

The Fiery Configure provides:

- Support for all current web browsers, without the need for special plug-ins
- Three menu levels to allow users to glide between settings easily
- Inline guidance to minimise mistakes.
- Search function to access relevant settings more quickly
- Support for constraints to guide users when selecting conflicting settings



Fiery Configuration Tool

- Usability improvements that allow settings used in multiple places, such as email or proxy, to be linked for easy access
- Restart handling: the tool is aware of which settings can be applied instantly and which require a restart or reboot. If the settings chosen require a restart/reboot, the tool notifies the user at the top of the screen. Settings that can be applied instantly are saved immediately.
- Data transfer over HTTPS for additional security
- Updated config sheet to reflect the categories displayed in the current Fiery configuration view

Benefits:

- Helps administrators get the Fiery server ready for production in a shorter time
- Minimises service calls

Simultaneous LCD/keyboard installation

This feature allows service technicians and analysts to use the LCD to complete the Fiery system software reinstall without connecting the monitor, keyboard, and mouse — regardless of whether the system is enabled for the Fiery GUI kit.

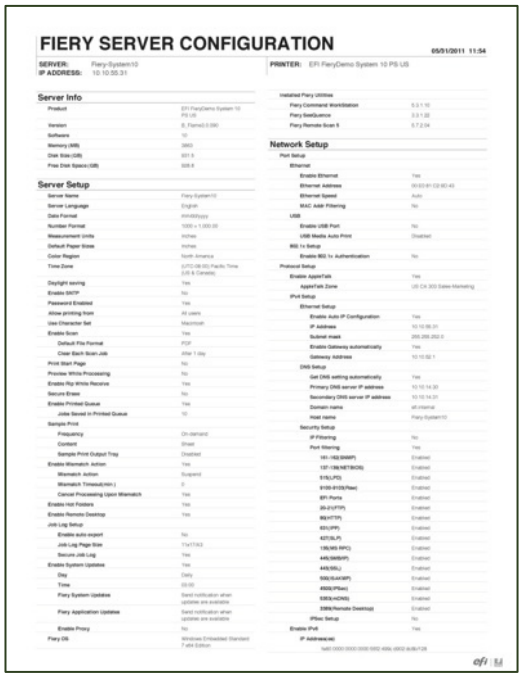
Benefit:

- Makes it easier for service technicians or analysts to reinstall the Fiery system without connecting a monitor, keyboard, and mouse.

Improved serviceability

Fiery servers greatly improve the speed of resolving technical issues by automating the transfer of all relevant information to technical support teams. That also reduces operation costs and speeds up installation and configuration processes with the following serviceability features:

- Improved server configuration sheet
- Job Error report
- Backup and Restore enhancement
- Clear Server enhancements



Improved server configuration sheet

Improved server configuration sheet

Fiery servers include a new version of the Fiery configuration sheet to improve readability.

At the top of the new configuration sheet, users now see commonly used items such as server name, IP address, and printer name. If printing the configuration sheet from a Windows Fiery server, users will also see details of the Fiery applications and the version numbers installed on the server — for example, Fiery Command WorkStation 5.3.0.54 or Fiery Hot Folders 3.3.0.29. This makes it easier for technical support staff to reproduce user scenarios.

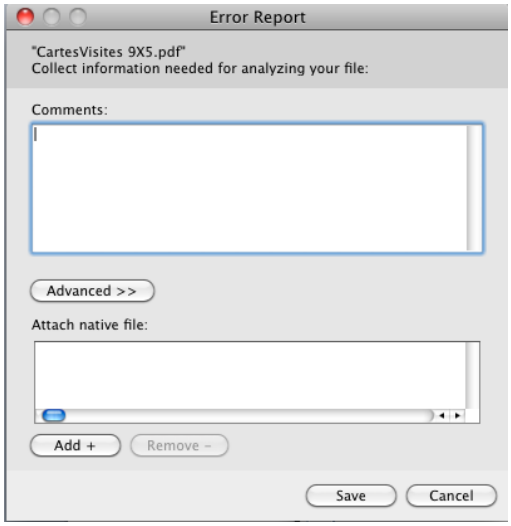
Users can print the server configuration sheet or save it in a PDF or text format. When printing the server configuration sheet from the Command WorkStation Device Center, users can also choose Job Properties so they can print on whatever media is loaded in the trays.

Benefits:

- Improves usability by making it easy to access all necessary system information from one location or in one printed document
- Allows administrators to print the configuration sheet on any paper size or weight

Job error report

The Job error report captures important troubleshooting information that EFI Technical Support personnel use to resolve issues. This feature automates collection of the raster file, native file, colour profiles, job logs, configuration sheet, job and job ticket, engineering logs, and optional operator comments into a zip file that users can save on the desktop with a simple click. By using this collected information, EFI Technical Support can provide faster problem resolution.



Creating an error report

Benefits:

- Facilitates communication of all necessary information to EFI Technical Support
- Provides faster and easier resolution of problems

Backup and Restore enhancements

Fiery servers allow users to capture many settings for the backup and restore procedure. These include:

- Fiery system settings
- Colour settings
- Preflight presets
- Scan settings
- Command WorkStation settings when backing up from Command WorkStation
- FreeForm/VDP resources
- Paper Catalog
- Virtual Printers
- Server Presets
- Fonts
- Job Log

Backup and Restore will now accept backup files from earlier system versions back to System 8 Release 2, allowing print providers to upgrade their Fiery server and restore their settings later.

Benefits:

- Improved usability with a much more comprehensive and faster backup and restore of a Fiery server.
- Faster and easier setup. Administrators can back up individual items such as Virtual Printers or Paper Catalog, and move them to other servers of the same model.
- Administrators can easily save and restore all the settings when upgrading a Fiery server from System 8 Release 2 or higher.

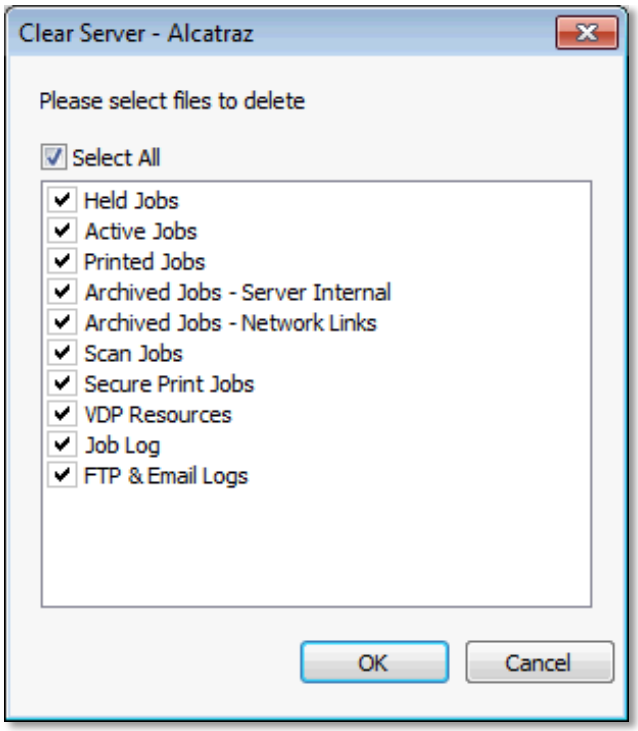
Clear Server enhancement

The Clear Server enhancement provides expanded cleanup choices to securely erase unwanted jobs or user data. It offers a dialogueue box that allows the user to clear selected file types, resources, or logs from the currently selected server. Administrators can use it to securely erase unwanted secure print jobs, VDP resources, FTP and email logs, and other types of information to improve the security of the Fiery server. The enhancement ensures that the Clear Server option is available for all user job data and, if the Secure Erase preference setting is enabled, the selected items are securely erased from the server. It is a standard feature for external and embedded Fiery servers.

The Clear Server setup window is located in Command WorkStation under the Server menu.

Benefits:

- Provides administrators with selective control over what to keep on or remove from the Fiery server
- Securely erases selected data from the server



The expanded list provides the administrator with greater control.

Fiery industrial design

The Fiery external server family has a sophisticated and appealing industrial design package which includes a stand and the GUI kit (keyboard, mouse, and flat-panel display also known as FACI kit) in addition to the server.

The design has been customised for the Fiery system and the needs of a digital printing environment, giving it the highest quality and functionality ever available in a design.

Features of the advanced design include the following:

- The Fiery stand is integrated into the Fiery server.
- The new design requires a smaller footprint.
- It has easily accessible USB ports, LCD panel, and power buttons.
- The neat and simple design includes storage space for system-calibration and profile-measuring tools.
- The design has a work space for user's typical activities, such as calibration and profiling.

Benefits:

- The smaller space requirement maximises floor space at the print site.
- Greater accessibility facilitates operation and diagnosis of the Fiery system.
- Dedicated storage space helps keep the Fiery server area clear of tools and peripherals.

Fiery Integrated Workstation

The chassis and stand included in the Fiery Integrated Workstation have been designed to improve the operators' printing experience and to optimise workspace efficiency.

Enhancements impact the Fiery QX^{100}, PRO^{90,} and PRO^{80} platforms. Design changes to the Fiery chassis include the following:

- Reset button: The reset button has been recessed and now requires a pen or other small pointed device to activate the reset action, preventing operators from accidentally resetting the Fiery server.
- DVD eject bar: An eject bar has been added under the DVD drive as another option to eject DVDs or CDs (in addition to the eject command on the Fiery GUI).
- Tabletop size: The tabletop size and shape have been modified to make it easier to maneuver the Fiery stand through standard doorways.
- ES-2000 holder: A recess on the right side of the furniture top has been added to provide a secure place for the spectrophotometer.
- Keyboard tray: A metal keyboard tray has been added to the front underside, giving operators a safe, protected place to store the keyboard when the top is being used for calibration, profile making, or other prepress tasks.

Benefits:

- Prevents accidental commands that would potentially delay operations
- Improves operator productivity by using the workspace more efficiently
- Optimises the usable workspace and saves operator time by adding the option to store the keyboard under the tabletop, so operators don't need to leave the immediate area to perform other prepress activities

Colour

Fiery servers deliver outstanding colour across applications and platforms. The Fiery server is ideal for top quality short-run commercial print applications such as marketing collateral, reports, sales proposals, point-of-sale materials, direct mail, and photo books. Fiery Driven digital print systems produce industry-leading results because the Fiery server delivers best-in-class colour quality that amazes print buyers, even those accustomed to conventional presswork.

Every Fiery server comes with press-manufacturer-approved colour profiles for common printing stocks. These profiles are used for the colour management of process colour output, and are also used to create spot colour matching tables for Fiery Spot-On so that spot colours such as those from PANTONE libraries print with the best possible match to the swatchbook.

Fiery Calibrator simplifies the process of re-calibrating the print system in order to deliver top quality and consistency for every job — and even for reprints. Fiery Calibrator includes features such as the ability to use an ES-2000 spectrophotometer, job-based calibration, and calibration guard.

Operators can take late-stage image editing and correction to the next level with Fiery Image Enhance Visual Editor. This Command WorkStation plug-in allows print service providers to offer custom image correction services on the final paginated PDF or PostScript print files.

The following table represents the standard configuration for each respective Fiery server platform and system version combination. ***For information on a specific Fiery model's feature set, refer to the Fiery model's datasheet, or ask your Fiery vendor about support for a specific feature.***

✓ Standard ⊙ Option - Not Available SFM = See product specific feature matrix

Feature name	QX^{100}	PRO^{90}	PRO^{80}	E^{200}/ E^{300}	PRO^{80} BW	SP^{30}
CMYK/Grayscale						
CMYK source profile	✓	✓	✓	✓	-	-
CMYK processing method	✓	✓	✓	✓	-	-
Pure primaries	✓	✓	✓	✓	-	-
RGB/Lab						
RGB source profile	✓	✓	✓	✓	-	-
RGB rendering intent	✓	✓	✓	✓	-	-
Device Link Profile support	✓	✓	✓	✓	-	-
Media Defined Profiles	✓	✓	✓	✓	-	-
Embedded profile support and override	✓	✓	✓	✓	-	-
Spot colour processing support	✓	✓	✓	✓	-	-
PANTONE approved	✓	✓	✓	✓	-	-
HKS, DIC, Toyo Ink named colour profiles	✓	✓	✓	✓	-	-
Fiery Spot-On	✓	✓	✓	⊙	-	-
Substitute colours	✓	✓	✓	⊙	-	-
Composite Overprint for Spot Colours	✓	✓	✓	⊙	-	-
Specialty colours	SFM	SFM	SFM	SFM	-	-

Feature name	QX^{100}	PRO^{90}	PRO^{80}	E^{200}/ E^{300}	PRO^{80} BW	SP^{30}
Colour processing					-	-
Composite overprint for CMYK	✓	✓	✓	✓	-	-
Composite overprint for grayscale	✓	✓	✓	✓	-	-
Combine separations (CMYK)	✓	✓	✓	✓	-	-
Unlimited separations	✓	✓	✓	-	-	-
Auto Trapping (fixed)	✓	✓	✓	⊙[1]		
Optimise RGB transparency	✓	✓	✓	✓	-	-
ImageViewer curve presets	✓	✓	✓	✓	-	-
Use maximum printer density	SFM	SFM	SFM	SFM	-	-
Proofing					-	-
RGB separation	✓	✓	✓	✓	-	-
PDF/X output intent	✓	✓	✓	-	-	-
Paper simulation (fixed paper white)	✓	✓	✓	-	✓	✓
Halftone simulation	✓	✓	✓	-	✓	✓
Softproof	✓	✓	✓	-	✓	✓
Image settings						
Text/graphics quality (engine dependent)	SFM	SFM	SFM	SFM	-	-
Image Enhance (in-RIP)	✓	✓	✓	✓	-	-
Image Enhance Visual Editor	✓	✓	✓	⊙[1]	-	-
Dynamic HD Text and Graphics	SFM	SFM	SFM	-	-	-
Image smoothing	✓	✓	✓	✓	✓	✓
Color Editor	✓	✓	✓	✓	-	-
Profile Manager for ICC profiles	✓	✓	✓	✓	-	-
Edit profiles	✓	✓	✓	✓	-	-
Device Link profile support	✓	✓	✓	✓	-	-
Calibration						
Calibrator	✓	✓	✓	✓	✓	✓
Color Cal (with autogray)	✓	✓	✓	✓	-	-
ES-2000 support	✓	✓	✓	✓	✓	✓
Calibration comparison page	✓	✓	✓	✓	-	-
User Defined Calibration	✓	✓	✓	✓	-	-
Calibration Guard	✓	✓	✓	✓	✓	✓
Job-based calibration	✓	✓	✓	✓	✓	✓

✓ Standard ⊙ Option - Not Available SFM = See product specific feature matrix

Feature name	QX[100]	PRO[90]	PRO[80]	E[200]/ E[300]	PRO[80] BW	SP[30]
Fiery Graphic Arts Package, Premium Edition	✓	⊙	⊙	-	-	-
Fiery ImageViewer	✓	⊙	⊙	⊙[1]	-	-
Automatic Preflight	✓	⊙	⊙	-	-	-
Postflight	✓	⊙	⊙	⊙[1]	-	-
Paper Simulation (with white point editing)	✓	⊙	⊙	⊙[1]	-	-
Halftone simulation with frequency per colour	✓	⊙	⊙	-	-	-
2-colour print mapping	✓	⊙	⊙	-	-	-
Configurable Auto Trapping	✓	⊙	⊙	⊙[1]	-	-
Graphic arts filters for Hot Folders	✓	⊙	⊙	⊙[1]	-	-
Control bar	✓	⊙	⊙	⊙[1]	-	-
Control bar builder	✓	⊙	⊙	⊙[1]	-	-
Progressives	✓	⊙	⊙	-	-	-
Fiery ImageViewer for black and white	-	-	-	-	SFM	SFM
Fiery Color Profiler Suite	⊙	⊙	⊙	⊙	-	-
ES-2000 spectrophotometer	⊙	⊙	⊙	⊙	SFM	SFM
Certifications						
IDEAlliance Digital Press System	SFM	SFM	SFM	SFM	-	-
FograCert	SFM	SFM	SFM	SFM	-	- -

✓Standard ⊙Option - Not Available SFM = See product specific feature matrix

[1] May be offered in the Fiery Productivity Package. See product specific feature matrix

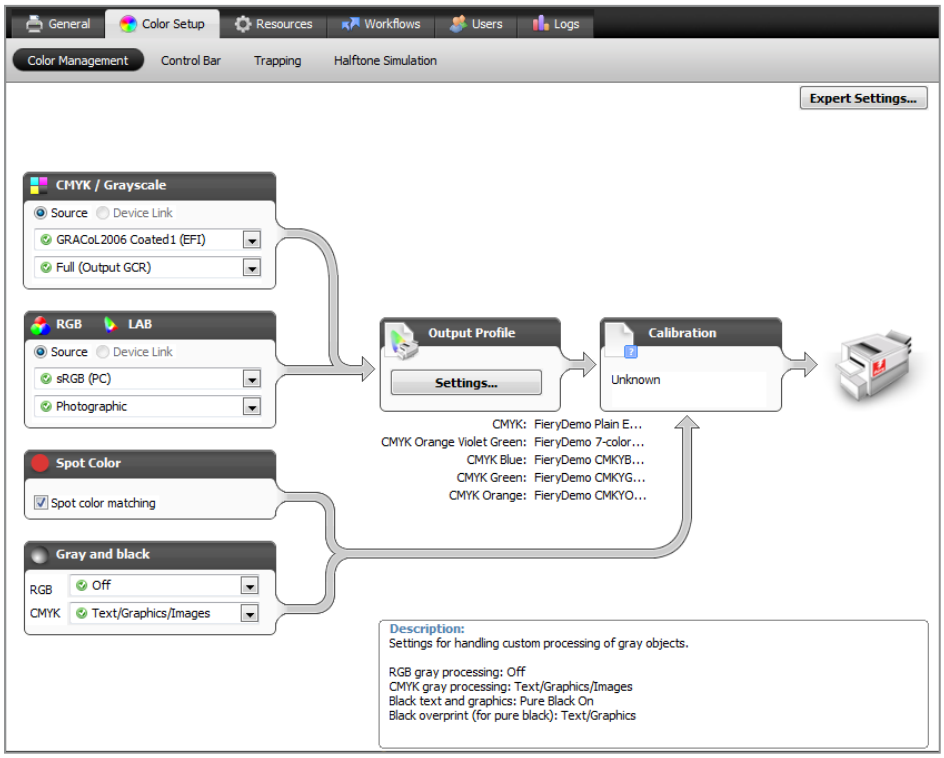
Colour management settings

Fiery colour management settings give the user maximum control over colour matching and matching to industry standards. Settings can be configured to accurately simulate conventional press standards, other toner devices, inkjet production print systems, or specific conventional presses. The colour management technology included in every Fiery server supports any input colour space including CMYK, RGB, spot colour, and device-independent. Controls are provided to use embedded ICC source profiles, and to configure the system for perfect output of industry standard PDF/X-4 files. Fiery servers deliver top quality out-of-the-box colour and have an intuitive and easy-to-use interface for configuring colour management settings.

High-precision ICC-based colour management

With Fiery servers, colour processing takes place only once, in RIP at the Fiery server — not at a client computer or prepress station. It is fully automatic so that there is no need to manually configure colour management settings each time a job is sent to the print system. Fiery colour management technology doesn't rely on the skills of each press operator to configure colour settings. Once configured, the correct settings are applied consistently to every job. Fiery servers manage colour quality quickly and intelligently, and provide operators the ability to automate colour workflows that run smoothly and consistently.

The Fiery colour features allow print jobs to be submitted faster in order to free the client workstation(s) for greater productivity. Fiery colour management technology also allows customers to use any source software application,or operating system, and supports virtually any file format.



