Fiery FS350 Pro and Fiery FS350 print servers

Product guide for cutsheet devices

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.

LAST UPDATED:
October 2019

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Table of contents

INTRODUCTION 7
The changing market for digital front ends 7
Fiery Workflow Suite 7
Fiery Foundation 8
Fiery areas of leadership 9
Range of Fiery DFEs 10
Fiery industrial design 11
Introduction to Fiery FS350/FS350 Pro 13
FS350 Pro and FS350 new features table 14

PRODUCTIVITY 15
Performance technology 17
Fiery NX hardware 17
Fiery HyperRIP 17
Rush RIP 19
Spool-RIP-Print Simultaneously 20
Fiery SmartRIP 20
Auto-detect Composite Overprint 21
Optimized PDF 22
Job submission automation 23
Job Presets 23
Fiery Virtual Printers 25
Fiery Hot Folders 26
Fiery Command WorkStation 26
Fiery Impose – Duplo finisher layout import 27
Fiery JobFlow 27
EFI MarketDirect StoreFront 28
Variable data printing 29
Fiery VDP Raster Preview 30
PPML 3.0 31
Fiery FreeForm 32
VDP Resource Manager 37
PDF/VT support 37
Processing optimization for PDF and PostScript VDP files 39
Define Record Length 39
Record level finishing support 39
VDP Record Range Printing 40
VDP Multi-Up Booklet 40

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Transactional printing 41
Set page device support 41
Sequential Printing 42

MANAGEMENT 43

Job and device management tools 44
Fiery Command WorkStation 44
New features in Fiery Command WorkStation 6 48
Fiery Ticker 61
Fiery Go 62
Fiery WebTools 62
International support 63

Advanced job management 66
Force Print 66
Suspend on Mismatch 66
Rush Print 67
Print/Process Next 67
Quick Doc Merge 67
Sample Print 67
Schedule Print 68
Proof Print 69
Increased maximum number of jobs in Printed queue 69
Fiery Productivity Package 69

Fiery Workflow Suite: Prepress solutions 71
Fiery Graphic Arts Package, Premium Edition 71
Fiery Productivity Package 86

Fiery Workflow Suite: Makeready solutions 88
New features in Fiery makeready products 90
Fiery Impose 93
Fiery Compose 105
Fiery JobMaster 106

Job submission and settings 115
Fiery driver 115
Fiery VUE 121
USB Media Server 122
Paper Catalog 122
Pad printing 125
Copy Numbering 126
Scale to fit sheet size 126
Fiery Remote Scan 127

COLOR & IMAGING 129

Integration with Adobe PDF workflows 132

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Adobe PDF Print Engine (APPE) 132
CPSI 3020 134
Color management settings 135
High-precision ICC-based color management 135
ICC-based color management for precise color matching 135
Embedded profile override 136
CMYK black-point compensation 136
Calibration 137
Fiery Color Profiler Suite 141
Fiery spot color 143
PANTONE Color-enabled 143
Fiery Spot-On 144
Specialty color support (engine specific) 145
Image quality optimization 146
Fiery Image Enhance Visual Editor 146
Fiery Image Enhance 148
Fiery imaging features 149
Perfect PDF 149
Composite Overprint for spot colors and CMYK 149
Grayscale Composite Overprint 150
Grayscale input profile 151
Optimize RGB Transparency 151
Auto Trapping (fixed) 152
Enhanced gradient smoothing 152
Text and graphics quality (engine specific) 153
Fiery Smart Estimator in Command WorkStation 155
Smart white 155
Certifications 156
Idealliance and G7 156
FograCert 156
CONNECTION 157
Fiery JDF 158
Fiery JDF key features 160
Fiery API 165
Integration with EFI MIS and Web-to-Print solutions 168
Tools for technical support 169
Fiery Setup Wizard 169
Fiery System Restore 171
Fiery Hardware Diagnostic Tools 171
Fiery Clone Tool 172
Fiery Configure 172

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Improved serviceability 173

Network integration and security in corporate environments 177
Automatic proxy configuration 177
Windows 10 operating system for external Fiery servers 177
Software licensing 178

Data protection 179
Security updates 179
Encryption 179
Removable hard disk drive 179
Secure Erase 3.0 179
Debian 8 180

Cost accounting and billing integration 182
Fiery Job Log 182
Tracking jobs with PaperCut 183
Job cost tracking 184

Mobile printing 186
Direct Mobile Printing 186

Access to training and Fiery users worldwide 187
Learning@EFI on-demand learning platform 187
EFI Communities 188

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Introduction

The changing market for digital front ends

In a 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
  - Color 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:

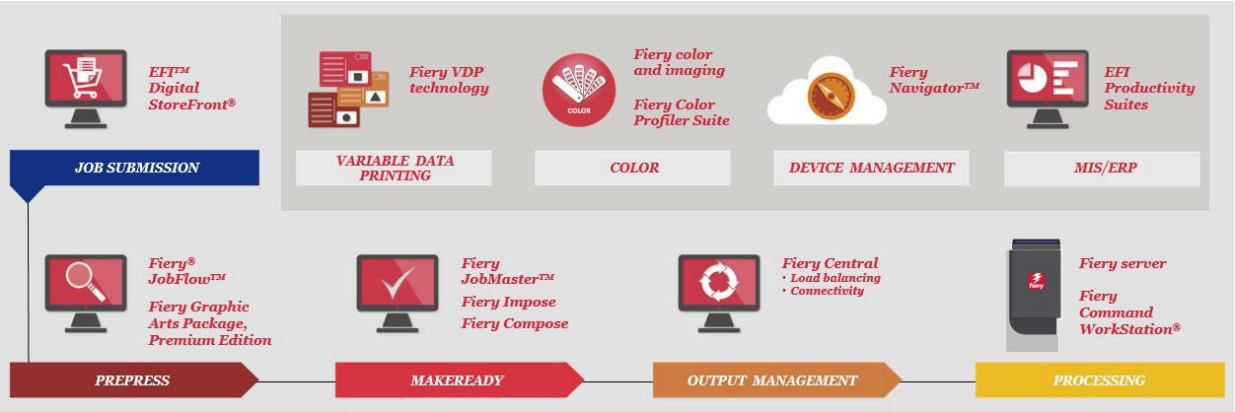
- Ease of use
- Consistent and reliable output
- High performance based on RIP speed
- Familiarity of interface and operational consistency

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 to 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 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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.

Fiery Foundation

Every Fiery digital front end that EFI designs, builds, and sells is based on a core set of foundational values. These values define our products, and are the promises we make to our customers each and every day. Our values drive us to provide Fiery products that are user-centered, reliable, scalable, compatible and secure.

User-centered

In case you think user-centered sounds like another technology buzzword, it's actually something we deliver. Building DFEs is what we do. But we build them by thinking about the actual people who use our DFEs. Our commitment is really to them. That's why we provide an integrated set of experiences at every stage. The interface is intuitive, quick, and responsive — which makes our products easy to learn and use. And we make our servers quick to set up, back up, and maintain. This ease of use minimizes mistakes and reduces steps to get a job done — so our customers can spend more time on what they're paid to do.

We also built EFI Communities that connect nearly 15 thousand Fiery users to each other and to our experts, so our users can find the best ways to get things done. It's an incredible way to share knowledge and expertise worldwide.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Reliable

Fiery users expect our equipment to run all the time, and to keep up with their printers. From factories that print millions of dollars of corrugated material to graphic artists who have to get a design in front of a customer in minutes, people depend on us. And we deliver. Made for the needs of 24-by-7 production, Fiery products work all the time, every time, even for the most demanding applications. Fiery servers are also resilient and easy to update with the latest fixes to keep systems running their best.

Scalable

What does scalable actually mean? It means Fiery servers can grow with businesses. If a customer is a start-up with a 50-page-per-minute printer, we have an embedded server that will add a lot to what they can do. If they want to add another printer, we have a DFE that will work for that expanded environment. We have workflow and color management software for more advanced work, and for automation. We have Fiery servers that let customers expand to wide format. And they all have the same job management interface. So, operators don't have to learn a new interface for every print engine, and shops don't have to redesign their whole workflow to add Fiery products. As part of our brand promise, all this flexibility comes with the best price/performance in the industry. Our customers can add functionality as their business grows or needs change, just by adding software packages or subscriptions. They can even upgrade their print workflow with the latest innovations and features to improve productivity with Fiery Command WorkStation® updates. Taken together, we're talking about a lot more than a wide range of servers. We're talking about adding innovation over the life of the print system.

Compatible

In the old days, buyers might get stuck with new equipment that didn't work with what they already had and kept them from modernizing.

So, we build Fiery servers to operate in an open, multi-brand environment to avoid workflow silos, and to give customers the highest level of operational flexibility. Our DFEs support Fiery partner workflows, plus leading third-party prepress and cost-accounting products. On day 1, we have new drivers available for Mac or Windows updates so our customers can just keep printing. We're relentless about keeping Fiery technology up to date with the latest industry standards, including VDP languages, color, and file formats — so users can accept and process all types of jobs.

Finally, Fiery API and JDF allow users to connect to EFI MIS and web-to-print systems, or to integrate to existing shop systems — all of which makes Fiery servers the most versatile and flexible in the industry.