Fiery colour setup in Fiery Command WorkStation

ICC-based colour management for precise colour matching

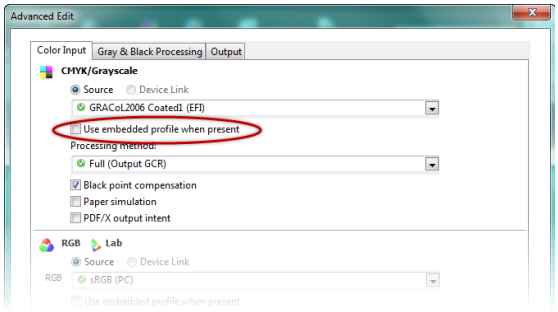
Fiery colour technology offers great out-of-the-box colour with features that colour manage source files to deliver stunning colour prints quickly, easily, and consistently. ICC profiles are used by Fiery servers for accurate colour printing from professional design applications, or from office software applications such as Microsoft Excel, PowerPoint, and Word. Users can select standard ICC profiles on the Fiery server for source colour spaces, and use top quality factory output profiles for the type of paper the job will run on. The Color Editor allows operators to edit the tone curves in Fiery output profiles to provide visual matching or correction if required.

Benefits:

- Achieves maximum colour control
- Minimises operator errors with easy user interface
- Provides excellent colour quality for professional digital colour production
- Shortens learning curve with intuitive controls and a unified interface with the Fiery print driver

Embedded profile override

Many applications offer ways to embed ICC profiles so that colours can be properly converted later in the workflow. For documents with a variety of colour spaces defined by separate colour profiles, Fiery servers are able to respect the source colour profiles embedded in a document. The checkbox "Use embedded profile when present" specifies whether embedded colour profiles should be used or ignored for RGB and CMYK sources.



"Use embedded profile when present" setting in Job Properties

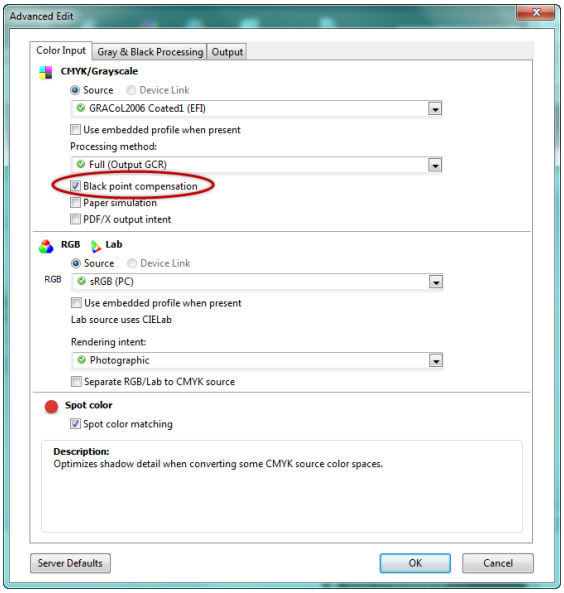
Benefits

- Gives users the flexibility to handle a variety of input colour spaces based on embedded ICC source profiles
- Using the embedded profiles within a design document ensures that printed output will match the expectations of the document creator

CMYK black point compensation

CMYK black point compensation uses Fiery colour management to control shadow detail when converting CMYK colours. This is especially useful for images with standard CMYK gamut sources such as ISO Coated V.2 or GRACoL. These are printed on low-quality media that deliver a smaller CMYK gamut, such as plain, uncoated paper.

When proofing small-gamut CMYK sources such as newsprint, the feature can be disabled to more accurately render colours as they would appear with the reduced colour gamut of such a press. Black point compensation is always enabled for RGB colour objects being colour managed with the relative colourimetric rendering intent.



Black point compensation setting in Job Properties and Fiery Driver

Benefit:

- Guarantees perfect PDF/X-4 output, or to pass the Altona and Ghent test suites
- Enables user to proof colour for small gamut processes such as printing on newsprint

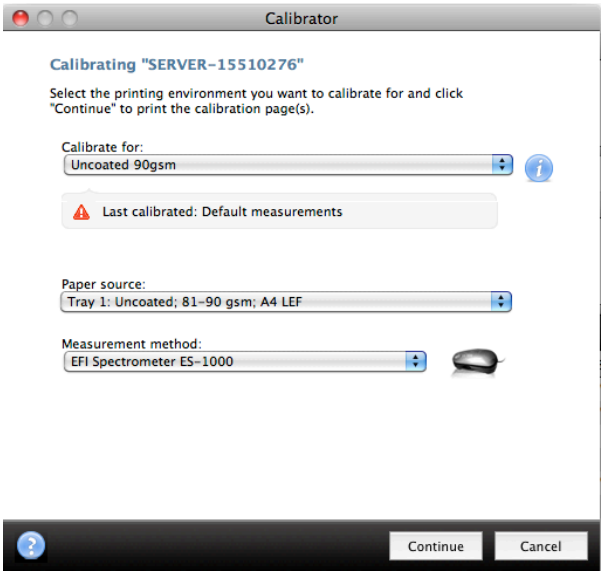
Calibration

Fiery Calibrator

Digital print engines are susceptible to gradual shifts in colour caused by changes in temperature and humidity, and fluctuation in CMYK toner or developer levels. To compensate for these variations, the print system needs to be calibrated back to a standardised colour appearance. Users accomplish this task by re-calibrating for paper stocks at regular intervals, or before printing jobs with critical colour requirements. When the user re-calibrates, the Fiery server corrects for the current colour behavior of the print engine.

Fiery Calibrator allows the user more visibility into a job's calibration status, and allows users to see details of the calibration set for each paper stock, including the date the set was last calibrated. From Fiery Calibrator, operators can also create calibration sets for new paper types. This is especially valuable if they are not using Fiery Color Profiler Suite for the end-to-end creation of a calibration set and output profile for a new paper.

For best results, Fiery servers should be calibrated with the EFI ES-2000 or ES-6000 device.



Fiery Calibrator

Benefits:

- Increases colour consistency by calibrating for specific media
- Saves time by allowing users to calibrate for the media they need at the time they need it
- Helps operators achieve consistent print quality with a user interface that makes the calibration process easy

EFI ES-2000 and ES-6000

The ES-2000 spectrophotometer is the recommended device for calibrating Fiery Driven print systems. Using a spectral meausuring device ensures the best colour precision, and takes just a few minutes. The ES-6000 is a network-connected scanning spectrophotometer that reduces the time and effort required to colour manage multiple print systems.

Benefits:

- Provides best print consistency over time, so that reprints match the first time a job was run
- Increases operator efficiency, since a control strip does not need to be placed on the print engine scan bed to measure calibration pages
- Enables calibration for print systems that do not have an off-the-glass scanning option

Any user can calibrate

Administrators can increase productivity by enabling any user to calibrate. Because calibration functions are separate from management functions, administrators do not have to be concerned that an operator may accidentally change or modify system preferences or global settings.

Benefits:

- Allows operators to calibrate frequently and efficiently so that colour output quality and system productivity are enhanced
- Ensures these same operators do not have control over global colour settings for the print system

Calibration Guard

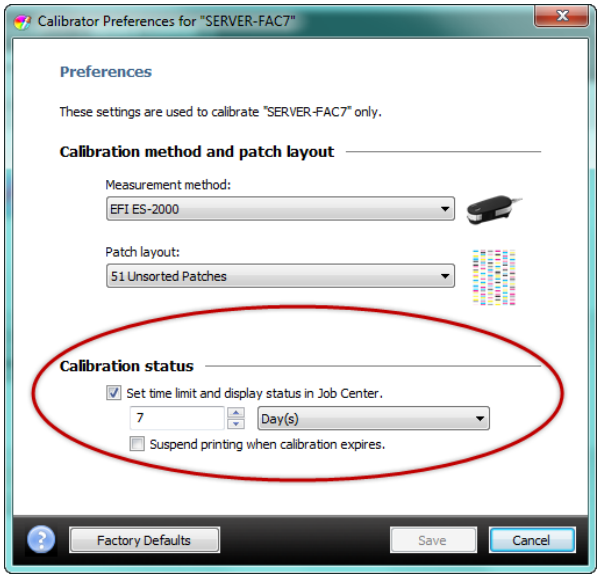
Fiery servers have the Calibration Guard feature to ensure that the calibration in use is current.

If a calibration has expired, Calibration Guard can warn the user or prevent jobs from printing to ensure colour consistency.

To configure Calibration Guard, administrators enable the feature, specify the duration for which a calibration can remain valid, and whether to warn users or stop printing until re-calibration is performed.

Benefits:

- Saves money and resources by not printing jobs with expired calibration
- Forces operator to calibrate at regular intervals, or printing is suspended until re-calibration is completed



Set time limit and display status in Job Center setting in Calibrator preferences

Job-based calibration

Job-based calibration increases accuracy and efficiency because users can be sure to re-calibrate for the calibration set used by a specific job. This is especially important for jobs that use non-standard media, because most users do not routinely calibrate special media. To calibrate for a specific job, users simply select the job in the hold queue and select "Calibrate." The Fiery Calibrator Wizard opens to guide the user through the calibration process considering calibration for multiple calibration sets in jobs that use mixed media.

Benefits:

- Improve colour consistency by re-calibrating for the specific media(s) a job uses
- Increase efficiency as operators calibrate the media they need at the time they need it

Grayscale calibration

Grayscale calibration is a standard software feature for black-and-white Fiery servers and requires the use of an ES-2000 or ES-1000 spectrophotometer.

Grayscale calibration is similar to colour calibration. It measures tonal variance from the desired target performance and compensates for the print engine variance when printing a job. On a regularly serviced engine, calibration will compensate for daily variances due to temperature, humidity, and paper stock.

Calibration provides consistency over time and ensures that a file printed today will match when reprinted. Grayscale calibration optimises the dynamic range of the print system to render detail in images from the darkest shadow to the lightest highlight. It ensures that prints do not " plug up" in shadow regions.

Before calibration

After calibration

Grayscale calibration can improve overall tonality, even on low-quality papers and helps reduce the plugging-up of shadows and reveal details for a higher print quality.

Benefits:

- Maintains a precise match to the ideal tone reproduction
- Ensures reprints of a file match the original run
- Preserves and enhances detail in shadow areas

Fiery Color Profiler Suite

Fiery Color Profile Suite, a set of additional colour management tools, allows users to make custom calibration sets and output profiles for the specific press and paper in use. While factory default profiles give pleasing quality, custom calibration and profiling is recommended for the best colour precision to match spot colours and print industry standards. It extends the colour capabilities of Fiery Driven printers with the most advanced colour management tools available, and makes the process easy via integrated communication with the Fiery server. Fiery Color Profiler Suite offers modular functionality to ensure colour accuracy and consistency across all types of media while increasing productivity and return on investment.

For more information on the Fiery Color Profiler Suite, refer to efi.com/cps.

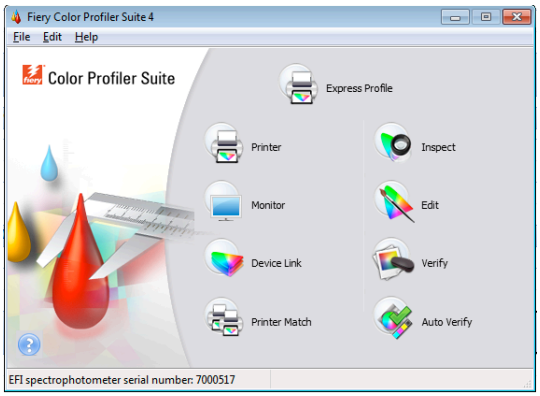
Integration with Fiery Color Profiler Suite

Fiery Color Profiler Suite makes world-class display and output profiles for Fiery systems. Device Link profiles can also be created using iterative measurement and optimization technology to achieve additonal precision.

Color Profiler Suite supports the EFI ES-2000, ES-6000, and a variety of third-party spectrophotometers. It provides tools that allow any operator to create output profiles and linked calibration sets, verify colour precision, match multiple Fiery Driven engines, compare colour gamuts, and edit profiles. The suite is the only set of profiling tools that is tightly integrated with the DFE to make output profiles, spot colour tables, and device link profiles directly on the Fiery server.

Benefits:

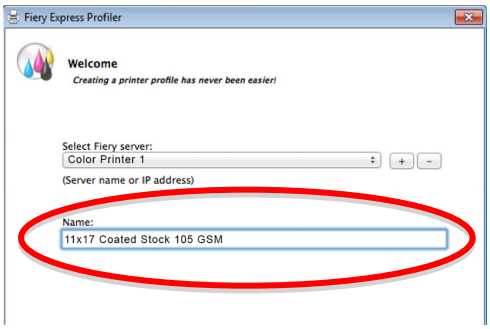
- Create custom output profiles specific to your press, paper, and preferred print settings
- Match industry standards such as ISO Coated v.2 and GRACoL more easily and precisely
- Verify colour match to the reference from day to day
- Improve spot colour matching by measuring samples and optimising
- Create monitor profiles for softproofing.

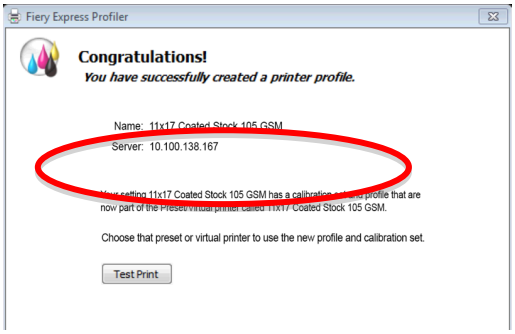


Fiery Color Profiler Suite launch pad

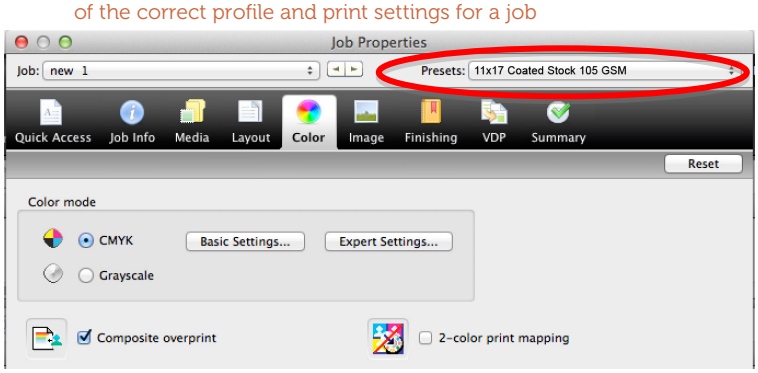
Fiery Express Profiler

The Fiery Express Profiler offers a simple five-step process to make a custom calibration set and output profile on a Fiery server. At the end of the profiling workflow, a server preset and virtual printer are created to ensure the user can access the new profile and calibration along with the print settings the profile was created for.



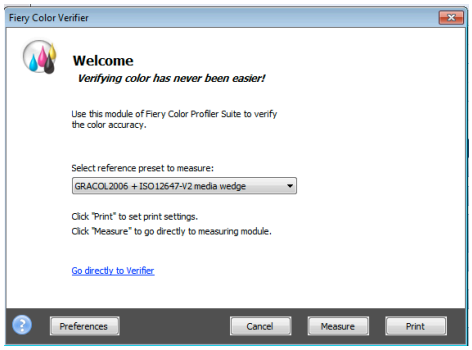


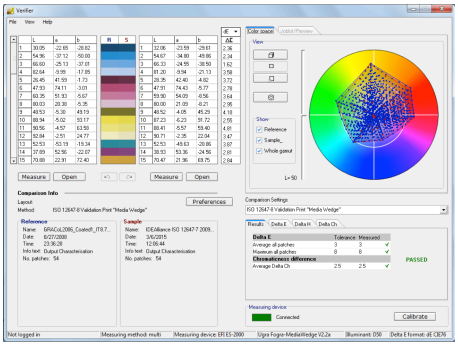
Fiery Express Profiler minimises operator errors in the selection of the correct profile and print settings for a job



Fiery Color Verifier

The Verifier module in Color Profiler Suite lets the user print a control bar and check colour precision against an industry reference.





Fiery Color Verifier window

Note: if you own Fiery Color Profiler Suite, free elearning online courses are included with the product (English only). If you don't have the certificate that came with the product, fill out a form at fiery.efi.com/elearning-bundles to receive a free code to access the courses.

Fiery spot colour

Pantone-approved

EFI and PANTONE have a long established partnership to provide the best spot colour tools and workflows for print providers. EFI offers the PANTONE Plus v.2™, as well as older Pantone libraries, that users can load on Fiery servers. Loading the latest Pantone libraries on a Fiery server ensures that spot colour output is accurate and consistent for all print jobs.

Pantone-approved Fiery servers provide state-of-the-art matching of spot colours

Pantone-approved Fiery servers automate the colour matching process from job submission to output. This automation eliminates guesswork and costly rework by controlling how colours will print.

The built-in colour lookup tables in the Fiery system automatically convert the PANTONE colour to optimised CMYK tints, based on the output profile for the paper that will be used. Operators can use Fiery Spot-On to further fine-tune the output of any PANTONE colour.

Using Fiery Spot-On takes the guesswork out of colour matching with an intuitive interface that makes it fast and easy to define or modify spot colours, eliminating the time-consuming task of making test prints to experiment with spot colour formulas. Spot-On reduces the potential for error by allowing users to create libraries of custom colours for use on other Fiery Driven print systems. The Substitue Color feature allows mapping colour tint substitutions for both CMYK and RGB source colours to correct spot colour tints and allow RGB tints from Office applications to be treated as spot colour when needed.

The latest PANTONE libraries are always available for download from efi.com

Spot colour libraries included in every Fiery server

PANTONE libraries: Includes the new PANTONE PLUS v.2 SERIES and PANTONE FASHION + HOME libraries

HKS, DIC and TOYO Ink Spot Colour Libraries: Includes the spot colours used in Europe (HKS) and Asia (DIC and TOYO)

PANTONE colour libraries and colour reference charts

The Fiery system currently supports a number of Pantone colour libraries, including the following:

- PANTONE PLUS v.2 Coated
- PANTONE PLUS v.2 Uncoated
- PANTONE FASHION + HOME

PANTONE PLUS v.2

Fiery FS200 allows users to reproduce even more PANTONE colours accurately, with new support for the PANTONE PLUS v.2 and PANTONE FASHION + HOME libraries. The PANTONE PLUS v.2 library provides updated colour definitions for legacy Pantone Coated Second Edition colours, and additonal colours included in the v.1 PANTONE PLUS libraries, the PANTONE 336 new libraries from 2014, and 84 additional colours added in 2015.

Benefits:

- Meets the brand colour expectations of demanding customers
- Properly matches the latest PANTONE colours, including new colourimetric definitions

The full array of PANTONE libraries, including the updated PLUS SERIES of the PANTONE MATCHING SYSTEM® with 84 new colours, can also be downloaded from download.efi.com/FieryPantone.

Fiery Spot-On

From corporate branding to high-level colour matching in commercial print settings, it'a essential to print consistent, predictable spot colours the first time, every time. With the growth of digital workflows, more users are able to create and influence colour in documents. This new level of control does have drawbacks, such the misuse of colour naming and callouts. These mistakes can lead to bottlenecks in prepress and proofing. Spot-On provides a world-class set of tools to address these problems and streamline colour print producion for jobs that use spot colours.

Fiery Spot-On is a standard tool in all external colour Fiery servers and often is offered as an additional software product for embedded servers. Fiery Spot-On provides a graphical user interface to help zero in on the CMYK tints needed to match a desired spot colour on a given printer and media. It also enables creation of custom spot colours with specific names. With Fiery Spot-On, users can achieve accurate colour matching for spot colours used in logos and branding with spot colour libraries such as PANTONE, HKS, TOYO, and DIC.

Fiery Spot-On delivers accurate colour matching for corporate and other spot colours more easily and quickly than competing colour editors.

Built-in spot and substitute-colour capabilities

Fiery Spot-On offers a number of sophisticated capabilities for spot-colour matching, including:

- Enables the user to edit spot-colour conversions in order to better match a customer's preference
- Allows users to create and manage new spot colours and collections of spot colours
- Captures new spot colours using an ES-2000 spectrophotometer
- Provides tools to visually select a better match to a desired spot colour

Spot colour management

Fiery Spot-On allows editing of CMYK tints associated with named colours, so users can achieve better colour matches It provides a graphical user interface to help the user zero in on the exact CMYK tints needed to match a desired spot colour for a given print condition.

Substitute Color

The Substitute Color feature allows users to achieve spot-colour consistency across documents to maintain brand colours. Because it can be used with RGB colours in source documents, it allows organizations to establish company-wide RGB colour palettes for Office applications that don't support spot colours.

Benefits:

- Delivers accurate and simplified corporate colour matching from Office applications
- Allows late-stage spot colour correction and replacement for spot colours that were converted to process in error when producing the print job
- Eliminates spot colour rework with late-stage colour editing, without opening the native application files

For more information about Fiery Spot-On, refer to the white paper, "Fiery Servers: The Easiest Way to Get the Right Colour Every Time."

Specialty Colour support (engine specific)

Specialty Colour enables custom output device colourants to be used for special effects. This includes transparent coatings, white colourant for printing on specailty media such as metalic substrates, and specific colours such as red or metallics.

Specialty Colours can be applied in the original design file, then managed on the Fiery Driven print system to enable the use of specialty colours available at the print device. Fiery Specialty Colour controls can also be used on jobs for which specialty colours were not defined in the original document. Controls are provided to

flood coat entire pages with a specialty colour such as clear, or to apply the specialty colour to specific page object such as images, graphics, pre-defined spot colours, or fonts.

Specialty colours can also be automatically applied as a watermark. The automatic generation of specialty colour watermarks is unique to Fiery servers.

Refer to the Fiery user manual for print engines that support the Specialty Colour capability for more information.

Benefits:

- Printers create can higher-value output with customised special effects right from the DFE
- Graphic designers can create documents that stand out from others, using special effects for highlighting
- Flood coat and image varnishing can be applied to files without having to define the varnish plate in the design file

Image quality optimization

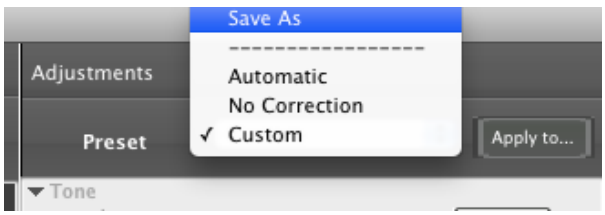
Fiery Image Enhance Visual Editor

Image Enhance Visual Editor is a Command WorkStation plug-in for adjusting images in a job without the need to open the file in the originating application. This feature is standard on external Fiery servers, and part of the Fiery Productivity Package for embedded Fiery servers. It enables real-time image editing, and eliminates the need for additional image-editing software. Image Enhance Visual Editor works with both PostScript and PDF files.

Image Enhance Visual Editor presets allow novice users to apply expert image enhancements and save custom enhancement configurations. These presets can be assigned to a specific range of pages in the current file, or to other files in the future. The default preset called "Automatic," will analyze and automatically enhance the image quality for a variety of imaging problems. More advanced users can manually adjust tone, colour, and image sharpness. Operators can see image adjustments before they save changes.

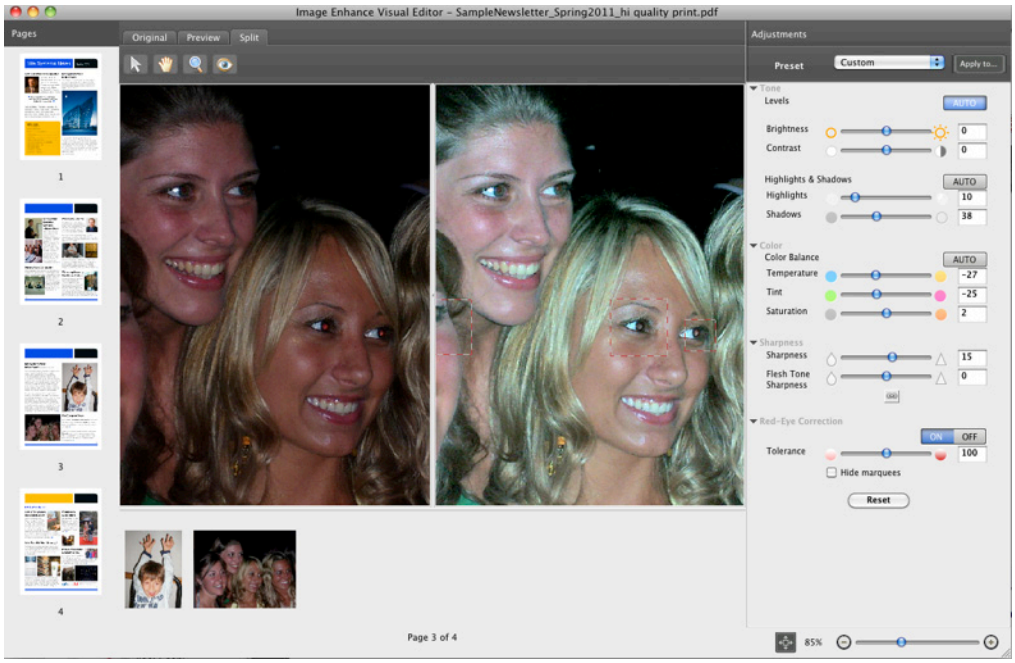
Before Image Enhance

After Image Enhance



Users can save custom image correction settings to reuse in other images.

Image Enhance Visual Editor also corrects for red-eye. When users set red-eye correction for an image, a preview is presented highlighting instances of red-eye in that image that will be corrected. Users can specifiy additional red-eye regions, or areas that don't need correction. These adjustments all appear in the onscreen preview so that the correction can be done without wasting time and money by printing a sample.



Users can select additional red-eye regions to correct, or deselect areas that don't need correction.

Once an operator saves image-correction settings from Image Enhance Visual Editor in PDF files, the settings are stored in the PDF so that the user can fine-tune corrections later. This way, operators can also reverse PDF file adjustments.

Image Enhance Visual Editor works with file sizes under 2 GB, documents less than 100 pages, and pages that contain fewer than 50 images. Additionally, the feature is designed to detect and enhance only natural images, so it won't affect bitmap versions of graphics such as charts and graphs. Image Enhance Visual Editor does not preview spot colours and inter-object print settings such as overprint or transparency. These remain in the original file so that they will be honored when printing.

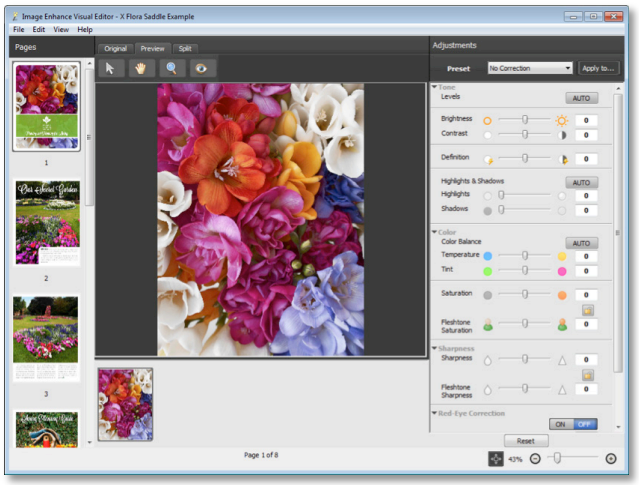
Fiery Image Enhance Visual Editor addresses the widest range of images and jobs by supporting RGB and CMYK colour sources and the most commonly used file formats. This makes it the most complete toolset of its type in today's market. It can be used to improve the image quality of many types of print jobs such as office documents, photo books, and professional publishing layouts.

Visit the Resources section at the Fiery Command WorkStation website at efi.com/CWS to watch the Image Enhance Visual Editor video demonstration.

Benefits:

- Reduces turnaround time because operators do not need to return to the originating software application to correct images
- Saves money, because expensive image retouching software is not needed at every workstation
- Corrects saturated colours without harming flesh tones
- Allows users to fix images late in the production process after the job is already on the Fiery server
- Makes it easy for any operator to enhance images with automated tools

Image Enhance Visual Editor is located in the Image tab in Job Properties, and can be launched from Command WorkStation (highlight job, right-click).



The new Fiery Image Enhance Visual Editor “definition” and “saturation” controls

Fiery Image Enhance

Fiery Image Enhance improves the output quality of digital photos, and saves prepress time by eliminating manual image editing tasks. Image Enhance addresses the widest range of images and jobs, making it the most flexible feature of its type in today’s market.

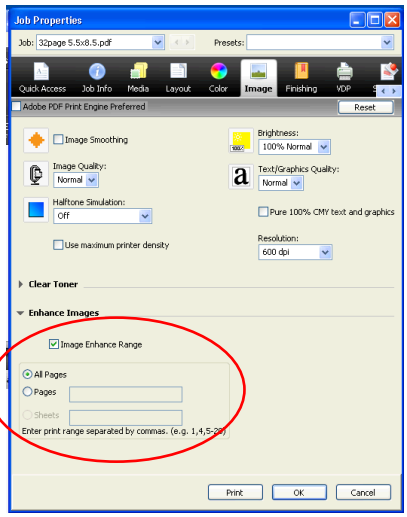
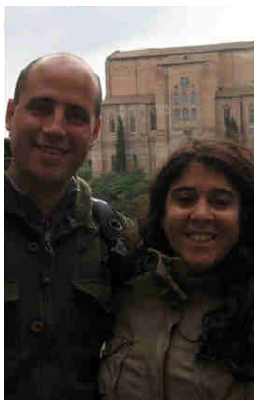


Image Enhance automates optimization so operators don’t need to preview or tweak images before printing. Simply turn it on in Fiery Job Properties. It also works with Fiery Hot Folders, Job Presets, and Virtual Printers.

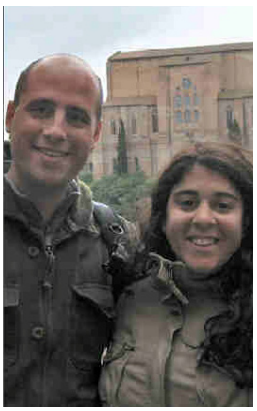
This feature is standard on all Fiery colour servers.

Key features:

- Automatically enhances images in submitted TIFF, PostScript, or PDF files
- Corrects images based on settings configured in Command WorkStation
- Features automatic correction modes that do not correct or affect images that do not require enhancement
- Once configured and enabled, requires no operator intervention to enhance images in every job produced
- Reduces waste from jobs printed with less-than-optimal quality



Before Image Enhance



After Image Enhance

Fiery imaging features

Perfect PDF

External Fiery print servers offer APPE, the native Adobe PDF Print engine. Only Fiery servers have been awarded the designation of printing the perfect PDF by the VIGC group in 2012. Fiery servers with APPE perfectly print the Altona Technical Suite version 2, the Ghent workfkgroup PDF/X-4 test files, and the additional tests developed by VIGC every time.

Benefits:

- Ensures that prints match the designer's expectation, even if complex transparency effect have been used from design applications
- Optimises shop productivity by moving to a 100% PDF/X-4 workflow so that print buyers submit files in the standard PDF/X-4 format and Fiery Driven print systems image them perfectly
- Elimiates errors and delays in production that can occur when PDF files need to be manually flattened or printed from the print driver to get proper transparency blending without colour or imaging artifacts

Composite Overprint for spot colours and CMYK

When an object of one colour is placed on top of an object of another colour in a page layout or drawing, it can be imaged directly on top if it has been configured to overprint.

Historically, pre-separated PostScript files needed to be sent to DFEs in order for overprints to render correctly on the printed output. This was not an optimal workflow for processing colour. It also led to many mistakes on the part of designers and print providers and often unsatisfactory quality.

In Fiery FS200 and FS200 Pro servers, Fiery's Auto-detect Composite Overprint feature can now be automatically enabled for objects specified to overprint. This means colour quality is assured. It also eliminated the long processing times common on other DFEs when composite overprint is enabled. Enable this feature for best results with all jobs except pure RGB files such as digital photobooks.

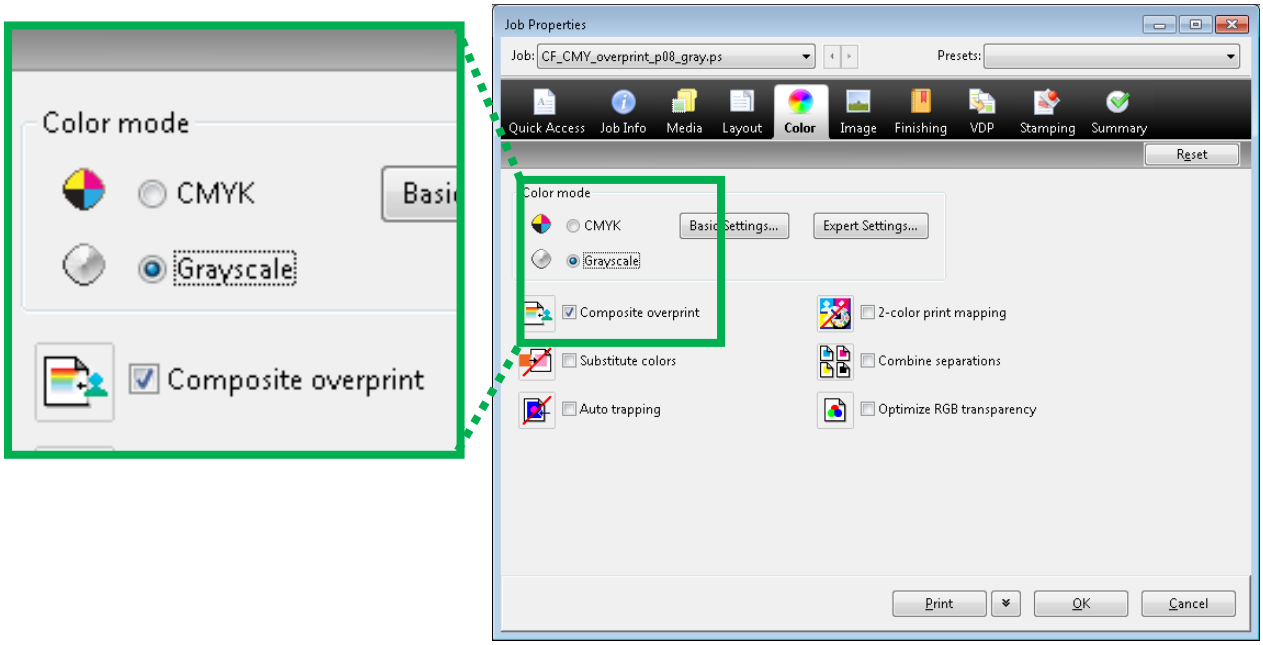
Benefits:

- Further enhances the performance advanced Fiery Driven print systems have always provided compared to competitors
- Produces overprints specified in design applications for perfect printed results that match the designer's expectation every time

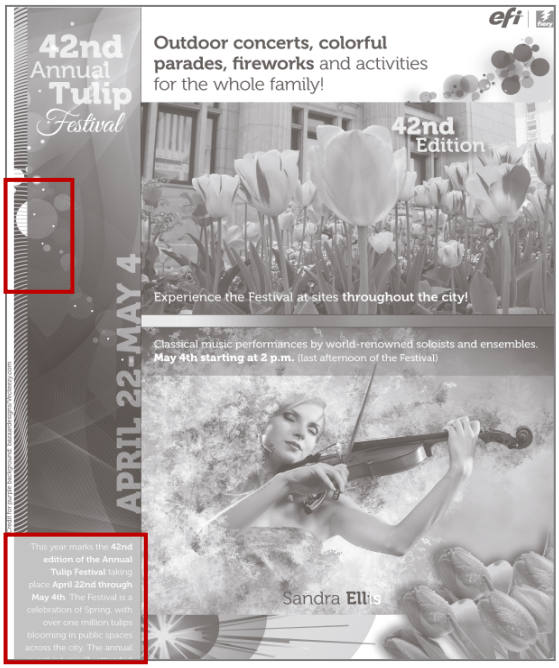
Grayscale Composite Overprint

The Grayscale Composite Overprint feature allows overprints, drop shadows, and transparencies in colour print jobs to render accurately when printing in grayscale mode on full-colour print devices. This unique Fiery

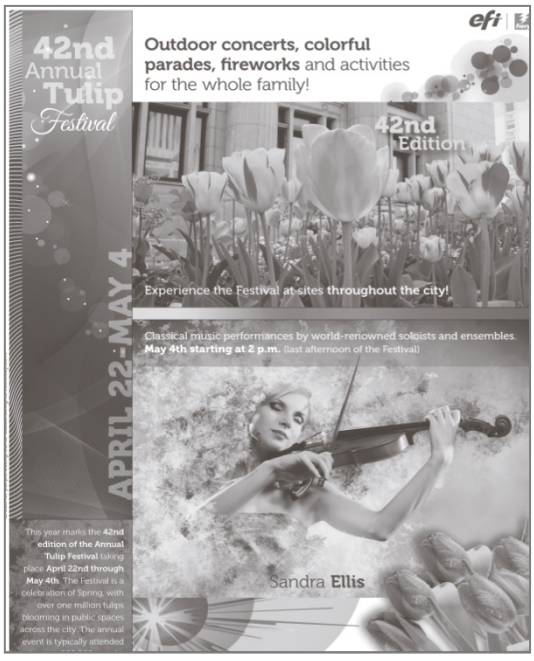
feature works when printing in grayscale colour mode with the Composite Overprint setting enabled, and works for both CPSI and APPE interpreters.



Grayscale and Composite Overprint settings need to be selected in Job Properties to guarantee correct representation of overprints in black-and-white output.



Red boxes indicate where errors occur because overprint is not applied



With Grayscale Composite Overprint enabled

Benefits:

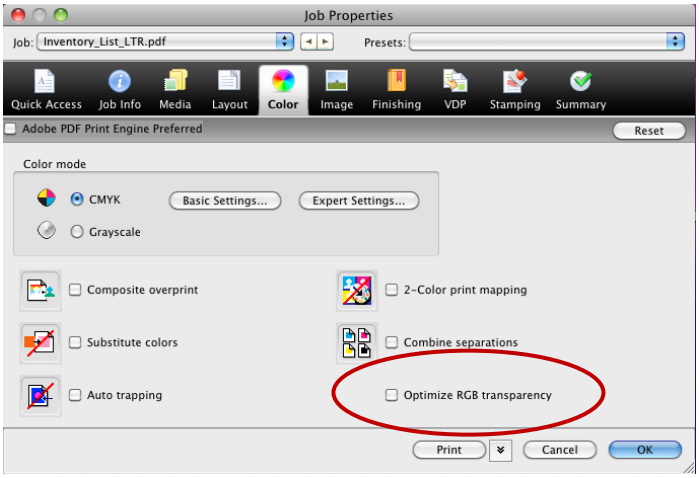
- Guarantees black-and-white output that matches the design on the first print, even if the designer has used techniques such as overprinting
- Saves cost while producing black-and-white output that preserves the appearance of complex design elements

Optimise RGB Transparency

Transparent page objects can be created easily in modern design applications. The definition of these transparent regions resides in the PDF document and they are flattened at the DFE to improve productivity. Design applications specify the colour space used when blending transparent regions in the PDF. The Adobe APPE interpretter does not consistently respect the intended blending of colour spaces and defaults to the same colour space for all jobs. On the Fery server, enabling the Optimise RGB Transparency setting at the Fiery driver or in Job Properties, forces the interpreter to use the blending colour space specificed in the PDF file, so that the output has no artifacts and matches customer expectations.