Secure

Today, security needs change at a dizzying speed. We keep users up to date with the latest security requirements and standards. But we also stay on top of bug fixes and security patches, so our customers always know they can protect sensitive data and documents in any operating environment.

Fiery areas of leadership

We view our foundational values like the foundation that builders use to construct a solid, well-built house. These foundations have been in every Fiery server we've made for more than 25 years. On them, we constantly innovate with features and functions in the areas our customers care most about — producing high-quality, accurate output, quickly and efficiently. We call these areas: color and imaging, productivity, management, and connection.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Color & Imaging

Fiery systems deliver the best imaging technology, with accurate and consistent color

Fiery servers provide state-of-the-art imaging technology, combined with expert color management tools, to deliver high-quality images with the accurate, consistent color customers want. Print providers can print the color the designer intended, looking just the way they wanted. And provide accurate and consistent color every time, all the time; and outstanding, high-quality images that satisfy the most demanding print buyers.

Productivity

Fiery systems provide performance and automated workflows that maximize printer throughput

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. To provide this, we also include features that directly improve turnaround times by automating workflows to keep print engines running at rated speeds, even for the short-run jobs that more and more print providers have to handle.

Management

Fiery systems enable profitable production of high-value products through leading job preperation and management

Unfortunately, increased functionality can lead to complexity. To make sure that doesn't impact productivity and costs, EFI innovations in the "management" area give users tools that speed job preparation and provide better device management — to not onlyproduce high-quality printed materials quickly, but more bottom-line profit too.

Connection

Fiery systems offer the versatility to fit in any environment with reliable system operation

Connection means the ability to fit in. Fiery DFEs have to work with everything from workflow software to an MIS system. And they do. Advanced connectivity technology provides easy, scalable Fiery integration to, and compatibility with, business and other production systems to increase efficiency; and provide secure, reliable operation in a variety of different environments.

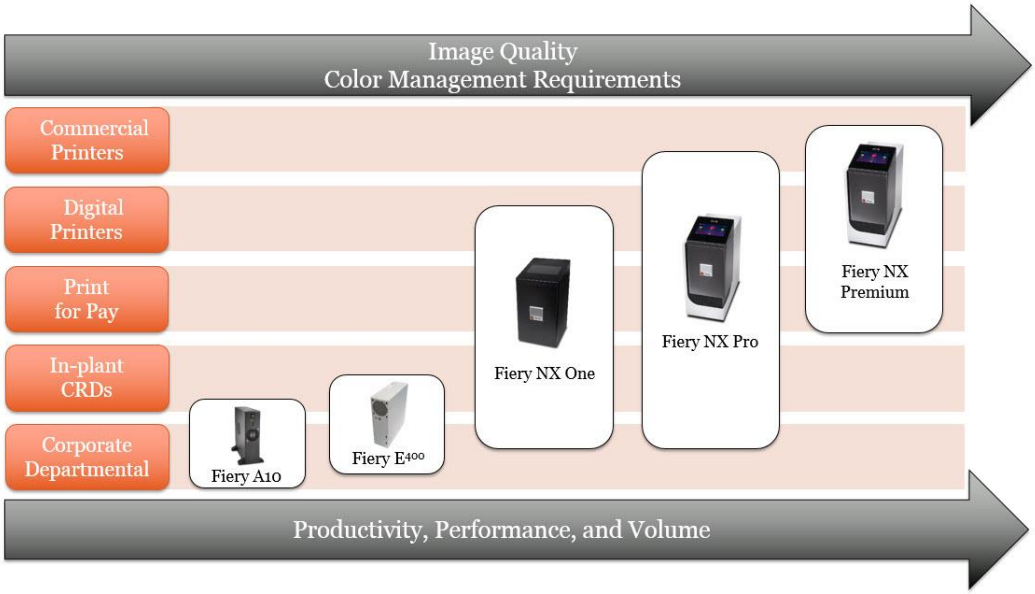
Range of Fiery DFEs

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 to production:

- Fiery NX Premium — an exceptionally high-performance system for high-level production and mission-critical users with high-speed engines
- Fiery NX Pro — a high-performance system for users who require quality and advanced makeready capabilities
- Fiery NX One —seamless workflow management and superior image quality for both, color and black-and-white production printing environments with tight deadlines and high customer expectations

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- Fiery E[400]— the ultimate document-publishing system that takes the pain out of producing complex color documents, providing efficiency and ease of use for small/medium businesses and enterprise office users alike
- Fiery A10 — a low-cost Fiery server for office users that require performance for large volumes of jobs; accurate brand colors; and simple, visual ways to prepare jobs for printing



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.

Fiery industrial design

Fiery NX design

FS350 Pro servers feature the cutting-edge and innovative Fiery NX industrial design that was precisely crafted with the Fiery user in mind.

Fiery QuickTouch

The new Fiery NX server design includes the Fiery QuickTouch software on the touchscreen display, which gives faster views of job status information and access to server management. With just a tap, the touchscreen display gives users easy access to intuitive system installation, backup and restore functions, plus system diagnostics. The display rotates 90 degrees to provide operational flexibility and visibility. Three USB ports are conveniently located on the side of the display.

This new QuickTouch software interface is an extensible platform as users can add features and functions in new versions of Fiery NX servers over time.

For more information visit this web page.

Benefits:

- Faster views of job status and device management
- Rotating touchscreen panel for better visibility

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery NX Station

The new Fiery NX Stations provide a centralized workstation for high user productivity. Either the Fiery NX Premium or NX Pro server can be placed inside the Fiery NX Station to provide a compact, centralized work station that adapts to different print production environments. A compact design reduces the footprint by over 20%, while the 31.5 x 18 inch table offers a large work area to perform activities such as calibration and profiling. A top tray stores commonly used items within easy reach, such as the ES-2000 spectrophotometer, and a rear compartment keeps the ES-2000 measurement ruler and backing board or key documents nearby. The wireless mouse and keyboard save space and make the work area more flexible. Five USB ports are easy to reach, with three on the side of the display, and two conveniently located by the work surface. The NX Premium/Pro server glides out on a sliding shelf for easy installation and service access. When the display is not in use, Fiery Ticker shows at-a-glance printing status and alerts to users at a distance.

The Fiery NX Station comes in two versions:

- NX Station GL – The basic configuration with a 22" display
- NX Station LS – Adds an adjustable-height workspace, a larger 27" monitor, a proximity sensor that wakes up the Fiery server as soon as it identifies someone approaching, and tidy power cable storage

For more information visit the Fiery NX Station web page.

Benefits:

- Efficient and ergonomic operation with new NX Station
- Compact design reduces footprint by over 20%
- Quick and easy to install and maintain

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Introduction to Fiery FS350/FS350 Pro

Fiery servers are constantly evolving to offer the best choice for every print engine and Fiery server combination on the market in terms of productivity, ease of use, color quality, and integration. Fiery system software platforms have version names to show their evolution over time. The following list of Fiery system software versions is ordered from older to newer since 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
Fiery FS300 Pro	Fiery FS300
Fiery FS350 Pro	Fiery FS350

The Fiery FS350/FS350 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 FS350 is available for embedded Fiery servers, and Fiery FS350 Pro for external Fiery servers.

Target markets

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

Target print applications

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

FS350 Pro and FS350 new features table

This product guide defines Fiery servers that include new features in Fiery FS350 Pro and FS350 system software with Fiery Command WorkStation Package 6.1 (featuring Fiery Command WorkStation v 6.1) These new features provide substantial gains in productivity, deliver accurate and amazing color, include impressive improvements in ease of use, and enhanced integration — helping print providers reduce costs and improve service.

Productivity	Color & Imaging	Management	Connection

• HyperRIP support for record range**
• Fiery FreeForm master on top
• Duplo finisher layout import***
	• APPE 4.4*
	• Automatic calibration updates
	• Fiery Smart Estimator in Fiery Command WorkStation®
	• Smart White
	• Fiery ImageViewer
	  ○ Color replacement
	  ○ Split view
		• Fiery Command WorkStation 6.3
		  ○ Unified print room
		  ○ Thumbnail view
		  ○ HiDPI monitor support
		  ○ Native 64-bit applications
		  ○ Archive Manager
		  ○ Export current view
		  ○ Link to EFI Smart Support
		• Fiery Driver 6.3
		• Copy numbering
		• Raster preview from back
		• Fiery Impose new features
		• Fiery JobMaster new features
		• Scale to fit sheet size
			• Fiery JDF 1.6
			• Fiery Installer Builder
			• Security updates
			• Debian 8

* APPE is updated with enhancements and service releases on an ongoing basis.