This enhances the print quality of PDF files that include overlapping RGB elements defined with transparency, rendering and accurately printing the resulting colours. This problem is often created by accident when designers use drop shadows or other effects that rely on transparency blending from design applications.

To use this feature, operators check the "Optimise RGB transparency" box in the colour tab of Job Properties.



"Optimise RGB transparency" box in the colour tab of Job Properties

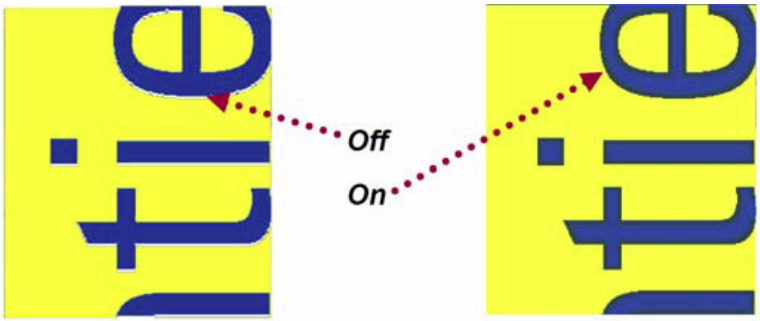
Benefit:

- Increases colour accuracy when printing PDF files

Auto Trapping (fixed)

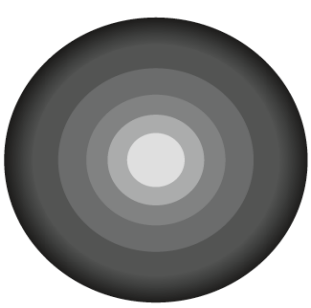
Professional-quality colour documents are created by managing all aspects of colour on the page, including how colours interact with one another. Traditionally, this interaction of colour on a page was managed by skilled operators using complex tools and techniques to accomplish the highest-quality results. By using the Fiery Auto Trapping feature, operators can achieve professional-level results without extensive knowledge of trapping rules. The feature accomplishes this by automatically adding a few pixels of the lighter colour into the darker colours so that the paper white does not show through registration errors.

The Fiery Auto Trapping feature applies trapping to jobs coming from any software application; it does not require the document designer to insert any information, and it does not require special commands other than Auto Trapping: On/Off. The Fiery Graphic Arts Package, Premium Edition extends this feature to allow trapping between image and graphic data as well as trapping of pixels within a single image. The Fiery Auto Trapping feature is not a simulation of trapping on other devices such as offset presses.

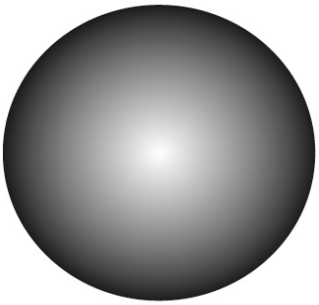


Enhanced gradient smoothing

The Image Smoothing setting in the Fiery driver and in Job Properties uses proprietary Fiery processing for enhanced gradient smoothing. This ensures the highest quality print appearance for colour transitions found in design elements such as vignettes or vector gradients by removing objectionable stepping in the print output.



Without Image Smoothing



With Image Smoothing

Vignettes and vector gradients are common design elements that typically transition from a dark to a light colour.

The colour transition in these elements may look smooth on the screen, but it can present visible bands when printed.

Enhanced gradient smoothing can be applied by enabling the "Image smoothing" setting in the Image tab in the Fiery driver and Job Properties.

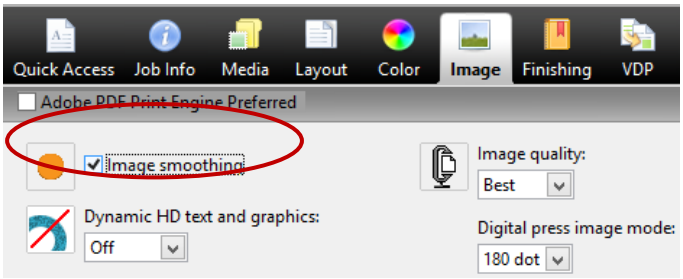
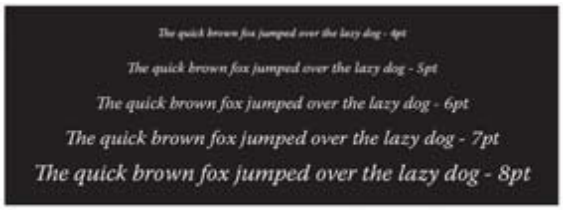


Image smoothing setting in Job Properties and Fiery driver

Text and graphics quality (engine specific)

Text/Graphics Quality applies processing enhancement to text and graphics, sharpening the edges of text and graphic images. Text/Graphics Quality is applied only when 100% colour is used in the image. Because pure cyan, yellow, or magenta elements are not a part of typical output — and because it's difficult to get 100% of toner in the output colours — the feature is mostly used in black elements for a sharper and smoother text and line art with minimised "jaggies" at a resolution of 2400 dpi.

Refer to the Fiery user manual for print engines that support the Text/Graphics Quality capability for more information.



Text Quality

Line Art Quality

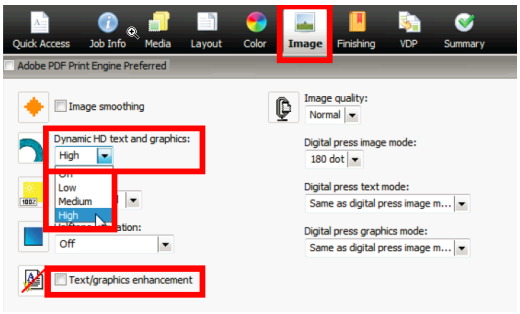
Benefit:

- Increases output quality, achieving better definition of black text and optimised full-colour images

Dynamic HD Text and Graphics (engine specific)

Dynamic HD Text and Graphics is an Fiery exclusive feature that reproduces accurately ultra-thin lines, small text, and fine details in the printed output. It also delivers lead/trail edge correction—a unique functionality that evens outs the colour of the lead edge and the trail edge of a character by compensating for the typically darker appearance of one edge and the lighter appearance of the other edge. It allows the Fiery to process files at 1200 dpi, preserving high detail content and reducing jaggedness associated with halftoned, non-saturated objects.

Refer to the Fiery user manual for print engines that support the Dynamic HD Text and Graphics capability for more information.



Dynamic HD Text and Graphics setting can be found in the Image tab in Fiery driver and job properties

Benefits:

- Delivers maximum detail on even the finest unsaturated lines with true 1200 dpi print quality
- Reduces jaggedness in both saturated and unsaturated text and line art
- No impact on performance

Fiery Workflow Suite: Prepress solutions

Fiery Workflow Suite includes all the prepress tools necessary to prepare a job for printing in a production environment. Fiery servers offer makeready components with Fiery Impose, Fiery JobMaster and Fiery Compose. Those software applications are covered in the Fiery makeready section in this product guide. Fiery servers offer advanced prepress tools to address colour control, troubleshooting, and automation of labour intensive prepress processes. Those advanced tools are included in the Fiery Graphic Arts Package, Premium Edition, Fiery Productivity Package and Fiery JobFlow software.

Fiery prepress tools offer printers a flexible solution that can be available to either, the local press operators or the remote prepress specialist without the need of investing in a dedicated desktop client. The unified working space for all prepress tasks simplifyes labour-intensive job preparation activities and shortens job setup times of even the most complex jobs.

Fiery Graphic Arts Package, Premium Edition

The Fiery Graphic Arts Package, Premium Edition is a professional "toolkit" that complements the Fiery external server with a series of features that emphasise colour excellence and precision for the graphic arts market.

The Fiery Productivity Package offers some of the same features for certain embedded Fiery servers.

The Fiery Graphic Arts Package, Premium Edition extends the level of colour control with the most advanced tools for previewing output and troubleshooting digital print jobs. It includes additional specialty features for softproofing and integration with prepress workflows. Three key components lead to enhanced productivity:

1. Preflight – Checks jobs for problems before they are printed. This feature can be automated through a Fiery Hot Folder workflow with Command WorkStation 5.3 or above or with Fiery JobFlow. Preflight catches problems before they result in bad prints that must be reprinted to satisfy the print buyer.

2. Fiery ImageViewer – Allows the user to visually inspect the raster output from the RIP before printing, and to apply colour adjustments for the overall job if needed. Because Fiery ImageViewer supports softproofing, users can achieve colour-accurate visual corrections on a properly calibrated and profiled display.

3. Postflight – Allows troubleshooting of problem jobs by identifying types of content, reporting missing spot colours in case they need to be added in Fiery Spot-On, and printing test pages to confirm whether an imaging problem is in the file or with the printer hardware.

Fiery Graphic Arts Package, Premium Edition also includes a number of other features useful to various types of professional print organizations:

4. Control bar and Control Bar Builder – Adds dynamic job information and user-selected colour bars to each printed page, including the Ugra/Fogra Media Wedge or IDEAlliance colour bars

5. Filters for Hot Folders – Offers filters for CT/LW, PDF2Go, ExportPS, DCS 2.0, EPS, PDF/X TIFF, TIFF/IT, (1-bit TIFF for some engines)

6. Configurable Auto Trapping – Provides complete control over trapping with advanced settings

7. Halftone simulation with frequency per colour – Enables customizable screen simulation for dot proofing

8. Paper simulation editing – Allows the user to manually adjust the white point of CMYK source profiles so that proofing of paper white can be fine-tuned

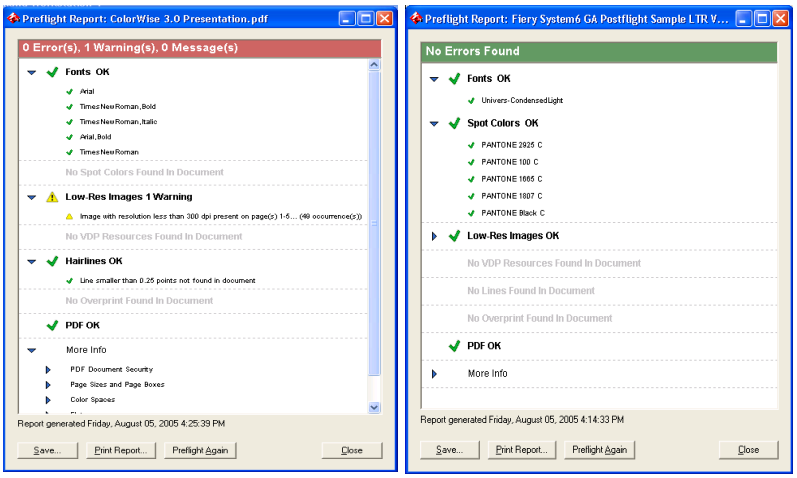
9. Progressives – Shows partial combinations of ink separations used in a job

10. Two-colour print mapping – Useful for proofing or plate-making for two-colour presses

Note: if you own Fiery Graphic Arts Package, Premium Edition, free elearning courses are included with the product (English only). If you don't have the certificate that came with the product, fill out a form at fiery.efi.com/elearning-bundles to receive a free code to access the online courses.

Preflight

Eliminating errors before they happen and making sure all settings and systems perform correctly is an integral part of managing a successful production printing operation. Interrupting a job to make corrections wastes valuable time and resources, and it takes much more time to correct a problem once production has started. For these reasons, prepress specialists and operators prefer to "preflight," a job before submitting it straight to production.



Examples of Preflight report results

In print production, preflighting involves checking a file for its "print worthiness." Several tests are performed, and settings are verified on the file to determine whether it will print successfully.

Specially created for digital colour printing, Fiery Preflight is a powerful preflight tool designed to check the most common areas of error to ensure that files will print successfully on a Fiery Driven printing device.

Preflight is a fast process that does not affect the performance of the Fiery server because it is performed outside of the actual job printing. The Preflight report is displayed in a matter of seconds. In reviewing the report, the user knows at a glance whether there are errors or missing elements in the job and can easily verify the status of every checked area. Users can access Preflight from the Command WorkStation.

Preflight reports on a number of elements, including:

- Fonts
- Spot colours
- VDP resources
- Low-resolution files
- Hairlines below threshold
- Overprint
- PostScript errors
- PDF document security
- Page size(s) and page boxes (such as trim, media, crop, etc.)
- Colour spaces
- Existence of transparency
- Image compression

Preflight component	What it checks	Default error level
Fonts	Reports if font not found on server	**Critical**
	Reports if Courier font is present. The presence of Courier font usually means that a font not found has been automatically replaced by a system default font.	**Information**
Spot colours	Reports if spot colours are not found in Spot-On libraries	**Critical**
Low-res images	Reports if image resolution is less than a specified DPI	**Warning**
VDP resources	Reports if VDP resources are not found	**Critical**
	Preflights individual VDP resources (using same checks applied to entire job)	**Off**
Hairlines	Reports if line width is less than a specified point value	**Warning**
Overprint	Reports when overprint is detected	**Warning**
PostScript errors	Reports if job results in a PostScript error (Preflight immediately aborts in this situation.)	**Critical**
Halt Preflight when first error found	Any error found (This is a checkbox option; it is either ON or OFF.)	**Off**

Table: Elements reported by Preflight

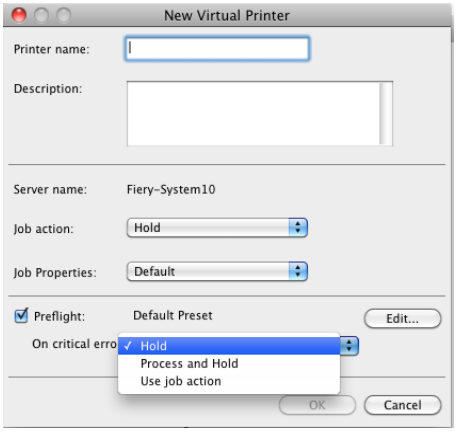
Benefits:

- Eliminates the need for users to purchase third-party applications to perform preflight testing. Preflights VDP jobs to ensure proper availability of VDP resources
- Increases productivity in job-submission and print processes by eliminating printing errors at the printing stage, reducing waste due to missing resources.
- Improves communications with designers by using the preflight report to improve the quality of the jobs submitted to the Fiery server, reducing turnaround time.

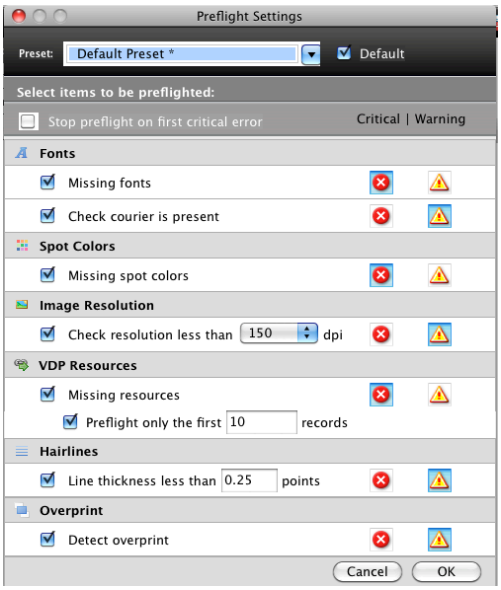
Auto Preflight for Hot Folders and Virtual Printers

Fiery users can apply Preflight to any jobs that use Hot Folders and Virtual Printers to automatically check files before processing. Automatically preflighting jobs saves time, resources and money, and it increases productivity by rerouting incorrect files before printing.

Users can configure Auto Preflight when setting up Hot Folders and Virtual Printers by checking the Preflight box and specifying a Preflight preset. The administrator can define what constitutes a warning or error and what to do with jobs that have these errors. For example, jobs can be moved to the Hold queue — preventing them from printing and wasting materials.



Enable Auto Preflight when setting up Hot Folders and Virtual Printers.



Customise the warning error tolerances in Preflight settings.

Benefits:

- Automatically preflighting jobs saves time and increases productivity.
- Rerouting incorrect files before printing saves resources and money.

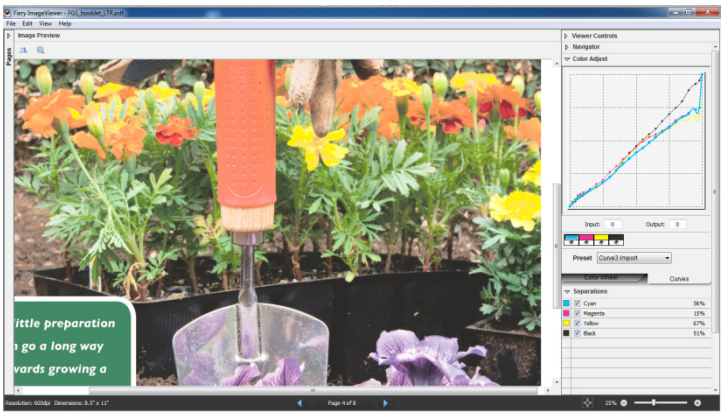
Fiery ImageViewer

When considering the overall cost associated with producing printed materials, many print providers focus on the final "cost per page" for ink or toner on paper, according to the CAP Ventures study — *The Cost of Business Communication: A Look at the Business Document Lifecycle.* Actually, the real cost of producing printed materials includes the time and resources allocated to print production. These expenses include authoring, design, proofing, revision control, ordering, warehousing, distribution, and obsolescence.

The CAPV study finds that internal preparation and review of print jobs accounts for at least 15% of the real costs of production. Obsolescence or waste adds another 14% to the overall cost. It's now easy to understand why accurate proofing and review of documents remains critical to reducing costs and increasing profits for print providers.

Fiery ImageViewer features the most powerful collection of preparation and review tools ever integrated into a colour DFE. It provides:

- Local and remote softproofing
- Online and offline softproofing
- Intuitive colour-editing capabilities for viewing and correction of a job after RIPping – but before it is sent to the print engine.
- Resources to view the effects of trapping, troubleshoot imaging artifacts, and make late-stage colour adjustments



Fiery ImageViewer user interface

Key functions and features include:

- Adjusts colour on a per-page basis
- Applies colour modifications to that particular job and prints it without the need to re-RIP the job
- Generates softproof PDF and exports a low-resolution raster file in PDF format for offline proofing
- Provides powerful and instantaneous zoom all the way to the pixel level
- Previews jobs without wasted clicks

Benefits:

- Saves time and money by allowing visual review of all elements in a file before sending it to the output device.
- Offers late-stage colour editing before printing.
- Reduces waste, increases productivity, and adds flexibility to the workflow.
- Avoids unnecessary proof prints.
- Permits rework without re-RIPping the job, saving valuable production time.

Fiery ImageViewer enhancements

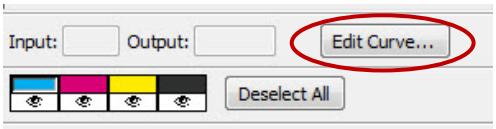
New features in Fiery ImageViewer for Fiery FS200 servers deliver more precise control for creating and applying colour curves, while enhancing overall usability.

- Tabular curve edit

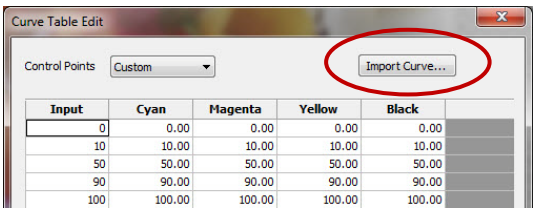
  Accessible through the "Edit Curve" button in the Color Adjust window, this feature allows to define curves using custom values, or choose pre-populated control points, such as 10% or P2P targets.

  The Import Curve function offers the ability to import third-party curves from applications such as Curve2™ , Curve3 and similar software.

  Users get a more precise way to edit colour curves and better control of colour edits. It also helps match G7 tone and gray balance targets for environments that choose to disable ICC-based colour management.



The new Edit Curve button in ImageViewer



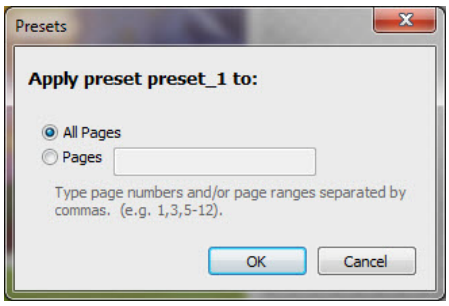
Edit curves more precisely with tabular curve edit

- Apply custom curves per page

  ImageViewer lets users save custom curves as presets, then apply them to a single page, a specific range of pages, to the entire job, or to other jobs.

  This gives better control over custom settings throughout a job.

  Once created, curve presets can be applied to other jobs within ImageViewer.



Choose to apply custom curve presets to desired pages within a job

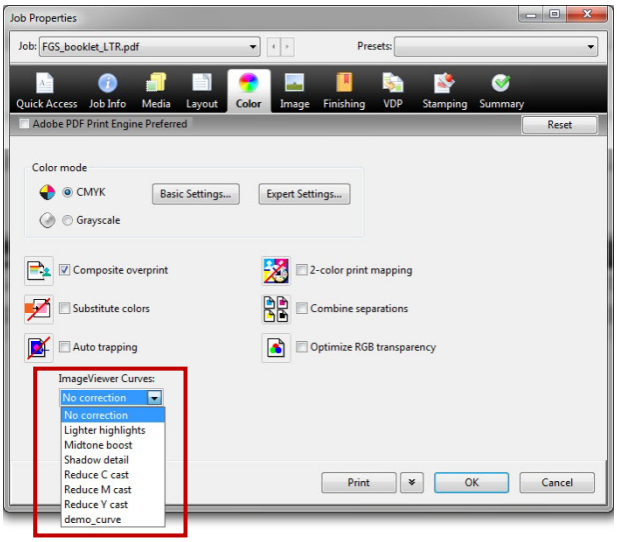
- Apply ImageViewer curves in Job Properties and Fiery driver

  ImageViewer curve presets allow users to apply custom curves from the Job Properties Color tab in Fiery Command WorkStation or from the Fiery driver.

  When a user saves a custom curve preset in ImageViewer, it will automatically be populated in the ImageViewer Curves dropdown menu in Job Properties.

  A set of predefined ImageViewer curve adjustments are available for use on all Fiery FS200 servers, even systems without the ImageViewer feature in Fiery Graphic Arts Package, Premim Edition or Fiery Productivity Package. These presets include:

  - Lighter highlights
  - Midtone boost
  - Shadow detail
  - Reduce C cast
  - Reduce M cast
  - Reduce Y cast



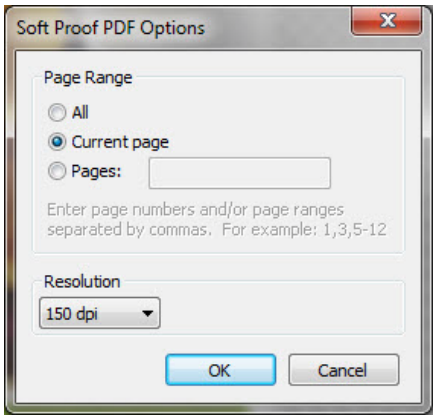
Choose from pre-populated curve adjustments or use a custom curve

  This new feature facilitates colour matching between similar jobs, and allows custom or factory default curve corrections to be applied without needing to open ImageViewer.

- Simplified softproof

  ImageViewer provides a simplified set of options to create a softproof. Simply specify the resolution (150 or 300 dpi) and the specific pages within the job that should be exported as a softproof.

  This offers a more efficient way to create softproofs.



Simplified options make creating soft proofs more efficient

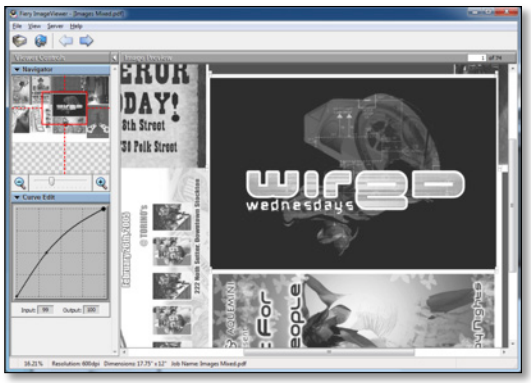
Fiery ImageViewer for Black and White

An optional plug-in to the Fiery Command WorkStation application for Fiery servers driving black and white engines. It allows users to preview full-resolution print data so they can see exactly how a black and white job will look before they print it — saving time, and reducing waste and mistakes.

It also provides controls to adjust the black tone curve, and lets operators copy the same tone curve to other jobs or similarly equipped engines. This way, print providers can split long runs between multiple engines with consistent output.

Also, print providers can match the output to a customer's satisfaction, and black tone curves can be stored and edited or reloaded over time to guarantee a consistent delivery of print results and accommodate changing print requirements.

Before



After

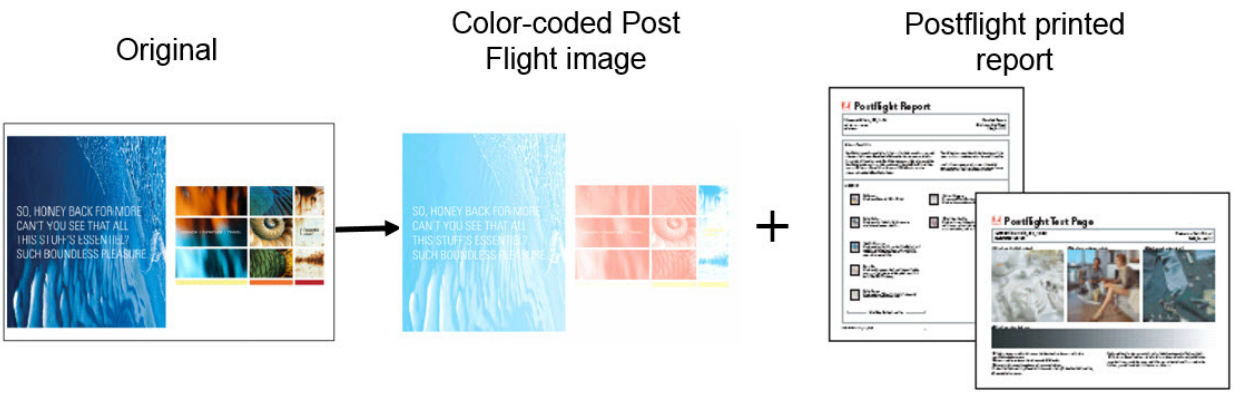
Benefits:

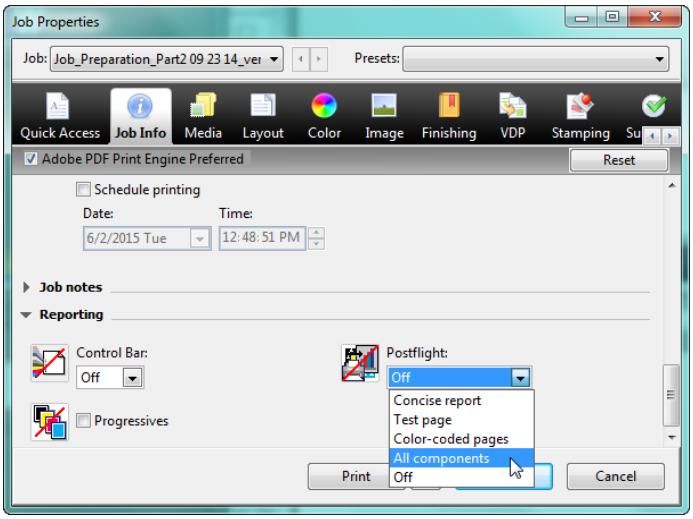
- Full resolution previews allow users to review the content and check for missing fonts, images, PostScript errors, and layout issues without the need to print the job — saving clicks and minimising waste.
- Black tone curve adjustments can be saved and applied to other jobs or other Fiery Driven black and white engines to ensure output consistency at all times.

Postflight

Postflight is the process of analyzing processed files — PostScript, PDF, DCS2, and others — for quality control in a digital prepress workflow. The Fiery Postflight report lets users produce a colour-coded version of the job to indicate the source colour space of each element for colour print troubleshooting. The colour coding is explained in an appended report that describes which colour spaces are used in the job and what job options affect those spaces. The report also provides information about the print environment, such as calibration date and time, as well as calibration method. Users may also print a colour test page to verify the condition of the print environment.

Operators can easily choose to produce Postflight reports from the Fiery driver.





Select Postflight from the Job Info tab in Job Properties and Fiery driver

Benefits:

- Decreases the amount of time an operator has to spend troubleshooting jobs, increasing efficiency, reducing turnaround time, and maximising profitability.
- Reduces the learning curve by teaching operators the effects of job-setting parameters, making it useful as a training tool.

APPE Postflight report

Before Fiery FS200 Pro, the Postflight report always processed PostScript and PDF files through the CPSI processing path. But, when processing a PDF with the APPE interpreter, the file can include colour information that is translated differently for CPSI. For that reason, it is necessary to have a Postflight feature that supports the native PDF printing path without converting the PDF file to PostScript for CPSI.

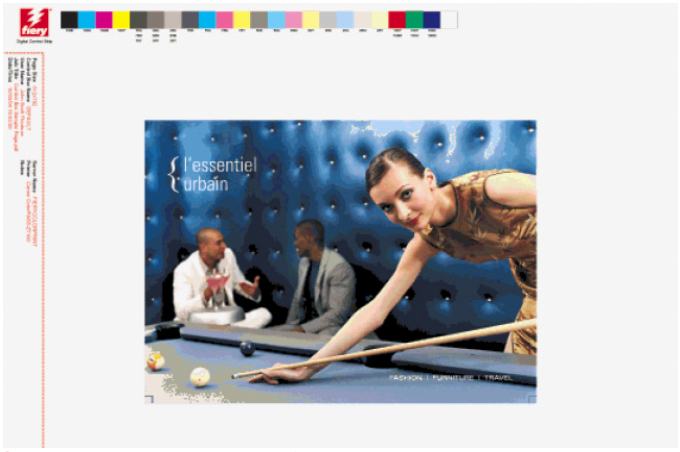
APPE Postflight reports the source-colour spaces in a PDF that are sent to APPE for processing. APPE Postflight also improves the reporting of missing spot colours by colour coding spot colours found in Fiery Spot-On differently than the missing spots.

This feature only works on Fiery external servers running FS200 Pro and requires APPE to be enabled in Fiery Configure. To do this:

- Check “Use Adobe PDF Print Engine Preferred as default for PDF Jobs”
- Or check the “Adobe PDF Print Engine Preferred” selection in Job Properties

Control Bar

A colour control bar is commonly used on conventional press work and contract proofs. Without a colour bar, it is difficult to determine the colour precision of the print.

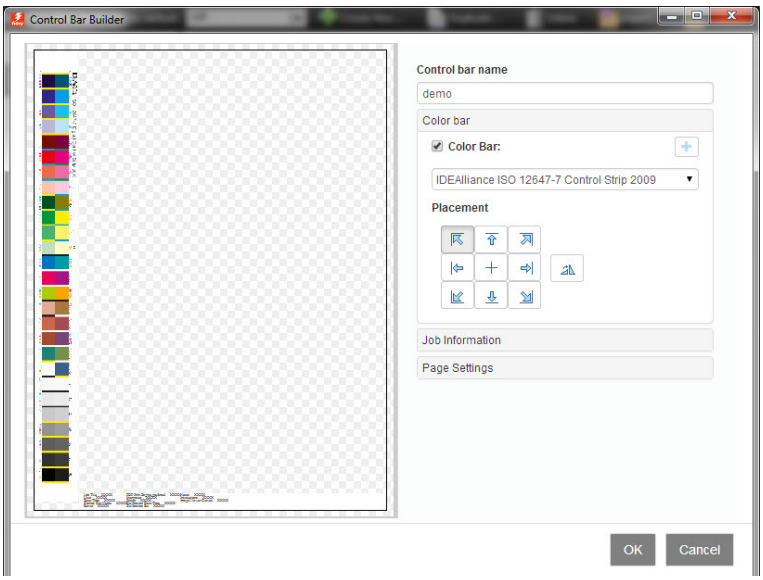


Control Bar displayed at top of page

The Control Bar also adds dynamic job information. Users select colour bars for each printed page and can customise the printed information by entering settings/preferences into the fields provided in the user interface. These settings can also be saved for future use.

Control Bar Builder

The new Control Bar Builder has a visual interface to design custom control bars. This allows for different colour bars or job information, depending on the application or intended audience. Each custom control bar can be used across all media sizes, reducing setup time and simplifying the operator's ability to use custom control bars.



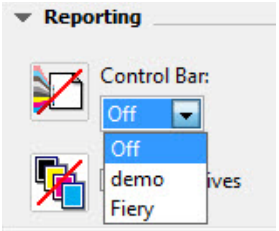
Control Bar Builder user interface

Users can upload a custom colour control bar, or use an industry-standard colour bar such as the Ugra Fogra or IDEAlliance control wedge included with Control Bar Builder.

Users can customise font, text size, colour, and the order of information in the job ticket portion. The control bar can be placed vertically or horizontally on the sheet, and at different locations. The Fiery driver and Job Properties provide a selection of default and custom control bars created with the Control Bar Builder.

Benefits:

- Flexibility on control bar placement and content that works across media sizes.
- Users can design custom control bars for colour consistency and quality control of specific jobs



Control Bar selection in Job Properties and Fiery driver

Filters for Hot Folders

In a high-end commercial or in-plant environment, print professionals demand compatibility and integration in their existing workflow. They also insist on proper file conversion with optimal productivity.

Fiery Hot Folders, is designed to provide users with an automated method for sending print files to a Fiery server through simple drag-and-drop or print-to-file actions. By adding Fiery Graphic Arts Package, Premium Edition users can access a set of expert-level filters, allowing Hot Folders to process jobs in native file

formats. In Hot Folder workflows, jobs may be routed to a Fiery server with predetermined settings, including PPD overrides, imposition attributes, and file format conversions.

Benefits:

- Offers seamless integration of digital production in conjunction with high-end graphic arts workflows.
- Relieves users of the repetitive task of configuring multiple jobs.
- Reduces errors and eliminates workflow redundancies.
- Enhances productivity by allowing native files to be submitted without the need to launch a separate application and by converting files in the Hot Folder application at the client, rather than on the Fiery server

The filters in Graphic Arts Package, Premium Edition include:

Filter	Description
DCS2.0 TO POSTSCRIPT	Converts DCS 2.0 format to PostScript. This plug-in accepts the following DCS 2.0 formats: • Single/Multiple file DCS, no composite • Single/Multiple file DCS with grayscale composite • Single/Multiple file DCS with colour composite The output is pre-separated PostScript, one separation per page.
TIFF/IT TO POSTSCRIPT	TIFF/IT is a file format used in graphic-arts environments for transfer of final print job data (often pre-screened) from one print platform to another. This filter converts TIFF/IT to pre-separated PostScript, one separation per page.
TIFF TO PDF	TIFF is a flexible, platform-independent file format used in graphic-arts environments, and for high-end graphics applications. This filter accepts all TIFF files up to TIFF 6. The filter preferences provide the user with options for scaling and positioning of the output.
1-bit TIFF (engine specific)	1-bit TIFFs are used in certain prepress environments when there is a need for fast output and predictability. They are considered the equivalent of digital film because they are locked, pre-screened files that contain all the information necessary for printing the file, including dot size and screen resolution. The ability to print 1-bit TIFFs on a Fiery Driven device allows users to simulate the conventional screening on the Fiery server.
EPS TO POSTSCRIPT	Encapsulated PostScript is a common legacy format for graphics and other page elements or pages. This format can also include text, graphics, and images. The filter preferences provide the user with options for scaling and positioning the output.
EXPORT PS TO PDF	The ExportPS file format is a PostScript raster output created by Creo's Brisque workflow. In Hot Folders, the ExportPS filter processes the ExportPS file by rendering and resampling to the device resolution of the print engine. The output of the filter is PostScript or PDF.
CT/LW TO POSTSCRIPT	CT/LW files contain information about photographic imagery, line art images, text, and lines from drawings. Together they determine what the final output will look like. The CT/LW filter accepts multiple CT/LW files and FP files, and uses the information they provide to output a single PostScript file. Also accepts "new" CT/LW formats.
JPEG TO POSTSCRIPT	JPEG is a standardised image compression format. The filter preferences provide the user with options for scaling and positioning the output.
PDF2GO	The PDF2Go file format is a PDF output created by Creo's Brisque workflow or the Creo Spire server. It usually contains PDF layers of rasterised CT and LW, each with a different resolution. The Hot Folders PDF2Go filter processes the PDF2Go file by rendering and resampling to the device resolution of the print engine that connects to the target server. The output of the filter is PostScript or PDF.

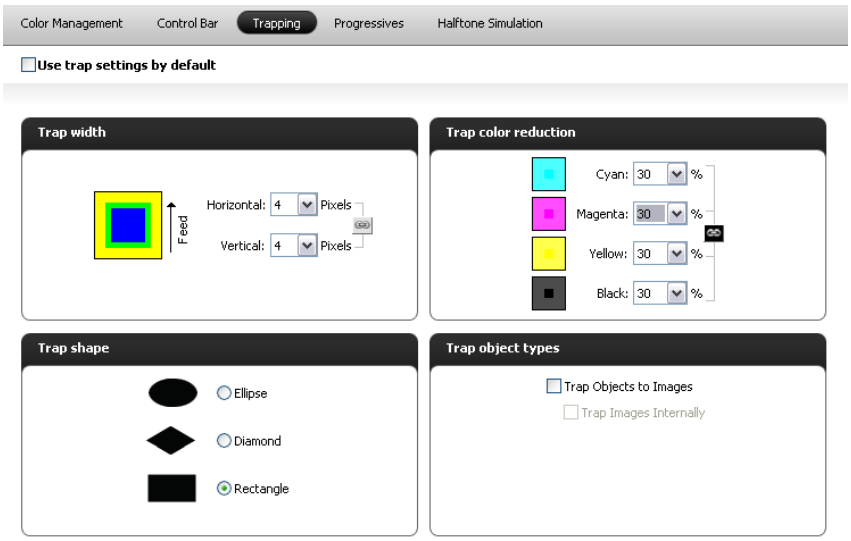
Filter	Description
PDF/X PREFLIGHT	The PDF/X-1a option is not a file converter, but a preflight check that verifies compliance of the job with the PDF/X-1a specification (defined in ISO 15930-4:2003). Essentially, all fonts and images must be embedded. The PDF/X-3 option is not a file converter, but a preflight check that verifies compliance of the job with the PDF/X-3 specification (defined in ISO 15930-6:2003). The main use of the plug-in is to allow only PDFX-1a- or PDF/X-3-compliant jobs to be downloaded to the print server.

Configurable Auto Trapping

The feature provides users with advanced trapping settings, and offers greater flexibility and full control over trapping. Auto Trapping is optimised for Fiery Driven printers, and is fast enough that it can even be applied to variable data jobs and still run the print engine at rated speed.