** Only available on Fiery NX Premium external servers

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Productivity

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

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

Feature name	NX Premium	NX Pro	NX One	E400
Performance technology				
HyperRIP (single- and multiple-job mode)	✓	-	-	-
Spool-Rip-Print simultaneously	✓	✓	✓	✓
Fiery SmartRIP	✓	✓	✓	✓
Optimized Adobe® PDF and PostScript®	✓	✓	✓	✓
Auto-Detect Composite Overprint	✓	✓	✓ (color only)	✓
Integration with PDF workflows				
Adobe PDF Print Engine 4.0 (APPE)	✓	✓	✓	-
CPSI 3020	✓	✓	✓	✓
Advanced job management				
Force Print	SFM	SFM	SFM	SFM
Fast reprint	✓	✓	✓	✓
Suspend on Mismatch	✓	✓	✓	✓
Rush print	✓	✓	✓	⊙[1]
Rush process	✓	-	-	-
Print/Process Next	✓	✓	✓	⊙[1]
Quick Doc Merge	✓	✓	✓	-
Sample Print	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[1]
Fiery JobFlow	⊙	⊙	⊙	SFM[1]
Variable data printing				
VDP Raster Preview	✓	✓	✓	-
VDP Resource Manager	✓	✓	✓	✓

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Feature name	NX Premium	NX Pro	NX One	E400
PPML v 3.0	✓	✓	✓	-
Fiery FreeForm™	✓	✓	✓	✓
PDF/VT–2 support	✓	✓	✓	-
Define Record Length	✓	✓	✓	✓
Record and Set Level Finishing	✓	✓	✓	✓
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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 that enables 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 engines are less likely to move into cycle-down and warm-up modes — losing valuable press time. A fast DFE also helps meet tight turnaround times and reduce bottlenecks. The following features define the Fiery performance technology that allows users to grow their businesses with more-profitable, timely, top-quality work — including higher-value, fully personalized jobs.

Fiery NX hardware

The new, breakthrough Fiery NX servers have a cutting-edge and innovative industrial design, customized for Fiery users and for the needs of a highly efficient print environment.

Fiery NX Premium, NX Pro and NX One servers

There are three types of Fiery NX servers:

- Fiery NX Premium

  High-volume, powerful servers for commercial printers, in-plant shops, and digital printers

- Fiery NX Pro

  Mid -volume servers for digital printers, print for pay, and in-plant shops

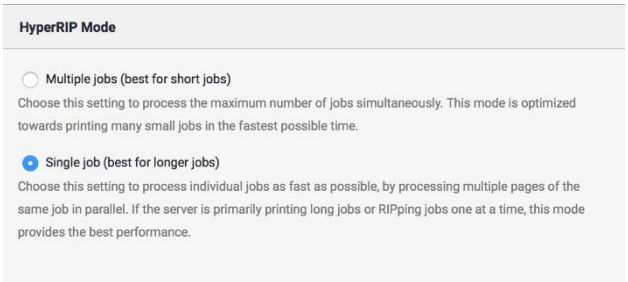
- Fiery NX One

  Mid -volume servers for black and white or lower-speed color digital printers targeted to print for pay, and in-plant shops

Fiery HyperRIP

Fiery HyperRIP is a proprietary EFI rendering technology, available on Fiery NX Premium hardware platforms, that makes performance-leading Fiery servers even faster. HyperRIP dramatically improves performance by simultaneously processing print jobs up to 55% faster by optimizing 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 capability helps optimize the print engine capacity and gets 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.



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

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

Fiery HyperRIP offers two modes of parallel job processing:

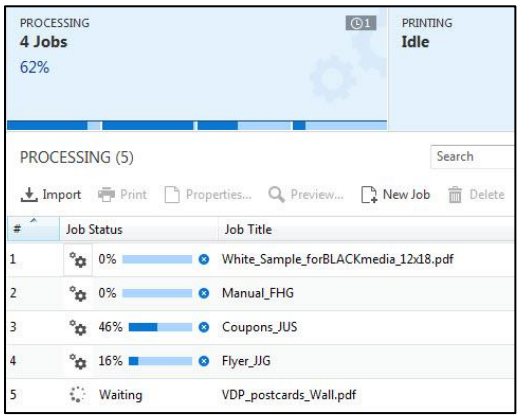
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

1- Single job

The single-job mode simultaneously RIPs a job across up to four processors 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 handle upcoming jobs.

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

Fiery FS350 Pro supports many more file formats for HyperRIP in single-job mode than FS200 Pro systems. This table lists the file formats supported, and the limitations with some workflows and print settings. If the Fiery server determines a file is not eligible for HyperRIP, it will automatically route the job through the single RIP path.

File type	Plain	Duplex	XObjects / Form caching	Mixed media	Control bar	Print range Page/ record	Impo-sition	Post-flight	Direct queue
CPSI workflow									
PDF	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
PostScript (PS)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
QuickDoc Merge	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
PDF/VT	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
PPML	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
VPS	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
VIPP	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
FreeForm Master	No	No	No	No	No	No	No	No	No
FreeForm Variable	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-
TIFF	No	No	No	No	No	No	No	No	No
EPS	No	No	No	No	No	No	No	No	No
APPE workflow									
PDF	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
PDF/VT	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
PCL workflow									
PCL	No	No	No	No	No	No	No	No	No

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

HyperRIP support for record range

This feature expands the uses of HyperRIP by enabling its use in single-job mode when printing a range of records in a VDP job. This provides faster processing to both CPSI and APPE processing paths.

2- Multiple jobs

The multiple-jobs mode simultaneously RIPs several jobs across up to four processors, 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.

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 which requires that jobs 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 by 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 RIP processors available to the job during processing.
- Number of RIPs used: indicates the actual number of processors used to RIP the job. Not all jobs can use HyperRIP, and some will use a single RIP processor instead.

Benefits:

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

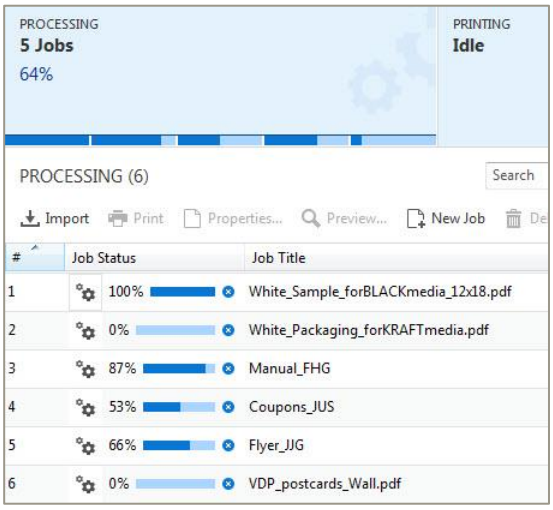
Rush RIP

Rush RIP is a unique Fiery feature that works in combination with the Fiery HyperRIP multiple-jobs mode. It is only available for Fiery NX Premium servers.

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

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

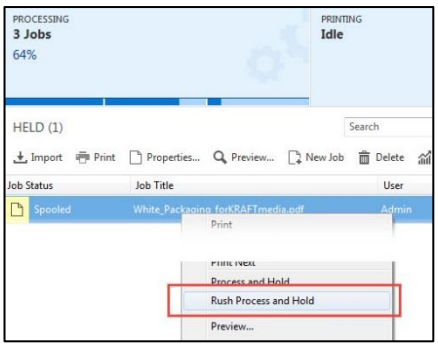
- Rush Print — When selecting Rush Print, the rushed job is sent to the top of the "waiting to RIP" queue. Once a Rush Print job finishes RIPping, it will interrupt a currently printing job and start printing.



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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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



Rush Process and Hold

Benefits:

Rush RIP is a great print management tool for high-end production environments and gives users 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 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, for these benefits:

- RIPChip technology: Proprietary EFI application-specific integrated circuits (ASICs) 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: Compression software provides flexible compression ratios and visually lossless image quality. decreases the amount of memory necessary to store documents during processing, and enables faster printing of documents.
- RIP-While-Print: Print one page while subsequent pages are simultaneously processed.
- Continuous Print: Store processed pages in memory before printing, eliminating the need for the copier or printer to cycle down between unique pages.
- RIP-1-While-Print-2: 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: RIP a job while it is still being spooled to 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 making the Fiery server more available to process jobs
- Reduces bottlenecks at the RIPping stage
- Helps maximize print device's capacity and shop productivity

Fiery SmartRIP

Fiery SmartRIP 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 color, compression, and rendering processes by recognizing file characteristics and using adaptive processing.

Users will especially notice the benefits of SmartRIP technology when:

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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

- The enhanced image processing allows users to print composite overprints of CMYK and Fiery Spot-On™ colors — this key feature enables Fiery servers to pass the Altona Test and Ghent suites.

Benefits:

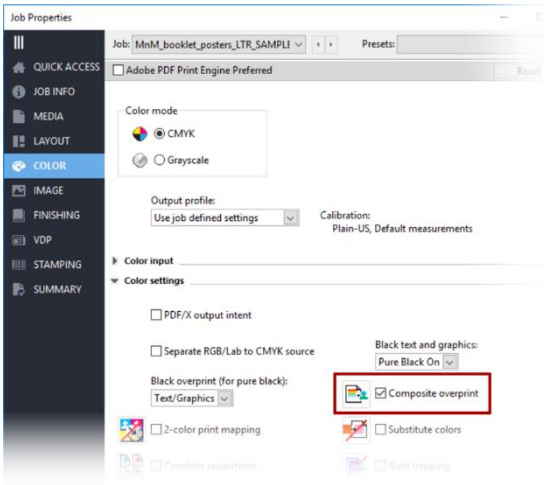
- Achieves RIP performance benchmarked at up to two times faster in a dual processor, and one-and-a-half times faster in a single processor
- Improves efficiency and predictability in color and VDP
- Produces visibly smoother edges and fine type at high resolution (1200 dpi and up). This is quite noticeable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

Auto-detect Composite Overprint

One 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.