The configurable parameters include:

- Width
- Colour reduction
- Shape
- Image trapping option

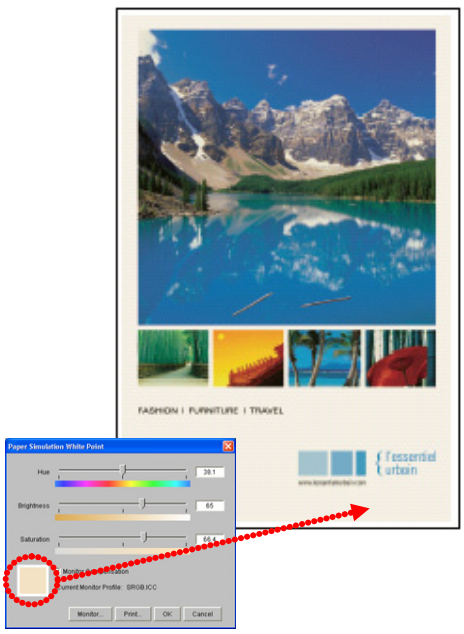


Benefits:

- Trap edges without performance impact, allowing operators to trap complex jobs without slowing down production
- Gain full control over trapping values to adapt to different printing environments and job characteristics
- Hide registration imperfections that can occur when printing on stiffer media, opening up new substrate options to increase revenue

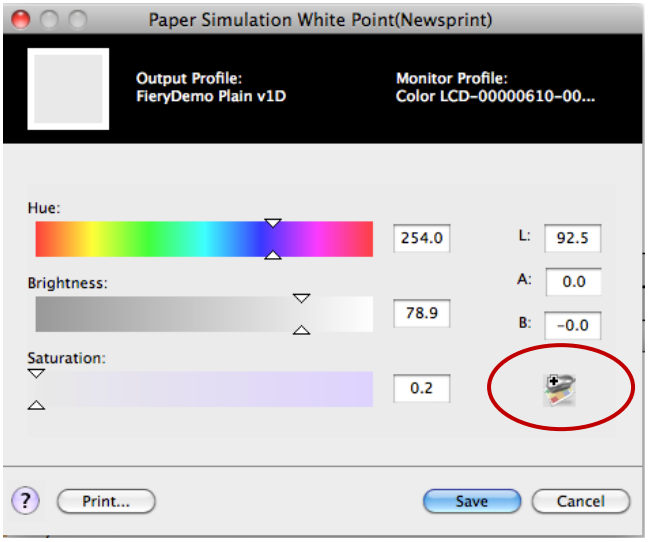
Paper simulation with white point editing

When printing proofs, it is sometimes desirable to simulate the colour of the paper that will be used on the actual press run The White Point Editing utility in Fiery Graphic Arts Package, Premium Edition provides users with intuitive tools to enter and edit the white point of a CMYK source profile so users can simulate a different paper white than that of the source profile when proofing.



Paper simulation with ES-2000

Paper simulation editing enables more accurate simulation of special media such as newsprint and packaging. Previously, the L*a*b values defining the white point of the paper had to be entered manually. Now, operators can use an ES-2000 spectrophotometer to read the white point value of the paper and populates the L*a*b values directly into the Paper Simulation feature.



ES-2000 is used to measure the media white point.

In addition, the feature:

- Allows the user to fine-tune the hue, brightness, and saturation of the simulated paper
- Downloads a custom CMYK Simulation Profile with the white point edit

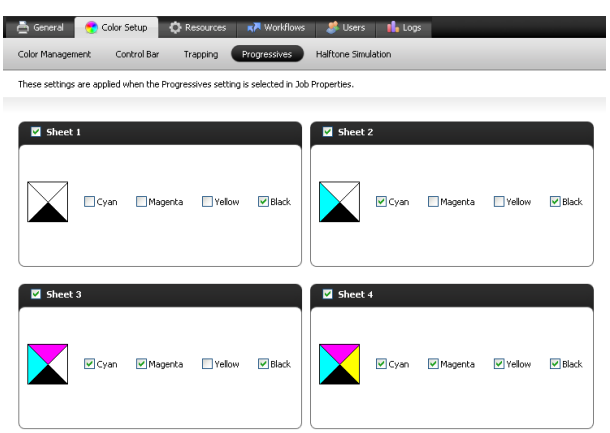
Benefits:

- Allows users to adjust the paper simulation values of the colour profile to simulate a paper white different from the true paper white of the source profile
- Enables users to create custom paper simulations to match the paper white point of special media that can be stored and reused for specific customers and/or applications

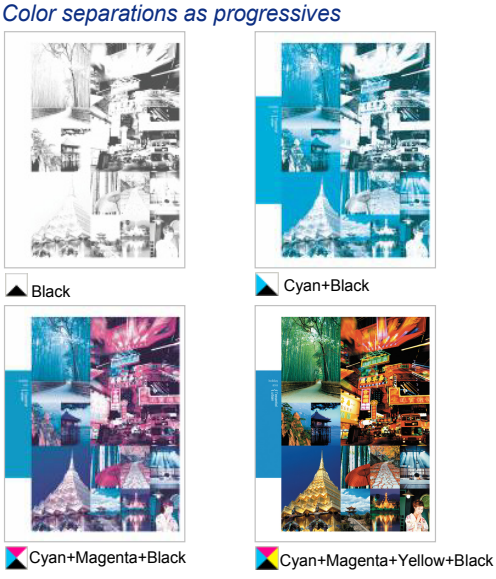
Progressives

Progressives refer to printing variations of a job, where pages are printed using any combinatiion of CMYK colour channels. The ability to print various progressive combinations permits users to inspect the impact and fit of each colour plate in a CMYK document. It also simulates one- and two-colour presses, including the sequence.

The Progressives function shows the separations that will be used to repoduce a job on a Fiery Driven print engine,. This feature helps operators gain insight into how their images are composed, and to better see image breaks for troubleshooting purposes. Users can also see the influence of trapping, verify registration of various plates, and see colour separation channels individually to diagnose imaging problems.



Color separations as progressives



Benefits:

- Progressives are useful for checking how a design element fits in a design file
- Progressives can be an effective troubleshooting tool for certain types of print problems

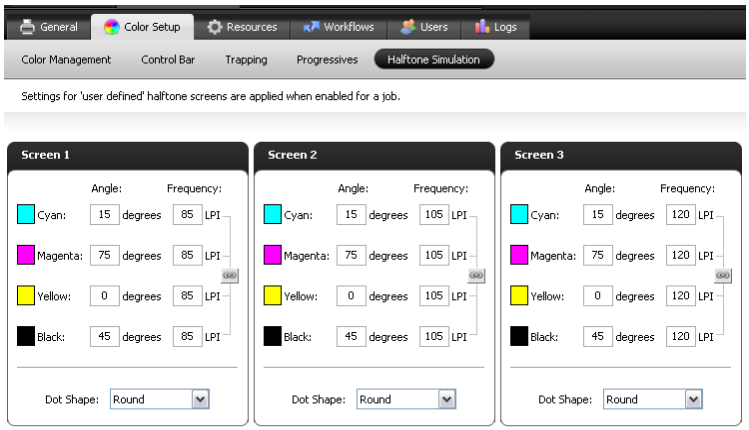
Halftone simulation — with frequency per colour

When final document printing is done on an offset press, operators may want to simulate the final halftone screen that will be used to generate conventional films or plates.

The Halftone Simulation feature allows users to print simulated halftone dots and to define the custom screening parameters that will be applied to their print jobs.

Halftone Simulation includes three halftone screen parameters:

- Lines per inch for each colour
- Screen angles for each colour
- Custom or application-defined dot shape



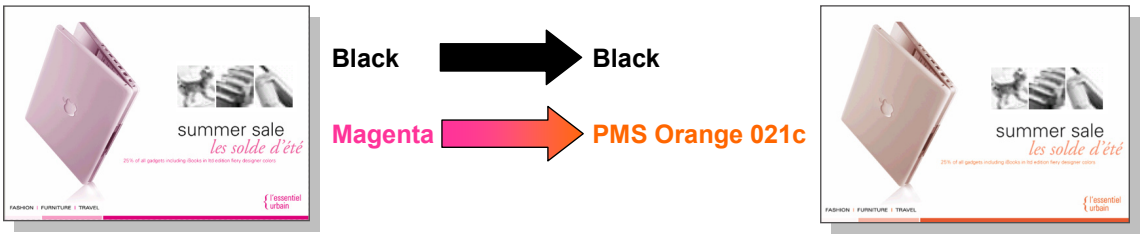
Benefits:

- Combines with the Paper Simulation feature, allowing users to simulate conventional press output for proofing.
- Allows users to make adjustments prior to plating the job
- Provides accurate simulation of the screened appearance for newspapers and packaging.

2-Color Print Mapping

When artists design two-colour jobs that will run with black and one spot colour, they don't always know the spot colour at the design stage.

The 2-Color Print Mapping feature allows operators to replace the black and magenta of a two-colour job with the required spot colours, without modifying the original job.



Benefits:

- Ensures accurate spot colour matching from Fiery Spot-On when printing the final spot colours.
- Allows for last-minute decisions about spot colours.

Fiery Graphic Arts Package

Some features in the Graphic Arts Package are available as standard features in Fiery external servers. Those features are:

- Softproofing that provides colour-corrected previews of RIPped jobs

- Paper Simulation to simulate the colour of the paper to be used for final output and the effect that the colour has on inks
- Halftone Simulation that simulates the final dots that will be imaged on films or plates for offset printing
- Image Enhance Visual Editor, an easy interactive tool for adjusting image colours in a job
- TIFF/IT Hot Folder filter that allows input of TIFF/IT files to the Fiery server through a Hot Folder

Fiery Productivity Package

The Fiery Productivity Package for Fiery embedded servers helps users meet tight turnaround times and produce top-notch colour documents the first time, while automating processes to make users more productive than ever before. The set of tools included in a Fiery Productivity Package varies by Fiery server and print engine combination. Please check the engine-specific information for detailed features. For more information visit the Fiery Productivity Package web page. Features in the package may include:

- **Fiery Spot-On:** Manage CMYK, RGB, and named colours — including all PANTONE, HKS, Toyo, and DIC names. In addition, operators can create custom colours with a user-specified name and CMYK value.
- **Composite Overprint for Spot Colours:** Recognises spot colour overprinting elements automatically from composite files and properly renders them, eliminating the submission of separated files from the native application.
- **Fiery ImageViewer:** Provides fast local and remote softproofing tools for amazing preview and colour editing capabilities in Fiery Command WorkStation.
- **Fiery Image Enhance Visual Editor:** Interactive toolset for optimising image appearance. Adjusts brightness, contrast, highlights, shadows, colour balance, and sharpness; and makes red-eye corrections on any image.
- **Postflight Report:** Job diagnostic tool delivers colour-coded reports to quickly and easily identify potential printing issues such as mixed-source colours and missing spot colours
- **Control Bar:** Delivers effective colour quality control, consistent results, and job identification on every printed page through the application of customised job information and images including logos, company names, or colour bars.
- **Fiery JobFlow support:** Fiery JobFlow 2.2 is supported in Fiery embedded servers with Fiery Productivity Package.
- **Configurable Auto Trapping:** Offers full control over trapping parameters. Adapts to different printing conditions, and corrects registration errors in composite or separated documents.
- **Paper Simulation:** Delivers more accurate proofs to better manage customer expectations by simulating the colour as it will appear on the actual paper to be used in production.
- **Hot Folders:** Automates the job submission process, reducing errors, and speeding repetitive tasks with a simple drag-and-drop operation. Input formats: PS, PDF, EPS, DOC, DOCX, XLS, XLSX, PPT, PPTX, PPS, PPSX, and PUB.
- **Virtual Printers:** Streamlines job setup times and eliminates print errors on repetitive print jobs by using predefined job settings in the print driver.
- **Graphic Arts Filters for Hot Folders:** Automates job submission for more file formats, including JPEG, EPS, TIFF/IT, CT/LW, PDF2Go, Export PS, and DCS2. Includes PDF/X preflight filter to verify the compliance of all PDF files with PDF/X-1 and PDF/X-4 specifications.
- **Rush Print:** Marks a print job as urgent so it can be processed and printed immediately, even interrupting a job that is printing.
- **Print/Process Next:** Queues a job to print immediately after the currently running print job completes.
- **Fiery JDF technology:** Enables built-in JDF-based integration support to automate processes from job submission to output by integrating print workflow and business management systems so that job information can flow through the systems with fewer touch points and errors.

Benefits:

- Troubleshoots colour issues effectively to get jobs printed correctly and quickly
- Simulates other printers' output to produce cost-effective proofs

- Eliminates bottlenecks and optimises production while maximising throughput
- Automates job submission to shorten setup times and decrease print errors
- Helps automate and integrate business and print processes for higher efficiency and increased profit

Certifications

Several industry organizations have tested and certified that Fiery servers can match industry colour references, and can be used for colour matching digital printing systems to press.

IDEAlliance and G7

Digital Press Certification from IDEAlliance is a popular U.S. certification program, available for digital print systems that consist of a printing press and a DFE. These print systems must meet or exceed established industry tolerances for excellence in the areas of colourimetric accuracy, uniformity, repeatability, durability, and registration.

Print sytems that achieve IDEAlliance Digital Press Certification are verified to be capable of simulating GRACoL standards within tight colourimetric tolerances. This means, by definition, that they also match G7 standards to the highest level of compliance — known as "G7 Colorspace." G7 qulaification is also offered by IDEAlliance for individual print shops, but no G7 certification exists for digital print systems, since systems that achieve Digital Press Certification are already matching G7 Colorspace requirements.

Note that, for digital press systems to match industry references such a GRACoL, a custom output profile must be created wth a tool like Fiery Color Profiler Suite, but that no loading of G7 calibration curves is required on a conventional analogueue press.

For more information refer to:

fiery.efi.com/idealliance-certified-systems

fiery.efi.com/color-standards-whitepaper

FograCert

FograCert is a popular standard in Europe. Fogra-certified Fiery servers meet the criteria and tolerances stipulated in the current draft (ISO/FDIS 12647-8) for the certification of contract proofing systems and for contract proof creation as tested by Fogra Graphic Technology Research Association. ForgraCert is similar to IDEAlliance digital press certification, except that it requires a colourimetric match to the FOGRA39 colourspace. FograCert-approved digital print systems also require that the DFE can RIP PDF/X-4 test suites correctly.

For more information refer to:

fiery.efi.com/fogra

fiery.efi.com/fogra-vps-certified-systems

fiery.efi.com/color-standards-whitepaper

Integration

Fiery technology delivers valuable integration to any type of print environment, offering a high return on investment because the open Fiery platform technology integrates with most JDF-enabled solutions and with most popular network environments. In addition, Fiery servers deliver the most comprehensive set of tools for IT managers to help keep the software updated, to automate security controls, and to simplify the administration of the Fiery server on the network.The following table represents the standard configuration for each Fiery server platform and system version combination. ***For information on a specific Fiery model's feature set, refer to the datasheet for that model, or ask your Fiery vendor about support for a specific feature.***

Feature name	QX^{100}	PRO^{90}	PRO^{80}	E^{200}/E^{300}	PRO^{80}BW	SP^{30}
Fiery JDF	✓	✓	✓	⊙*	✓	✓
Fiery API	✓	✓	✓	✓	✓	✓
Integration with EFI MIS and Web-to-Print solutions	✓	✓	✓	⊙*	✓	✓
Fiery option software licensing	✓	✓	✓	✓	✓	✓
Corporate network integration						
Data protection						
Encryption	✓	✓	✓	✓	✓	✓
Removable hard disk drive	⊙	⊙	⊙	-	⊙	-
Secure Erase	✓	✓	✓	✓	✓	✓
Accounting and billing integration						
Job Logs	✓	✓	✓	✓	✓	✓
Job cost tracking	✓	✓	✓	✓	✓	✓
Mobile printing						
Direct Mobile Printing	SFM	SFM	SFM	SFM	SFM	SFM
PrintMe Cloud Printing	SFM	SFM	SFM	SFM	SFM	SFM

✓ Standard ⊙ Option - Not Available SFM = See product specific feature matrix

* Included in the Fiery Productivity Package

Fiery JDF

What is job-description format (JDF) technology?

JDF is an open-standard technology that allows data to pass between different applications and systems for automated print production workflow, specifying how jobs are managed and produced. JDF allows MIS, Web-to-Print, and prepress solutions to talk to each other. The electronic JDF job ticket simplifies data exchange and collection, eliminates manual data entry and re-entry, makes print production faster, and increases efficiency and accuracy.

Fiery JDF, available in Fiery servers, provides support for JDF workflows from the Fiery system itself. It provides the functionality of the Fiery server and user-interface elements in Fiery Command WorkStation needed to integrate the Fiery server in JDF workflows. This enables bidirectional JDF device connectivity between JDF submission tools (submitting JDF intent or JDF process job tickets via JMF (Job Messaging Format) and the Fiery server.

Fiery FS200 Pro, along with Fiery FS150 Pro, Fiery FS100 Pro, Fiery System 9 Release 2 and 10; are the first and only systems to achieve the JDF1.3 Integrated Digital Printing Interoperability Conformance Specifications (IDP-ICS) certification by CIP4.

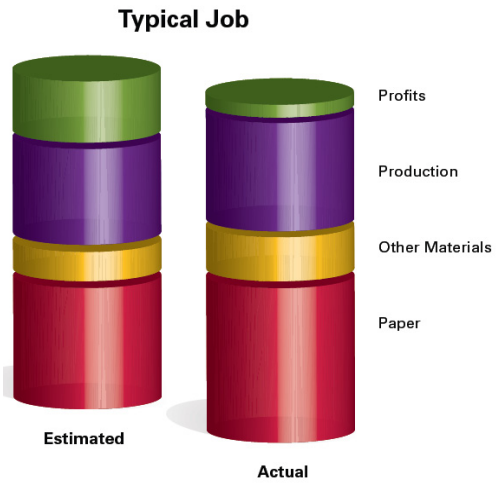
For more information, please visit the CIP4 website: fiery.efi.com/cip4-certified-experts

In addition, Fiery JDF is now available for Fiery embedded systems through the Fiery Productivity Package for selected Fiery products. This lets more users integrate print workflow and business management systems. Visit the Fiery JDF supported printers webpage to see the list of Fiery embedded servers that offer Fiery JDF support through the Productivity Package.

For more information, refer to fiery.efi.com/fiery-jdf.

Increases productivity by eliminating manual data entry and re-entry

Fiery JDF technology allows job tickets and metadata to move through systems without human intervention, and automatically collects production data. It eliminates much of the need for operators to enter job and production data, dramatically decreasing waste and error. The technology enables unattended job processing and frees up operators to complete other tasks that involve higher-level skills, which ultimately increases profits. In addition, customer satisfaction is dramatically improved because jobs are delivered right, on time and on budget.



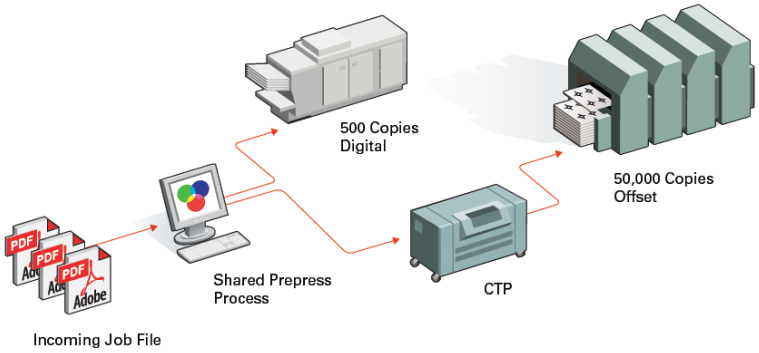
Job production component breakdown

Provides highly accurate business intelligence

Fiery JDF technology captures print production data, such as media usage and job running time, and disseminates it to the appropriate business software (for example, print MIS) for more accurate reporting, estimating, and accounting. Now business owners get automated business intelligence that can help them assess their profitability.

Supports hybrid workflow for the best of both worlds

If a print provider using prepress systems such as Agfa :Apogee, Heidelberg Prinect and Kodak Prinergy has both offset and digital printing solutions and needs to move jobs back and forth, Fiery JDF technology can serve as an easy and quick mechanism to direct jobs to the appropriate systems, enabling hybrid workflow. JDF jobs can be managed with a common user interface for multiple devices, and can be automatically routed to the most cost-effective devices.