But 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:

- Jobs will process as fast as possible, while ensuring the overprinting and transparencies are rendered correctly every time

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Optimized 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 Optimized 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 on a per-job basis

Users can use XObjects and optimize 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

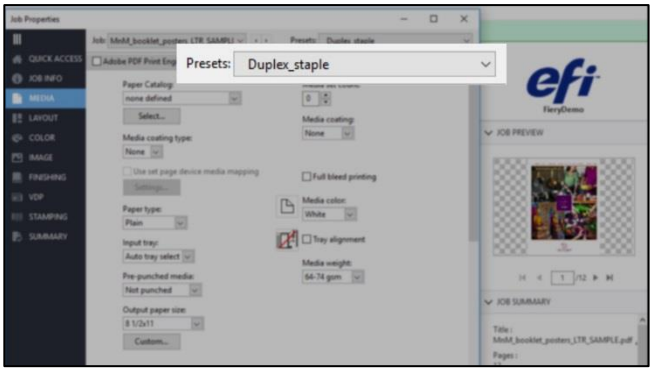
Job submission automation

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, use digital workflows to capture as much formatting and direction from users as possible. This helps to shorten job-preparations times, minimize errors, and speed up turnaround times.

Fiery servers offers a wide range of tools to streamline workflows from submission to output and therefore, adapt to any type of automation needs.

Job Presets

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

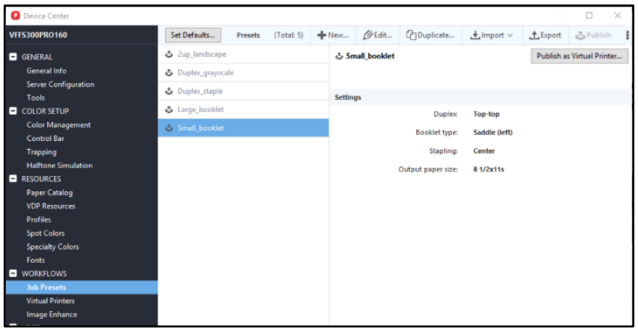


Job Presets in Fiery driver

Server Job Presets

Local Job Presets are available only on the user's client workstation. Administrators can create Server Job Presets to share Job Presets with all Fiery users. This way, they can automate the selection of Job Properties for commonly used tasks, saving time and maximizing productivity.

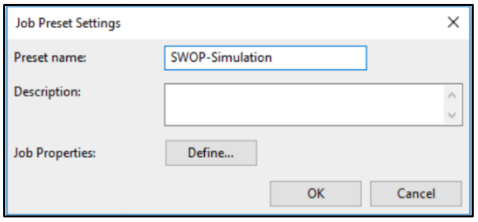
Administrators can save, edit, publish, and delete Server Presets from the Command WorkStation Device Center. They can also create Server Presets from Job Properties in the Command WorkStation, right after selecting the applicable job settings, by simply providing a name and description. Other users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

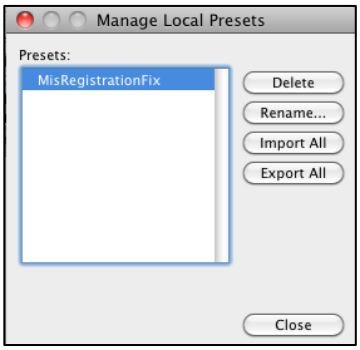


It's easy to create server Job Presets by providing a name and description for the job settings.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

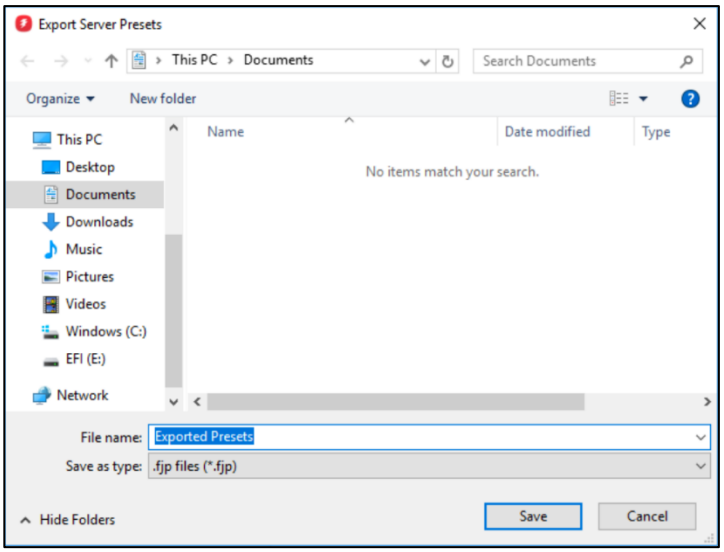
Import and export Job Presets

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.

Benefits:

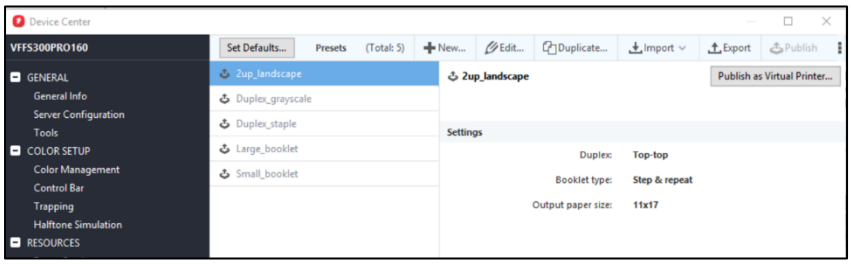
- Share and back up local Job Presets for safekeeping
- Easily and quickly make Server Job Presets available to multiple Fiery users
- Create automated workflows for any repetitive task, reducing the number of times a job needs to be touched during printing

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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:

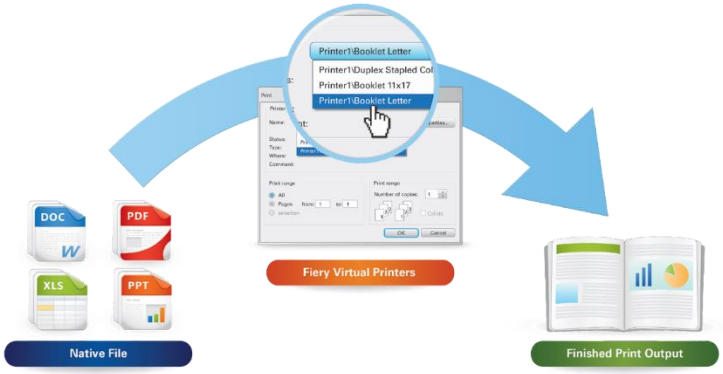


US and metric presets

1. 2up landscape
2. Duplex grayscale
3. Duplex staple
4. Large booklet
5. Small booklet

Fiery Virtual Printers

Fiery Virtual Printers lets production print administrators create a specific configuration for a certain print device that contains all the print driver settings they need for a given job type. They can then present the configuration 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 for the job.



In comparison with Fiery 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 of Virtual Printers include:

- 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:

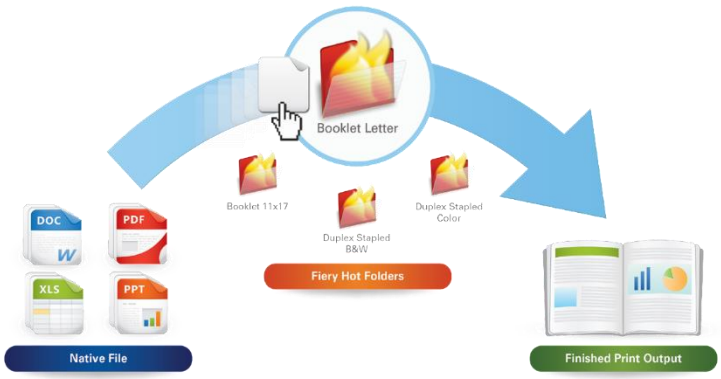
- Automates workflow for all users, increasing productivity
- Reduces repetitive workflows for faster, error-free printing

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- 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 the pre-set print settings. Hot folders can be set up to specify certain job properties, to impose jobs, and to merge jobs.



Fiery Hot Folders relieve the user of the repetitive task of configuring print settings for multiple jobs, and allow direct printing of files without the need to open them in their native application such as Adobe Photoshop® or Microsoft Word. 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.

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

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

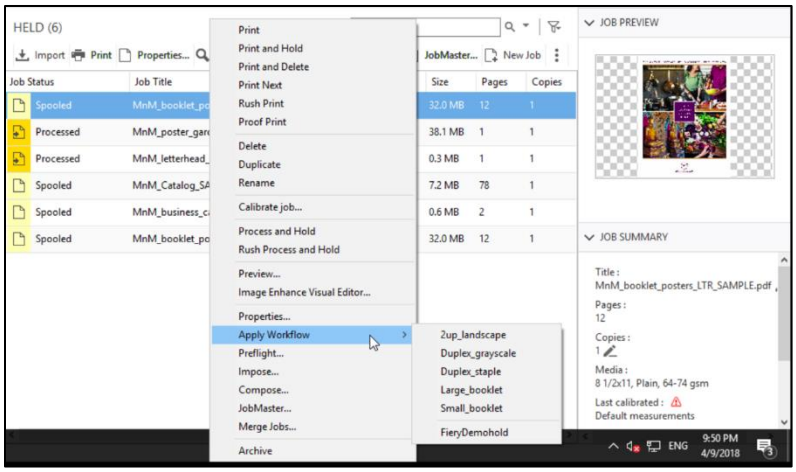
Benefits:

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

Fiery Command WorkStation

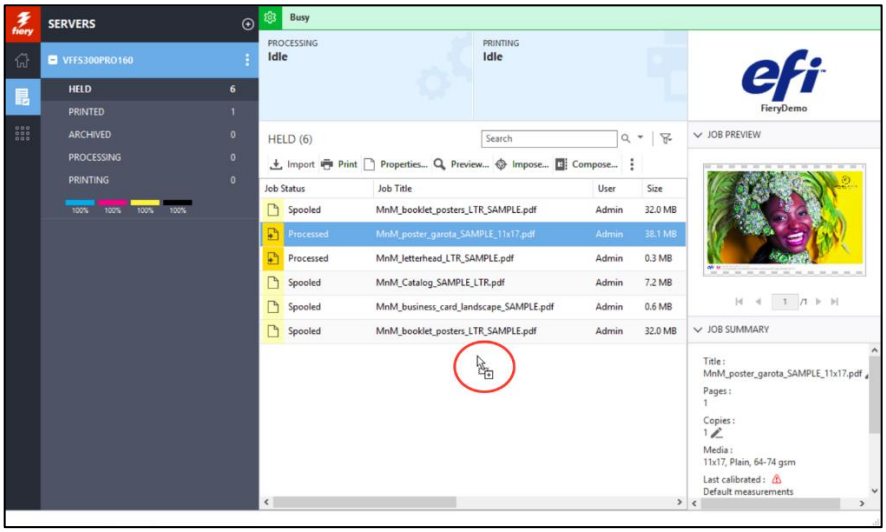
The Fiery Command WorkStation interface offers a way to automate job-submission workflows by quickly selecting Server Presets after right-clicking on a job. Fiery administrators can create and publish job-submission workflows as easily as they can create a new Virtual Printer, and can publish the workflows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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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

The Drop Zones feature gives a new look and feel to Fiery Command WorkStation by clearly indicating the areas where users can drop files for printing. It also displays an easy way to associate Server Presets and Virtual Printers after dropping files in the server list pane.



Drop zone indicated on the Held queue

Benefits:

- Easy way to associate Server Presets and Virtual Printers while downloading a job onto the Fiery server

Fiery Impose – Duplo finisher layout import

Fiery Impose has been introducing significant improvements to the integration between Fiery Impose and Duplo. With this feature, users can import the layout file for the Duplo finisher into Fiery Impose to set up imposition in seconds and automate future jobs to eliminate manual setup on the Duplo finisher.

Read the full description in the Fiery Impose section.

Fiery JobFlow

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

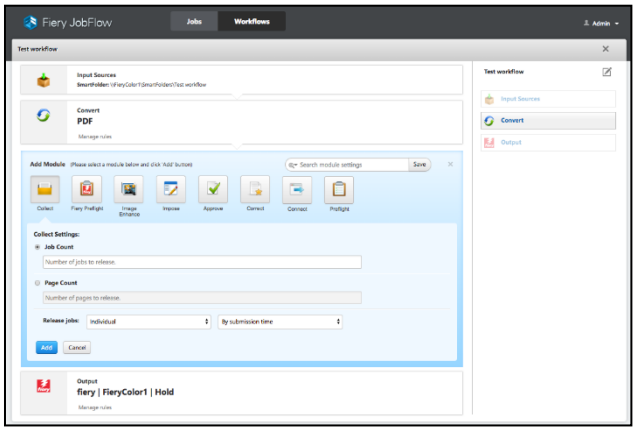
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 running on FS200 Pro and later, Fiery JobFlow Base comes pre-installed on the server itself.

Installing the Fiery JobFlow application gives users access to 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 for:

- 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 touchpoints
- Detects and uses existing Fiery resources such as presets and templates, to avoid rework and to 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

EFI MarketDirect StoreFront

EFI MarketDirect StoreFront is the award-winning, flexible eCommerce solution that offers an industry-leading experience for print buyers, and is designed to grow your business.

The Fiery integration setup wizard helps establish a touchless workflow with EFI MarketDirect StoreFront to save time and eliminate errors — synchronizing media libraries; job status; and job configurations such as color settings, layout, and finishing.

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 personalized communications or targeted marketing can significantly improve a company's bottom line. Overall revenues and profits associated with personalized marketing programs are more than 31% greater than those from general marketing. Personalized communications also garner measurable increases in the size and value of orders. Customers are apt to respond more quickly and in greater numbers to personalized marketing messages. And personalized 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 customized end-to-end attention to customer needs and budgetary constraints.

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

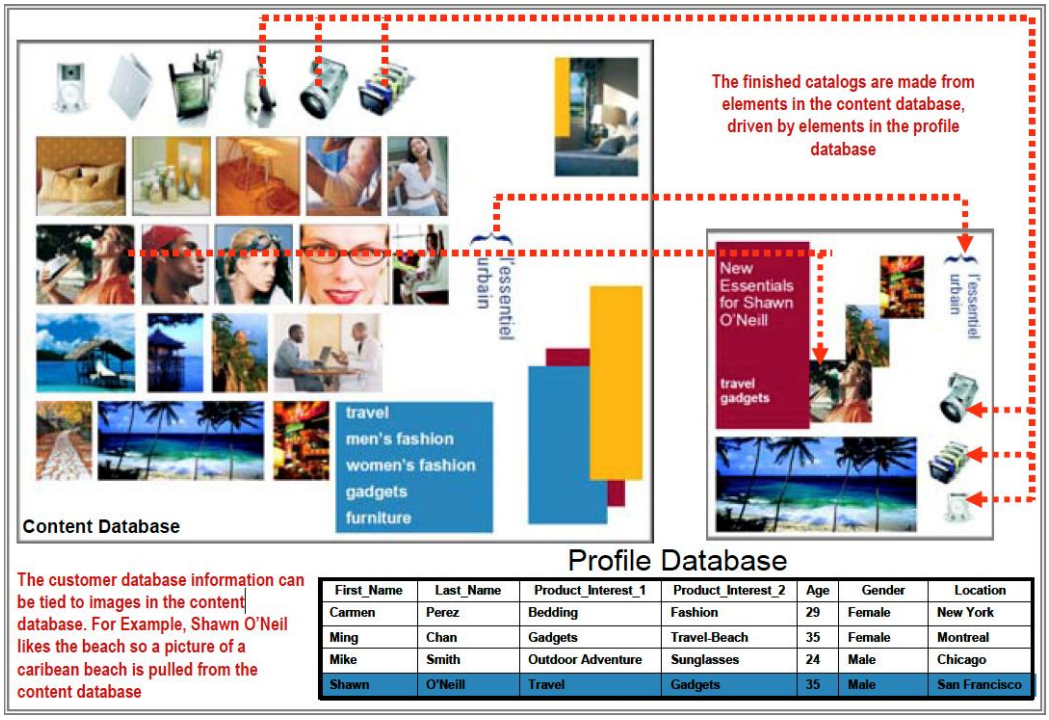
EFI Fiery technology delivers fast, industry-leading, adaptable VDP capabilities, and allows Fiery users to choose any authoring tool to create static and variable elements with flexible and open, end-to end VDP solutions. They use the most comprehensive array of VDP languages, such as Fiery FreeForm™, the open-standard personalized print markup language (PPML), PDF-VT, and a host of proprietary languages. All this lets print providers 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 even the most complex VDP jobs. This allows users to manage their Fiery servers and VDP jobs from one location. The VDP Resource Manager utility enables print production shops to store, view, and reuse RIPped objects on networked Fiery servers. Using it in conjunction with a high-speed printing device and a Fiery server, shops can eliminate production bottlenecks, and print VDP jobs faster than ever before.