Hybrid workflow example

Fiery JDF technology also allows analogue print shops to easily expand their businesses with digital print capabilities for on-demand, cost-effective, and value-added services such as variable data printing. Now those businesses can meet customers' demands for faster turnaround times and short-run jobs with capabilities that only digital printing and hybrid workflow environments are able to produce.

Maximises ROI through integration and scalability

Fiery JDF technology not only makes print production business more efficient, but also opens new doors for future expansion by working with many third-party solutions and in-house systems by using JDF industry standards with nonproprietary formats for flexible, out-of-the-box interoperability.

It integrates seamlessly with EFI Web-to-Print, Print MIS, and production workflow solutions; and is supported by more than 30 partner technologies, including Agfa :Apogee, Heidelberg Prinect, and Kodak Prinergy. The integration enables print providers to meet their business needs now and in the future, and allows businesses to scale using the same solutions.

Fiery JDF technology is a standard feature for Fiery servers. Visit fiery.efi.com/fiery-jdf today to view the current list of JDF-enabled Fiery digital print servers. To talk to peers and EFI experts about the technology, participate in our JDF forums at fieryforums.efi.com.

Fiery JDF key features

Live status updating

The existing Fiery JDF status signal updating mechanism has been improved by implementing the RepeatTime JDF command. Users can access the feature through EFI Pace™, EFI Monarch™, Agfa :Apogee, and Heidelberg Prinect.

Benefit:

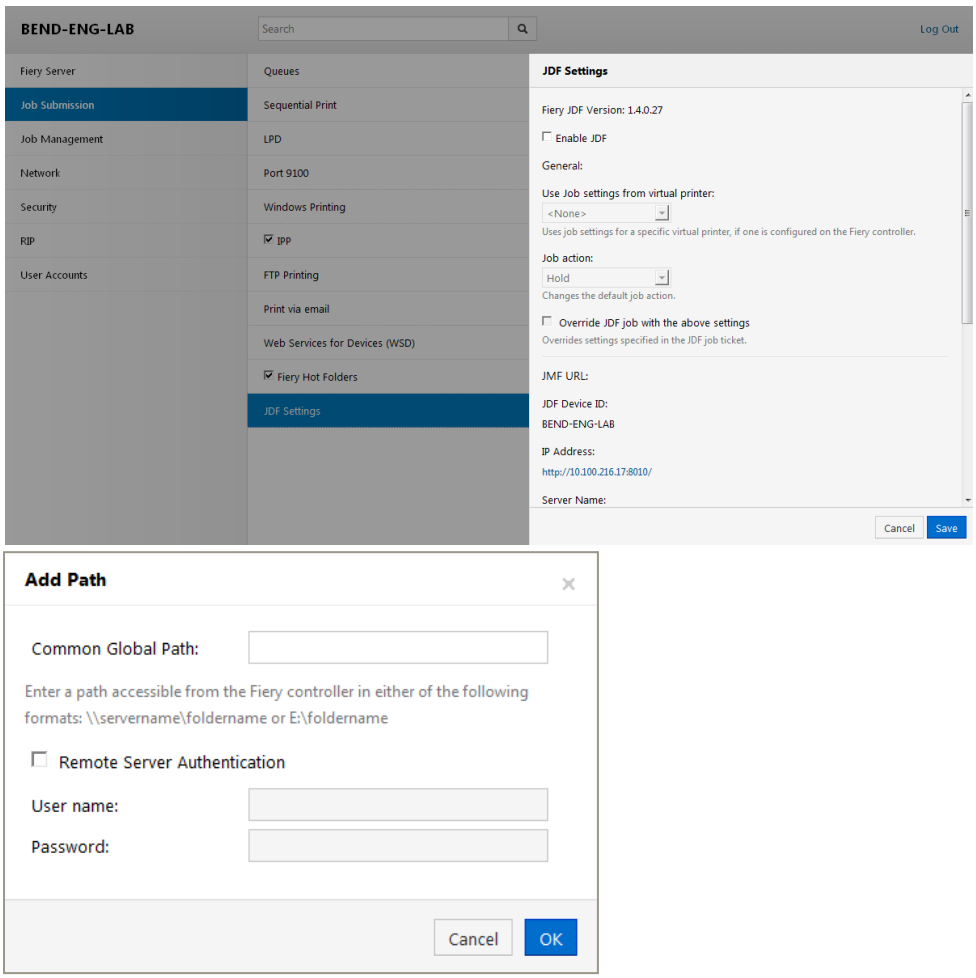
- Enhances the status updating shown through the client user interface

Common global paths

Fiery JDF can use the network credentials stored in the Fiery Command WorkStation "Server\JDF\Common Global Paths" dialogue box to access remote JDF files and RunList content files. Many solutions that customers have developed in-house, and even a few commercially available solutions, insert only the file name for content files in the JDF RunList. Leveraging the Common Global Paths functionality, a user can configure the Fiery server to look in network directories and automatically find the content files without any operator intervention, increasing efficiency.

Benefit:

- Improves existing JDF file path reference
- Simplifies JDF integration



Common Global Paths

Dynamic device capability updating

The device capabilities file is used by the JDF submitting application to determine the available capabilities for a given Fiery server/engine combination. It is compatible with JDF-capable Fiery servers. The new device capabilities file will be updated with JDF attributes, which have been dynamically converted from Fiery values, and will then be populated/updated in the device capabilities file on the Fiery server.

Benefits:

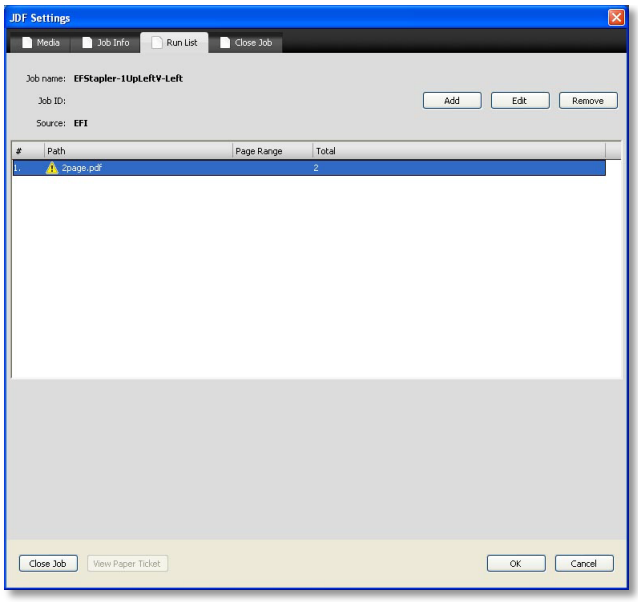
- Simplifies JDF integration
- Enables applications such as Agfa :Apogee to populate their UI with available finishing controls, and applications such as EFI Digital StoreFront to automatically map their job attributes to Fiery job attributes
- Designs a job option dialogue that matches the installed Fiery configuration with JDF applications that read device capabilities

RunList editing

JDF jobs that fail to include a valid link to a content file will be flagged in Command WorkStation, and a dialogue will allow the operator to resolve the missing content file link, eliminating errors.

Benefits:

- Simplifies JDF integration
- Eliminates errors



RunList editing dialogue

Improved media mapping

The Fiery server automatically selects the correct Paper Catalog entry when the incoming JDF attributes uniquely identify a single media. The Fiery server clearly flags media mismatches when a single media is not uniquely identified.

Benefits:

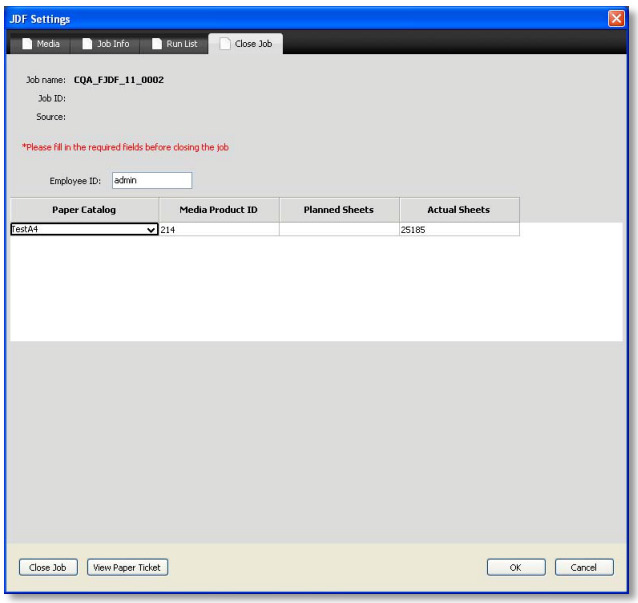
- Saves operator time
- Simplifies JDF integration

MIS manual job close

Instead of the default Auto Close, wherein the printing information is returned to the submitting application, this feature allows the operator to control when job completion is reported back to the sending application.

Benefits:

- Allows operators to control when the job is reported as "done"
- Validates the results



Manual close dialogue

Improved job details — user authentication and tracking

Additional information such as the Command WorkStation logon credentials are automatically captured and inserted into JDF tracking audits. This provides more robust reporting to MIS and makes the Fiery server a strong choice for MIS-integrated workflows.

The JDF-emitting application now receives more information, including:

- Job received
- Job status messages (several standard levels of JDF detail and frequency)
- Usage counter "clicks"
- Media used
- Total time on Fiery server from job arrival to close
- Spooling time to Fiery server (JDF 1.3)
- Waiting to process time (JDF 1.3)
- Processing time (JDF 1.3)
- Waiting to print time (JDF 1.3)
- Printing time (JDF 1.3)
- Job completion status
- Job close

Benefit:

- Simplifies JDF integration
- Provides a more robust reporting to MIS

View "paper" job ticket

A PDF file representing the originating customer ticket (from Fiery Digital StoreFront®, Pace™, and other sources) can be linked to the JDF ticket and displayed in Command WorkStation, which provides a human checkpoint and an opportunity to edit the JDF ticket.

Benefits:

- Eliminates the need to print the job ticket
- Allows operators to validate job settings in Command WorkStation before printing
- Permits operators to view the ticket electronically if the submitting application includes it

CIP4 IDP ICS JDF certification

See http://ir.efi.com/releasedetail.cfm?ReleaseID=711945

Benefit:

- Trusted job handling from the first and only certified DFE in the industry

Queue status support

The JDF submitting application can receive a list of jobs in the queue and their basic status. Enables MIS to monitor queues, query the detailed status of individual jobs, and send some queue management commands for them — pause, resume, abort, delete.

Benefit:

- Richer job control from the JDF-emitting application

Toner level reporting

The JDF-emitting application can receive and display the toner levels on the Fiery server.

Benefit:

- Real-time engine status displayed at the JDF-sending application

Sample and reprint tracking

When a job is reprinted, accounting information is accumulated and sent to the MIS.

Benefit:

- Accurate tracking of media usage for cost accounting

Preset and Virtual Printer support

Job Presets are now accessible via JDF through the familiar known geatures mechanism used with Virtual Printers.

Benefit:

- Template-based workflow can be selected at the JDF-emitting application without Fiery user intervention

NumberUp and StepRepeat imposition

Gangup and gangup repeat imposition is now available via JDF.

Benefit:

- Enable dynamic access to Fiery imposition settings

Subset finishing

Support for subset finishing of staple, punch, and fold.

Benefit:

- Print mixed sets of documents without user intervention at Command WorkStation

Slip sheet support

Insert a blank sheet per copy or sets of a specific number of sheets on Fiery servers that support the feature.

Benefit:

- Automatically separate job sets from the JDF emitting application

Stamping

Use JDF control for the Fiery Job Properties stamping feature.

Benefit:

- Enable and control the Fiery server's stamping feature from the JDF-emitting application

Last calibrated time

Query and display the Fiery server's last calibrated time.

Benefit:

- Offers calibration status from the JDF-emitting application

Dynamic HD Text and Graphics

Enables printed output to preserve high detail in text and vector content to improve and sharpen edge quality; it does not affect colour.

Benefit:

Dynamically control leading-edge Fiery features in an automated workflow

Automatically eject unused tabs

Allows an upstream system to specify an output tray for tab kick-out through JDF

Benefit:

- Enables advanced tab workflow automation from Web-to-Print or Print MIS systems

Saddle-stitched booklets with different media

- Produce saddle-stitched booklets that require different media for the cover page and the body pages:
  - Specify media for front and back cover
  - Specify to print both sides, only outside or only inside
  - Colour or black and white can be specified separately for cover and body pages

Benefit:

- More control of booklet attributes from upstream systems for automation.

Fiery API

Print workflows are unique to every print business. Fiery application programming interface (API) allows customers and inside developers for print shops to rapidly develop unique apps and tools for specific business needs on a variety of desktop or mobile platforms including Windows, Mac OS, iOS, and Android — using the development environment of their choice. The RESTful Fiery API exposes the Fiery interface, and establishes a secure bi-directional connection with Fiery servers. This allows developers to extract job data for custom uses such as cost analysis and optimised scheduling, and to submit jobs with basic settings from existing applications. Fiery API can:

- Request job log data on Fiery servers, such as the number of sheets used, media size, and media type for custom accounting and supply tracking needs
- Control certain job actions such as process, print, and delete a specific job or all jobs on the Fiery servers
- Submit jobs to Fiery servers from an app with a simple command
- Retrieve current status for actions such as printing and errors, and gather real-time printer reports with simple commands
- Access previews of a processed job generated by the Fiery servers for softproofing

Users can find the resources they need to get started at developer.efi.com. These include sample codes, API documentation, and how to get an evaluation license for their project.

The free Fiery API Evaluation Key gives access to the full set of the standard Fiery API functionality for 90 days. It helps evaluate the potential use of the API for unique business needs.

Fiery Go, the free app for smart phones and tablets, takes advantage of Fiery API and lets users access Fiery servers remotely from their iOS or Android devices. Fiery FS200 and Fiery FS200 Pro servers come with Fiery API, so they're ready to communicate with mobile devices out of the box.

Fiery API feature highlights

Sever login, administration, and status

Feature	API calls	Description
Login	POST login	A POST request that establishes secure, authorised user access to the Fiery API features from your application with a Fiery API access key.
Logout	POST logout	A POST request to terminate an authorised session initialised by the POST login request.
Info	GET info	A GET request to list a Fiery server's basic information such as hardware info, serial number, language settings, and time zone.
Consumables	GET consumables	A GET request to report information about the tray, and supply of paper and toner on the print engine.
Server	POST server	A POST request for actions on the Fiery server such as start or stop server, restart or reboot server, and cancel RIPping or printing.
Devices	GET devices	A GET request to retrieve information about the connected printer and current job progress of printing or RIPping.
Print system pages	POST printpages	A POST request to print system pages such as system configuration page, PostScript or PCL test page, and font list.

Job and queue management

Feature	API calls	Description
Jobs	GET jobs	A GET request to list the all jobs presently in the job list on the Fiery server, including printed jobs. • Specify job attributes to be shown for each job • Filter jobs by username or job status such held jobs, RIPped jobs, or printed jobs
	GET jobs/ID	A GET request to retrieve job info with a specific job ID.
Job preview	GET preview	A GET request to retrieve preview images of the job • Specify job with job ID • Specify page number of the job • Specify the size of the preview image: thumbnail, screen size, or full size
Job submission	POST jobs	A POST request to submit job with a file, a Fiery Preset or Virtual Printer setting and basic job attributes.
Job actions	PUT jobs/ID/method	A PUT request to perform job actions for existing jobs in a queue with a specific job ID. Available actions include: • Print, print and hold, rush print • RIP (process job), re-RIP • Cancel, remove raster data
Job reorder	PUT jobs/ID/move	A PUT request to reorder a specific job to be a first or last in a queue, or put in before or after a referenced job.
List queues	GET queues	A GET request to list the printer queues (logical printers), including Fiery Virtual Printers, configured on the Fiery server.
Create queues	POST queues	A POST request to create a new printer queue (logical printers) with a name, print action, and basic job attributes.

Cost accounting and job log

Feature	API calls	Description
Cost	GET cost	A GET request to retrieve Fiery job logs containing selected accounting information for each printed job.
	GET cost/ID	A GET request to list selected accounting information with a specific job ID.

Hardware and software requirements

- Fiery System 9R2/ 9eR2 or higher Fiery embedded or external server
- Command WorkStation 5.4 and Fiery Extended Application Package 4.3 or higher

Integration with EFI MIS and Web-to-Print solutions

Fiery servers integrate with EFI Management Information Systems (MIS) and Web-to-Print workflows.

Fiery users can leverage the power of their DFEs to do the following:

- Deliver job specifications entered at a Digital StoreFront® or PrintSmith site client, or at the EFI MIS. The information is validated and transferred to the Fiery server without touch points, delays, or errors common in a disconnected workflow. The Fiery server uses this information to configure the job, automatically preparing it for output on the digital engine.
- Track job costing information to perform accurate and timely cost analysis and invoicing.
- Analyze information about equipment and employees to provide management staff with the details they need to make more informed business decisions.

Below is a summary of key customer benefits for each EFI solution that integrates with Fiery servers. For more information visit fiery.efi.com/fiery-integration.

EFI Digital StoreFront

EFI Digital StoreFront is a Web-to-Print platform that provides an end-to-end content and eCommerce workflow that lets print buyers order, edit, and preview job specifications. It integrates with Fiery servers and EFI PrintFlow® to make the entire operation more efficient and profitable. Digital StoreFront offers the following:

- Personalised marketing. DSFdesign Studio™ offers immediate entry into single-version VDP. Powerful VDP technology (from XMPie or FusionPro) complements the solution, with 1:1 personalised products to support more complex, direct-marketing initiatives — all via the rich Digital StoreFront experience.
- Unlimited, customizable storefronts. Create branded, "sticky" storefronts, specific to your customer base, to drive adoption and more online revenue.
- Streamlined job submission. Digital StoreFront's powerful Visual Product Builder lets print buyers order, edit, and preview their job specifications on a single page!
- Automated workflow. Digital StoreFront creates an end-to-end content and eCommerce workflow by providing seamless integration with EFI Fiery servers and EFI print MIS/ERP solutions. Integration means less re-keying of job data and fewer chances for production errors.
- Deployment flexibility. Digital StoreFront can be deployed on-site or from the cloud, depending on your business requirements.

For more information visit dsf.efi.com.

EFI Pace

EFI Pace is a browser-based, scalable, and customizable print management system. It is designed to streamline operations, reduce costs, and provide the information print providers need to be more successful. Its primary users are small to mid-sized commercial print shops, in-plant operations, specialty and hybrid printers, plus government and school operations. EFI Pace:

- Offers a complete suite of software modules that give total control anytime, anywhere. It uses an appliance model that allows for installation and training in a fraction of the time required by other solutions.
- The secure system architecture is XML driven and ODBC compliant. It allows browser-based access from Mac and PC platforms to better leverage emerging technologies that will define the digital workflow process.

For more information, visit mis.www.efi.com.

EFI PrintSmith Vision

EFI PrintSmith Vision is a flexible, feature-rich business management software that offers powerful estimating, point-of-sale, account management, production management, receivables, and sales analysis tools in a single, easy-to-use application. This browser-based platform is both modular and scalable, making it an

excellent solution for growing businesses. Its primary users are quick printers, small commercial shops, in-plant facilities, specialty printers, and print-for-pay operations. Companies running PrintSmith Vision find they are able to:

- Attain greater visibility into business performance
- Improve customer service
- Increase billing accuracy and cash flow
- Make informed decisions that improve their organization's profitability

For more information visit printsmith.efi.com.

Network integration and security in corporate environments

EFI networking technologies allow users to print and manage Fiery servers from popular network environments. Fiery servers deliver the most comprehensive set of tools for IT managers and system administrators to help keep the software updated, to automate security controls, and to simplify the administration of the Fiery servers on the network.