Using proprietary 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



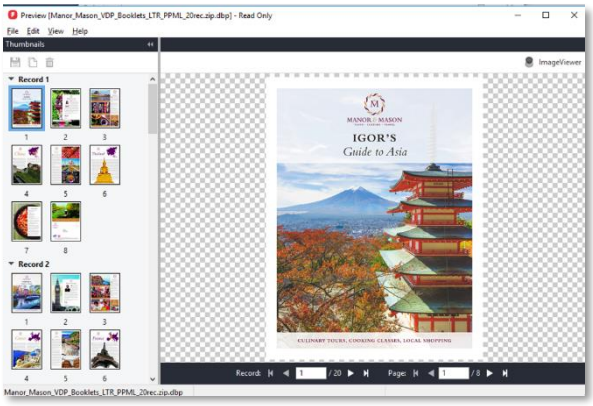
First_Name	Last_Name	Product_Interest_1	Product_Interest_2	Age	Gender	Location
Carmen	Perez	Bedding	Fashion	29	Female	New York
Ming	Chan	Gadgets	Travel-Beach	35	Female	Montreal
Mike	Smith	Outdoor Adventure	Sunglasses	24	Male	Chicago
Shawn	O'Neill	Travel	Gadgets	35	Male	San Francisco

Fiery VDP Raster Preview

The Fiery VDP Raster Preview enables users to view the content of the job, organized 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 can use scroll bars to see the whole image. This way, users can verify whether the record boundaries for imposed and non-imposed jobs are correct before printing the job. The feature is available when using 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 DFE to know early on which fonts, logos, diagrams, images, or other resources are needed at a particular point in the job; the DFE can rasterize that resource a single time and use it as many times as needed without redundant processing. Fiery DFEs are compliant with PPML 3.0 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. Fiery servers are compatible with the Creo VPS format, so users can RIP and print jobs in the Creo VPS format.
- VI Compose (VIPP/VPC) — Available on Fiery servers driving Xerox print engines only, this open language from Xerox enables the highest-performance output in variable data PostScript documents.
- PDF/VT — PDF/VT is a standard developed by the International Organization for Standardization (ISO) 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 or Adobe InDesign. FreeForm creates rasterized master background pages with specified variable content zones, and merges database information in to these zones. It offers granularity for the job at the page level, and is 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:

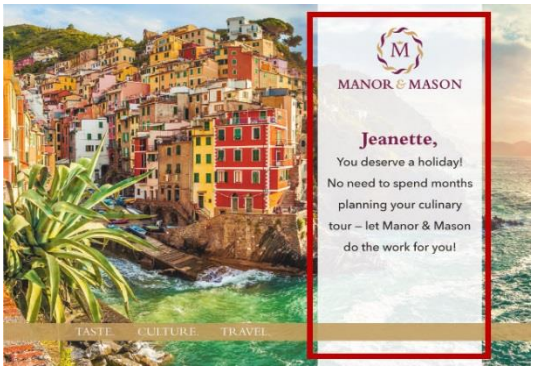
- Offers open VDP implementation, ensuring compatibility in all VDP workflows and complete flexibility
- Consistent Fiery workflow interface greatly reduces training curve for existing Fiery users, leading to fast adoption and higher productivity

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 allows 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 user productivity
- Eliminates costly file rework

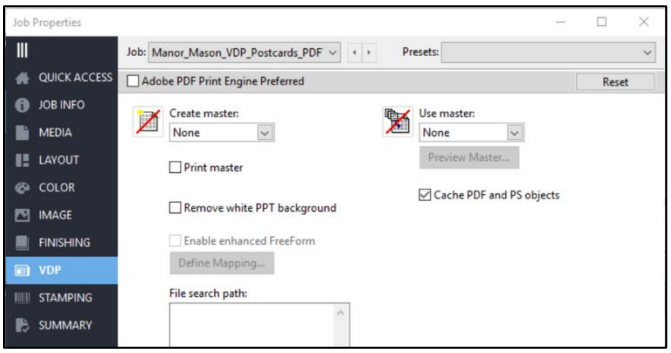


VDP job sample with variable transparent element

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 personalized marketing campaigns and support a multitude of customer requirements with ease. Fiery FreeForm is an ideal entry-level tool that requires minimal skill, so there is almost 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 settings in Fiery driver and Job Properties

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 with static content that spans multiple pages.

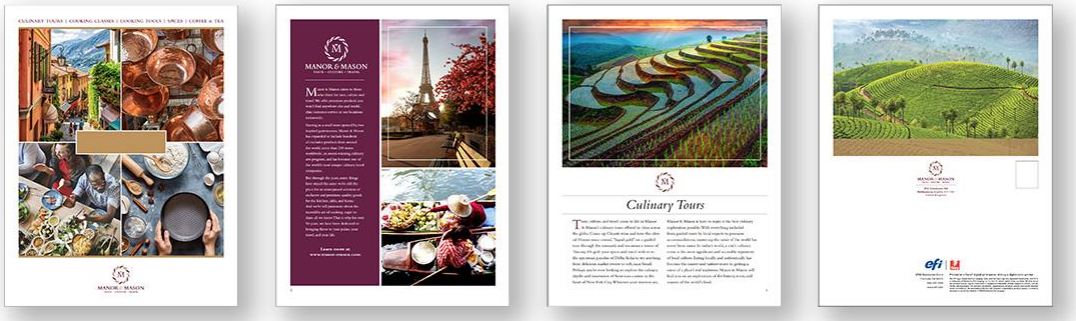
Enhanced FreeForm

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 personalized 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 personalized image, and the back cover with the mailing address and a custom ad — contain variable information.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Master Pages



Variable Pages

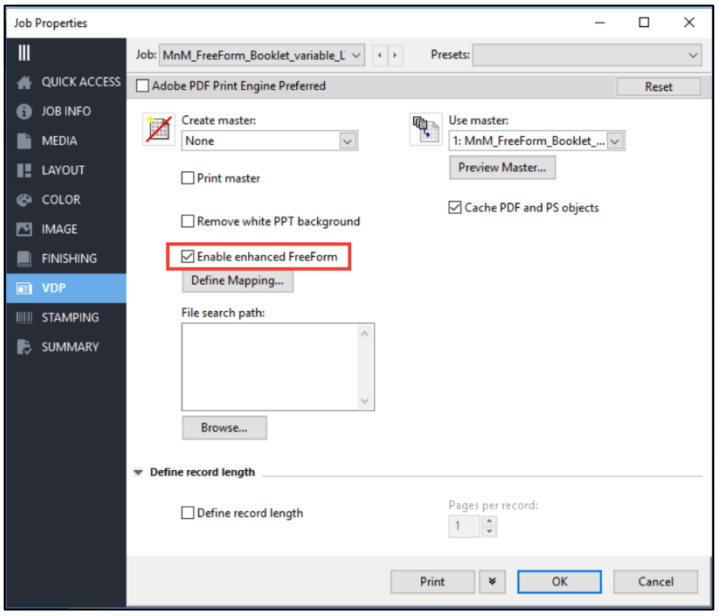
Personalized four-page newsletter with only two variable pages

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.

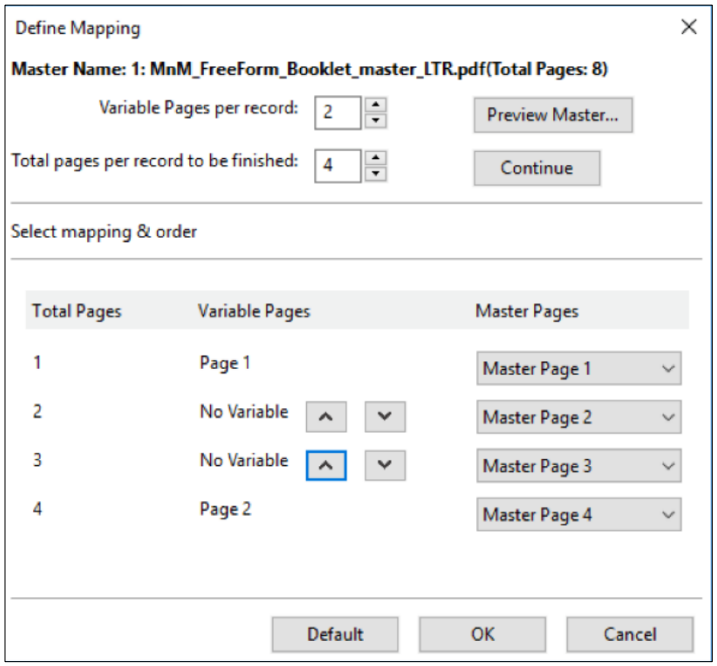
The Enhanced FreeForm settings can be accessed from Command WorkStation Job Properties, Virtual Printers, Presets, Fiery Hot Folders, and in Windows and Mac drivers.

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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:

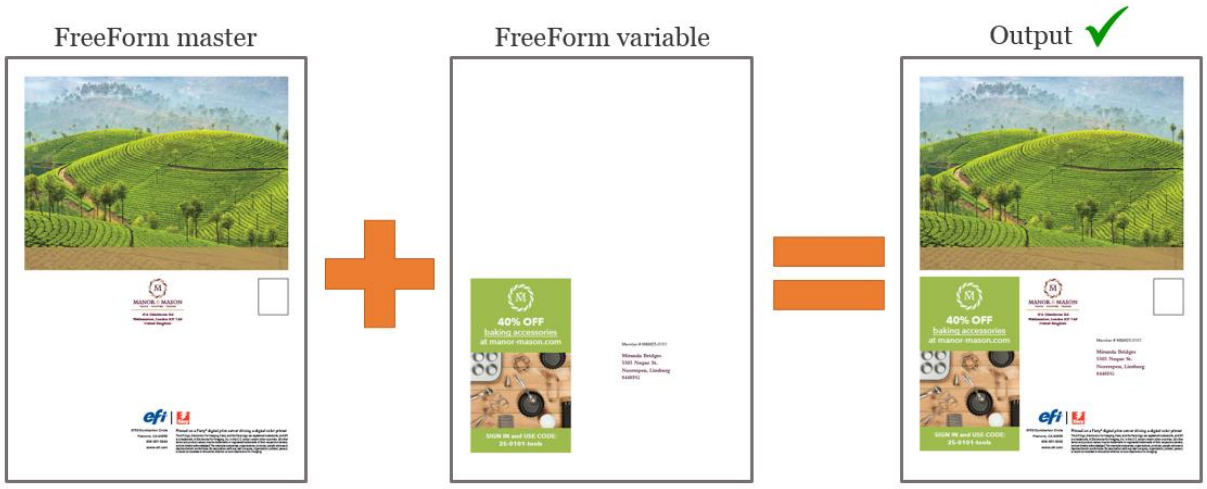
- Simplifies creating and using VDP documents by allowing users to map variable documents to master documents without modifying the source documents
- Offers the flexibility to pick only a subset of pages from a master document, and use the selected pages with the variable record in any order
- Lets users create powerful personalized print jobs using standard tools, without the need for additional VDP software

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery FreeForm master on top

This feature provides the option of merging content from a FreeForm master on top of variable content during job processing, preventing the variable content from obscuring master content in some designs for personalized jobs.

Most common FreeForm uses expect the master content to be a background layer for the variable content. An example is the use of a FreeForm master file as a document letterhead, with the FreeForm variable file as the content of the letter. In this workflow, none of the variable elements overlap any of the master file elements, and the job prints as expected as shown below.



Personalized output looks correct regardless the order the master is processed

Some applications may have a FreeForm variable file with background elements such as a picture that would overlap and obscure the master data.

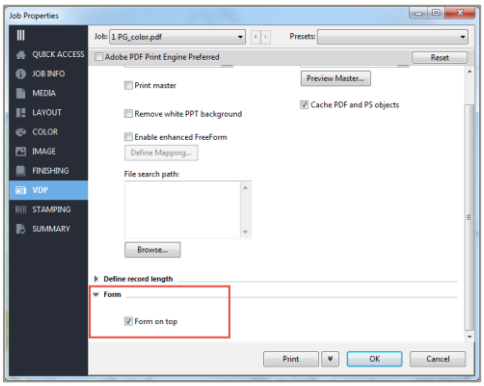
Variable content obscures the master content due to processing the master as a background layer

The FreeForm master on top feature gives users extended flexibility in the design for variable data applications. It is also useful when using specialty colors such as clear, white or neon.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Correct output using the FreeForm master on top feature

The setting is a check box that can be found inside the VDP tab in Job Properties.



Fiery FreeForm Kit

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

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 offers this built-in capability in such a easy, accessible way.

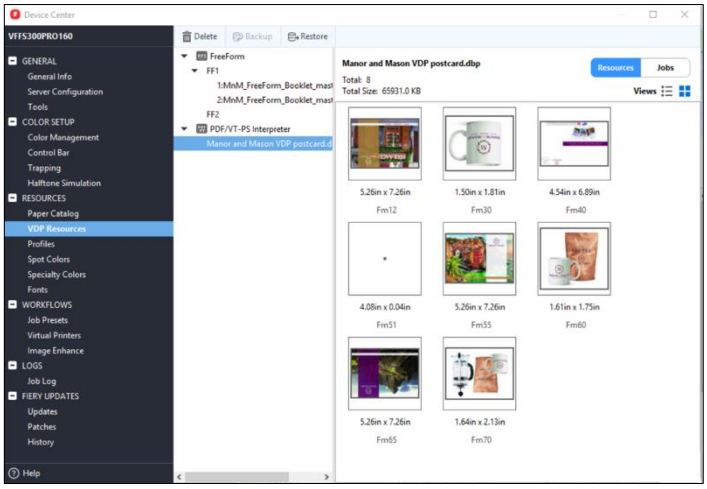
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

VDP Resource Manager

The Fiery VDP Resource Manager presents a list of the repeatable elements (source and cached) that are stored for future use. Users can find the VDP Resource Manager in the Device Center, in VDP Resources under the Resource section.

Key functions and features:

- Easy to navigate with an intuitive user interface
- View a list of repeatable elements, categorized by VDP file format
- See a thumbnail preview of elements; as well as their name, size, and creation date
- 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 printshop
- Choose from a list or thumbnail view (thumbnail view provides a visual illustration of resources)
- View a list of jobs in the Hold queue that are associated with a selected resource
- Delete all the resources in a print environment
- Back up and restore resources
- Automatically refresh stored VDP resources when a new VDP file is processed



VDP Resource Manager in Device Center

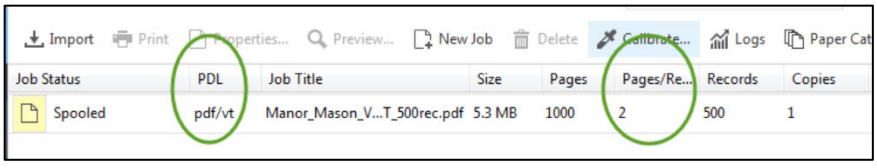
Benefits:

- Quick identification and verification of cached VDP elements
- Optimizes management of VDP resources that can be leveraged by future jobs in FreeForm, PPML, VPC, and VIPP formats

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. Support for PDF/VT brings the benefits of a PDF workflow to VDP, which helps 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 Command WorkStation.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

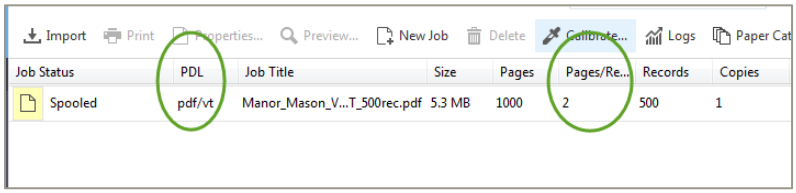
Benefits:

- 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 recognizes 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. Fiery servers support PDF/VT 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.

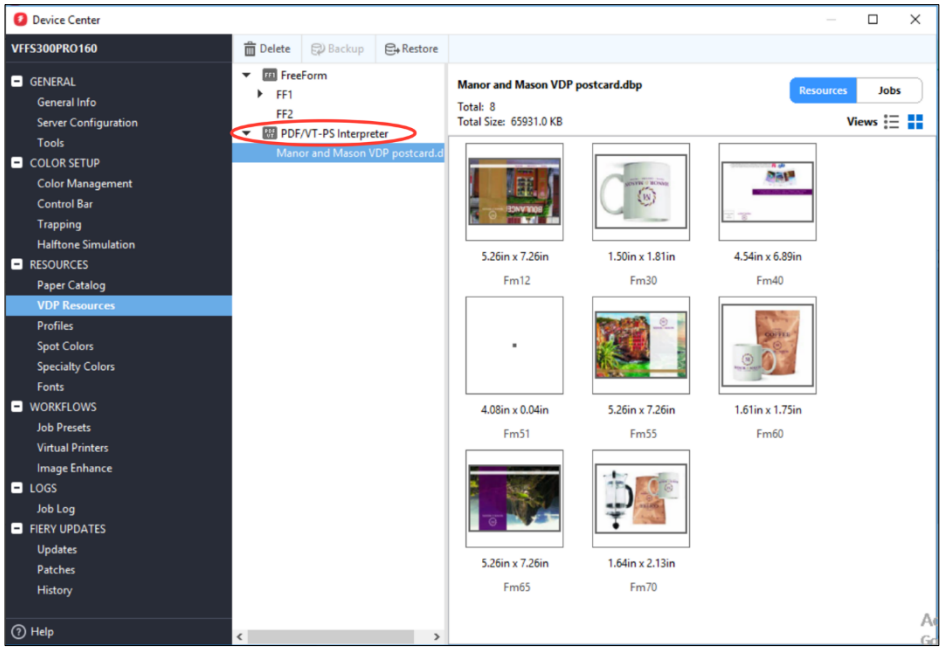
See this Adobe whitepaper for more details: fiery.efi.com/PDFVT-whitepaper-en



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

Benefits:

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



PDF/VT file format under VDP Resource Manager

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery 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.

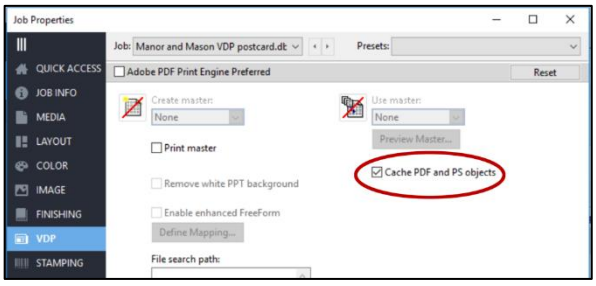
Benefits:

- 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.

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



"Cache PDF and PS objects" box in 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 in 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, users need to be able to define these parameters.

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 Command WorkStation:

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

Benefits:

- Allows VDP jobs imported in 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 users to prepare and troubleshoot VDP jobs more efficiently

Record 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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.

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

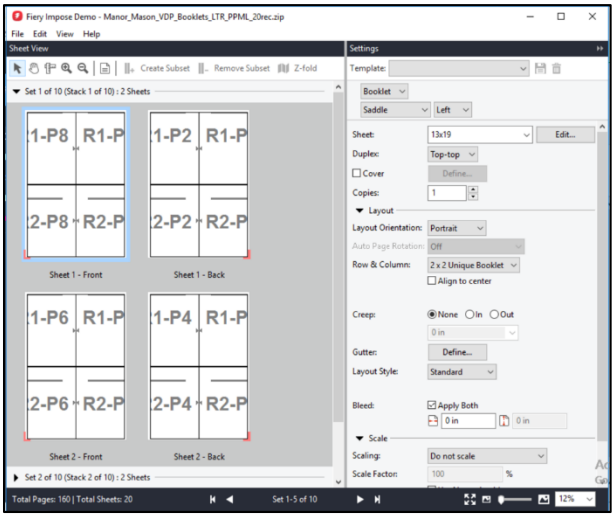
VDP Multi-Up Booklet

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. Users can find it through Fiery Impose, and can save settings as an Impose preset they select from Virtual Printers or Fiery 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.