From controlling access to the Fiery system to managing open network ports and securing the system's hard drive data, the Fiery server is flexible in its configuration and rigorous in its implementation of security protocols. As a result, the Fiery system offers a wide security feature set for corporate environments. Features such as user authentication, IP Sec, and secure socket layer/transport layer security (SSL / TLS) support make it the server of choice to integrate into current secure network environments. IPv6 support adheres to IT standards with support for the latest revision of the Internet protocol. SSL support (IPP/LDAP/HTTP/SMTP) creates a secure connection for transmitting data between a client workstation and the Fiery server over the Internet, using the SSL protocol to transmit private documents. Adhering to industry-standard certification policies, its open-architecture solution is preferred by MIS/IT organizations.

Windows 8.1 operating system for external Fiery servers

Fiery external servers running Fiery FS200 Pro system software are now based on Windows Embedded 8.1 Pro 64-bit operating system.

Debian 7 operating system for embedded Fiery servers

Fiery embedded servers running Fiery FS200 system software are now based on Linux Debian 7. This updated version of the Linux operating system provides a 64-bit operating system with improved support for security updates.

Benefits:

- Complies with the latest IT and government OS standards
- Offers a more efficient administration and implementation of security patches because it supports automatic updates from Microsoft in Fiery external servers
- Provides an extended support and maintenance life

For more information, see the Fiery security white paper.

Software licensing

Software licensing allows users to enable optional Fiery software products and activate features built-into Fiery software without a physical dongle. Dongles can be lost, broken, or even stolen. Software licenses are easier than ever to install on a Fiery server through a common interface to manage the software license activation.

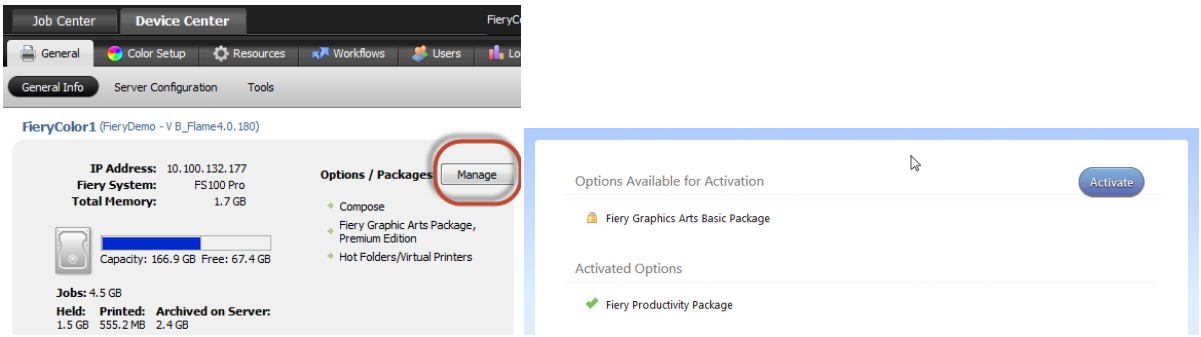
- Fiery software products (such as Graphic Arts Package, Premium Edition, Hot Folders and Virtual Printer, and Fiery Productivity Package) can be activated from the Device Center in Command WorkStation, or by using the "manage" button in WebTools.
- Fiery JobMaster, Impose, and Compose are activated and deactivated from the Help and the manage license menus within Command WorkStation.

Note: Legacy Fiery SeeQuence dongles are still supported in newer Command WorkStation versions.

Benefits:

- Users never lose and can easily retrieve lost Fiery JobMaster, Impose, or Compose licenses
- Fiery software products are easier to install
- Users can activate or deactivate a license without Internet connectivity

Note: Licenses for Fiery software products installed directly on the server cannot be deactivated; only software licenses such as JobMaster, Impose, and Compose can be deactivated.



Users can easily manage software licenses.

Data protection

Fiery technology delivers the most comprehensive set of tools for IT managers and system administrators to help keep the software updated, to automate security controls, and to simplify the administration of the Fiery servers on the network.

For more information on security-related features, refer to the Fiery security white paper.

Encryption

Fiery configuration settings on the hard disk drive are encrypted with 168-bit encryption. This ensures that a Fiery server hard drive meets and exceeds the data encryption requirements from the National Institute of Standards and Technology (NIST). NIST requires encryption strength of >128-bit.

Removable hard disk drive

To meet strict corporate data security guidelines or government regulations, some organizations need to protect their data by completely removing the internal hard disk when the device is unattended or not in use. The Fiery removable hard disk drive uses a device-mounted casing and a keyed locking mechanism to secure the disk to the device. Only when the removable hard disk drive is securely seated and locked will the device operate and the stored data be accessible. When the device is not in use, administrators can unlock the drive enclosure from the mounted casing and store it in a safe location until the device is needed again.

Secure Erase 3.0

To ensure optimal security, government agencies and corporations sometimes require the complete removal of data from computer equipment. Often, simple file erasing and/or re-formatting does not entirely remove the data, and is insufficient for customers with more advanced needs for data security. The Fiery Secure Erase feature is designed to remove ALL traces of job data from the Fiery hard disk drive. When deleted, the space occupied by each job data file is overwritten three times using an algorithm based on U.S. Department of Defense specification DoD5220.22M, which eliminates the possibility of restoring the data to intelligible form.

The user enables/disables the feature with the ON/OFF option in Fiery Setup (through setup UI/LCD or Web Setup/WT). If "on" is selected, when the user decides they no longer need the job and selects "delete" from the Command WorkStation right-click or actions menu, that delete function will act as a "secure erase," and the job will be overwritten.

The following are the limitations and restrictions.

- Does not apply to job files located in systems other than the Fiery server:
  - Copies of the job that are load balanced to another Fiery server
  - Copies of the job that are archived to media or network drives
  - Copies of the job that are located on client workstations
  - Pages of a job that are merged or copied entirely into another job
  - Previews of jobs sent to MIS systems or other systems via Fiery API
- Does not delete any entries from the job log
- If the system is manually powered off before a job deletion has finished, it is not guaranteed that the job will be fully deleted.
- It cannot erase jobs submitted through an FTP server, which saves the job to local hard disk. The Fiery system software has no control over this, hence the system cannot securely erase the job.
- When printing through SMB, the print job goes through the spooler on the Fiery server, which saves the job to local hard disk. The Fiery system software has no control over this; hence the system cannot securely erase the job.
- When submitting jobs throught Fiery API, the print job goes through the spooler on the Fiery server, which saves the job to local hard disk. The Fiery system software has no control over this; hence the system cannot securely erase the job.

- Does not delete any job data that may have been written to disk due to disk swapping and disk caching.

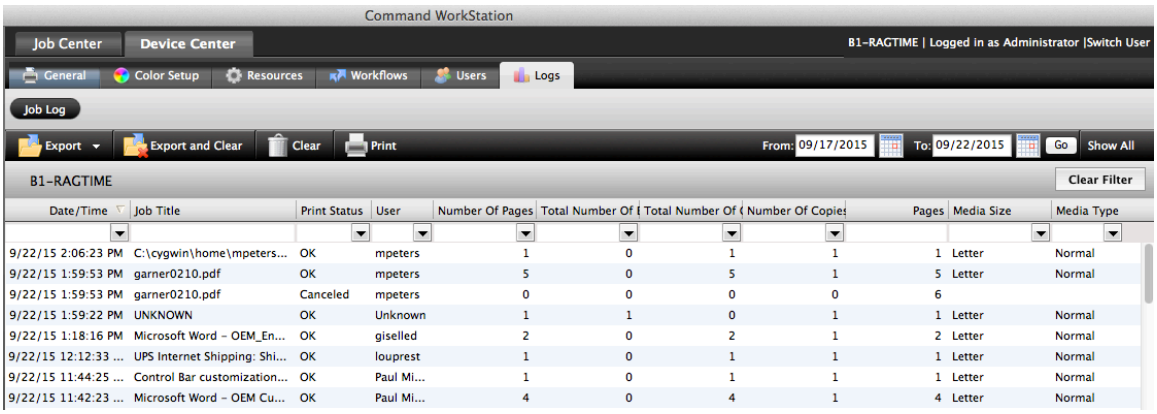
Benefits:

- Provides a high level of document security on the Fiery server
- Users can trust that, when submitting confidential documents to the Fiery server, it will be impossible to recover the job once deleted from the Fiery server
- It removes all traces of deleted print files stored on the Fiery hard drive automatically
- It provides ISO-15048 Common Criteria Security Assurance (Pending certification from NIST)

Cost accounting and billing integration

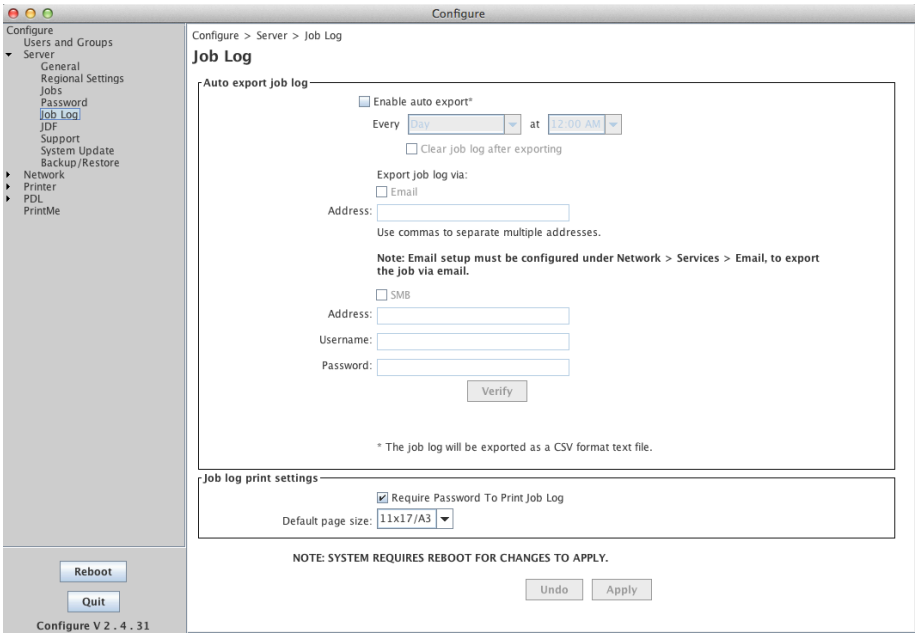
Fiery Job log

A robust job log tool is available through the Device Center of the Fiery Command WorkStation to a user with operator level or higher privileges. The Fiery Job Log provides a record of all job activities. The Job Log can be viewed at the Command WorkStation, Device Center, logs tab. The Job Log can be customised by selecting the columns of information to be displayed. The data can be sorted by several criteria. A job log can be used for accounting, billing, and tracking equipment usage. Customising job logs makes it easier and faster to search for specific data in the Job Log.



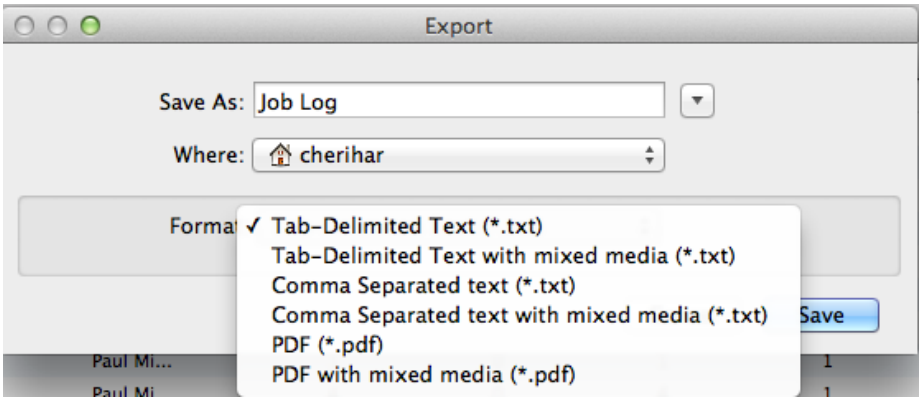
Print job logs

The Job Log can be printed at any time. Assigning Job Log printing privileges and selecting the paper size on which to print is set in Configure / Server / Job Log.



Export Job Log

The data in the Job Log can be exported as a txt or pdf file. Operators can export the complete log (all the data that is collected) or the current view (only the data that was selected to display in the Command WorkStation, Device Center, logs tab).



Job Log Auto Export

The Fiery administrator has the option to automatically send, clear, and save the job logs at a scheduled time. The job log can be submitted by email, or saved to an SMB or FTP location.

This feature is configured through Command WorkStation or the Configure tool. The feature allows the Fiery administrator to define their Job Log preferences, including options such as where to send the job log, the schedule for sending (such as weekly, monthly, etc.), and whether to clear the job log on the Fiery server after sending. This is a "set-and-forget" feature, which requires no user intervention after initial setup.

The job log is sent as a comma-separated-values (CSV) formatted text file that contains the default set of Job Log columns, as they appear in Command WorkStation.

This feature is ideal for corporate and education environments where the accounting department requires a job log report for costing purposes, but the accounting staff does not have Command WorkStation or know how to retrieve these logs. This feature can automatically send logs by email, or save log files to a pre-determined location on a network.

In addition to the convenience of automatic job log transmittal, automatic clearing prevents the log from becoming too large and taking up unnecessary resources on the Fiery server.

Benefits:

- Saves time by automating report generation and submission
- Improves accuracy of cost management and control by improving communication of Job Log reports to accounting departments
- Automatic retrieval of job log guarantees access to exported data, even if Fiery software is reinstalled

Tracking jobs with PaperCut

Managing production print with PaperCut allows Fiery customers to allocate cost with Fiery tracking and reporting. Administrators can now limit unnecessary printing and encourage positive user behaviour to enable Fiery cost recovery.

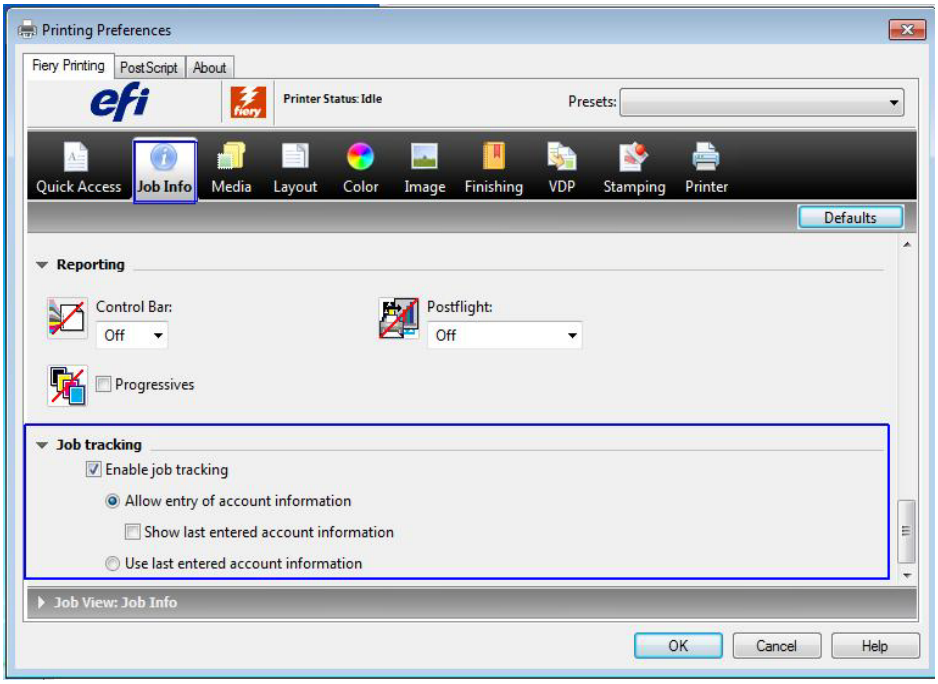
Fiery driven devices have the ability to hold and reprint jobs and manage the print job settings after PaperCut has analyzed the job on the print server. For this reason, a custom program is needed to integrate PaperCut to track print jobs released from Fiery servers. PaperCut has developed this program that checks Fiery print logs and updates PaperCut with the jobs that are reprinted. For more information visit the PaperCut website.

Job cost tracking

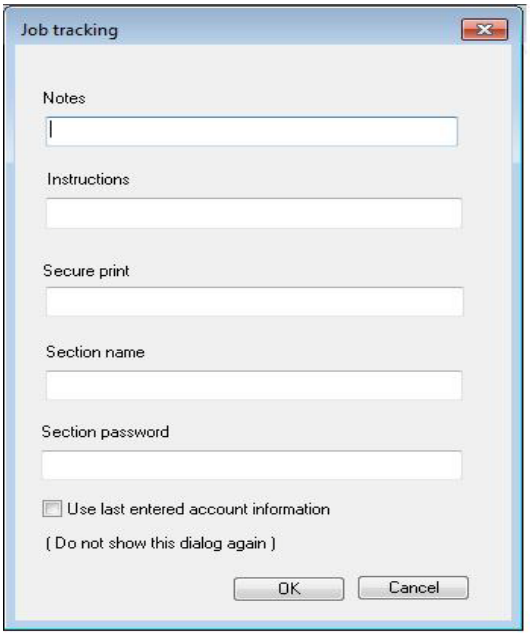
Fiery FS200 systems include version 4.8 or above of the Fiery driver, which includes the new Job Cost Tracking feature. Job Cost Tracking configures the print driver to record the accounting information included in the print job, so that print environments without a cost accounting solution have a way to track print activity. The account code assigned is associated with a specific department or client project, and provides accurate printing costs that can be allocated back to the internal department or client project.

A pop-up dialogueue box comes up immediately after users click "print," to remind them to enter the data which is collected in the Fiery Job Log so that it can be retrieved and exported to other accounting systems.

No validation is performed on the data entered in the pop-up dialogueue box. Any required validation is done by the print engine.



Job Tracking setting in Fiery Driver v4.8



Job Tracking account information required

Mobile printing

Direct Mobile Printing

All System10/10e Fiery servers and above provide Direct Mobile Printing for Apple iOS devices running version 4.2 and above. Wi-Fi–enabled Apple iOS devices will automatically discover any System10/10e and later Fiery Driven printer on the same network inside the corporate firewall. Users or IT administrators don't need to install any additional print drivers or software for the iOS devices. Visiting remote employees can print using their Apple iOS device without looking for a printer, installing print drivers, or requiring assistance from corporate support resources. Local employees can print while moving around to different departments, conference rooms, and other locations in the company on the same network.

Benefits:

- Allows visiting remote employees with Apple iOS devices to easily print without any additional steps
- Allows local employees with Apple iOS devices to change locations and easily print without any additional steps

PrintMe Cloud printing

Mobile professionals and business guests can use EFI PrintMe® Cloud Service on a Fiery Driven printer to easily send a file and print securely. Users can send files to the PrintMe Cloud from their desktops, laptops, smartphones, or tablets and receive back a retrieval code. They can choose from a variety of ways to send files: by email, from mobile apps, by uploading with a web browser, through a print driver, or by transferring from a cloud storage account. When users are ready to print, they simply enter their document retrieval code at the printer display screen. No sensitive documents ever sit unattended at the printer.

The PrintMe Cloud Service is an ideal fit for a wide variety of industries:

- Hospitality businesses — Offer customers a convenient printing service that is easy to use without setup or support. Use existing equipment to provide better services that increase customer satisfaction, loyalty, and repeat business.
- Libraries and universities — Provide the convenient printing services that students, visitors, and patrons demand.
- Print service providers — Attract new customers and grow revenue by making it easy for users to find your business for their printing needs with the PrintMe Locator tool.

PrintMe Cloud Service is free on Fiery Driven printers through December 31, 2020.

Benefits:

- Provides a hassle-free printing solution for mobile professionals
- Offers a fast, secure, and confidential cloud printing solution
- Enables print service providers to offer new services

EFI fuels success.

From Fiery to super wide inkjet, from the lowest cost per label to the most automated business processes, EFI has everything your company needs to succeed. Visit www.efi.com for more information.