Benefits:

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



Record 1 and Record 2 booklets print on the same sheet

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

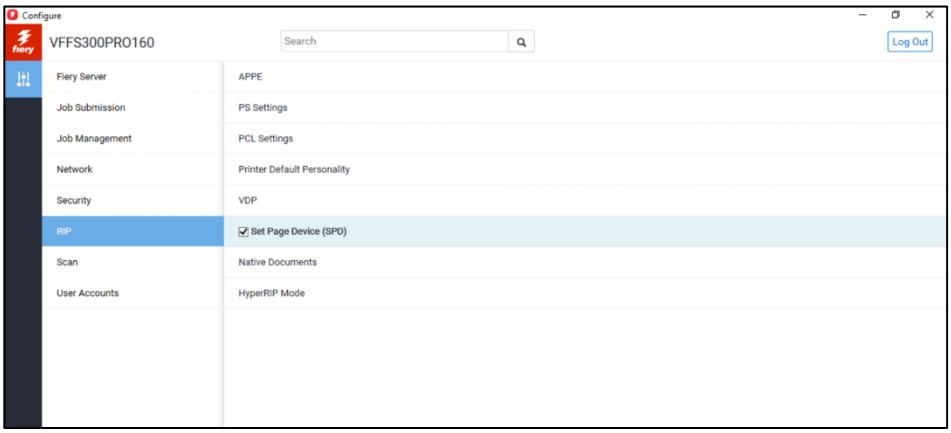
Transactional printing

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 things such as paper attributes, finishing options, and number of copies. These commands are primarily used for specialized 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.

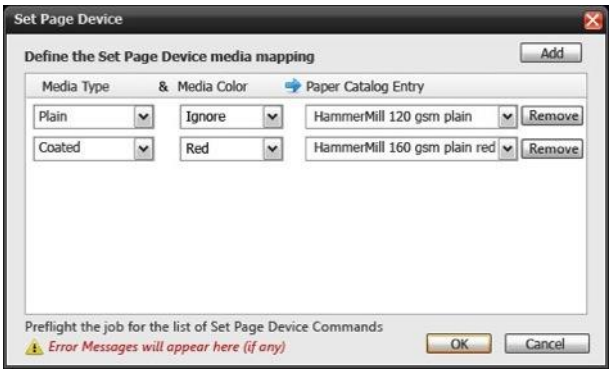
Set page device support lets Fiery servers translate or map the paper attributes to the Fiery Paper Catalog, and finishing options to specific output bins. This eliminates the need for human intervention, saves time, increases productivity, and automates workflow.

Users enable set page device in the Device Center, and select it in Job Presets, Virtual Printers, or Fiery Hot Folders for automation. Set page device commands can only be used with 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, users 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 (part of Fiery Graphic Arts Package, Premium Editon) to generate a report of the commands in the file.

Benefits:

- Increases productivity with support for the user's existing workflow

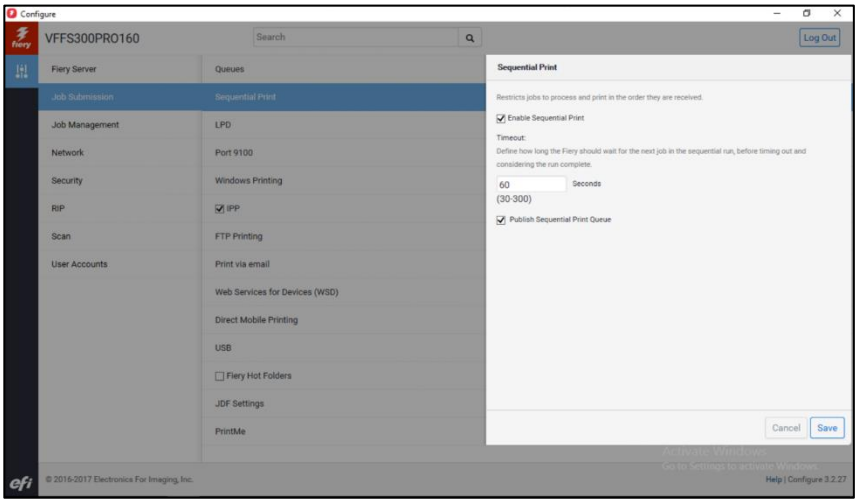
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- Automatically prints set page device embedded files without user 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 Job Submission, as shown in the screenshot below. It 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.



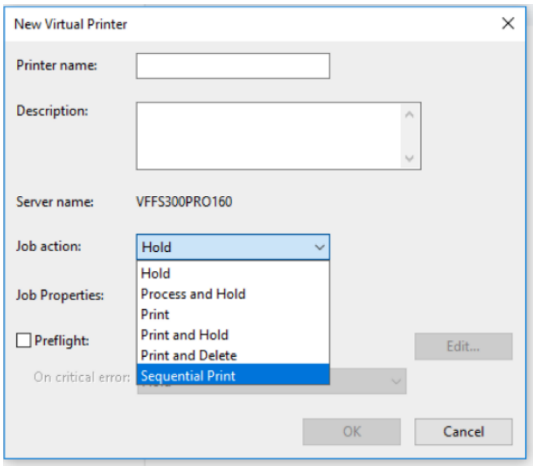
Enable the Sequential Print queue in the Configure tool.

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

Sequential Print jobs can be submitted through Fiery Hot Folders, Virtual Printers, Command WorkStation, JDF job ticket, 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.

While a Sequential Print run is taking place, the Fiery server will still allow the user 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.



A new default print queue called Sequential Print is published

Benefit:

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Management

Fiery Command WorkStation in the main job and device management interface for Fiery Driven printers where local and remote users can manage Fiery servers from various print engine manufacturers, do color management, submit jobs, prepare and preview jobs before printing, and more from Mac and PC client workstations. The visual, intuitive interface lets users 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	NX Premium	NX Pro	NX One	E400
Job and device management tools				
Fiery Command WorkStation	✓	✓	✓	✓
Fiery Ticker	✓	✓	✓	-
Fiery Go	✓	✓	✓	✓
Fiery WebTools	✓	✓	✓	✓
Fiery makeready solutions				
Fiery Impose	✓	⊙	⊙	SFM
Fiery Compose	✓	⊙	⊙	SFM
Fiery JobMaster	⊙	⊙	⊙	SFM
Job submission and settings				
Fiery driver	✓	✓	✓	✓
Fiery Job Properties	✓	✓	✓	✓
Fiery VUE	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 NX industrial design				
Fiery QuickTouch	✓	✓	✓	-
Fiery NX Station GL	SFM	⊙	-	-
Fiery NX Station LS	SFM	⊙	-	-
Fiery NX One Station	-	-	⊙	-

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Job and device management tools

Fiery Command WorkStation

Fiery Command WorkStation, the print job management interface for Fiery cutsheet servers, makes printing more productive, powerful and intuitive. It centralizes job management, connects to all networked Fiery servers driving cutsheet printers, and improves productivity. The intuitive interface simplifies job management, regardless of the user's level of experience.

Full cross-platform Apple Mac and Microsoft Windows support provides consistent functionality, look, and feel. The intuitive interface offers a remote connection that gives users the same quality results as a local connection to a Fiery server. Fiery Command WorkStation also offers software upgrades that provide usability enhancements, compatibility with the latest Windows and Mac operating systems and new features for Fiery servers (Fiery System 10/10e and above) at no additional cost.

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

Fiery Command WorkStation Package

Fiery Command WorkStation 6 is part of the Fiery Command WorkStation Package. The Fiery Software Manager handles the download and installation process for this package.

Fiery Command WorkStation 6

Version 6 of Command WorkStation offers a new user interface to provide a more engaging and intuitive printing experience that allows users to manage print jobs faster and boost print production.

Fiery Command WorkStation 6 includes the following licensed makeready software: Fiery Impose, Fiery Compose, Fiery JobMaster and Fiery Graphic Arts Package, Premium Edition.

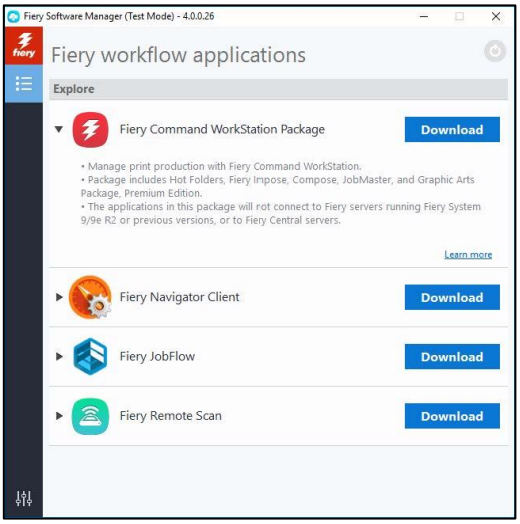
Fiery Hot Folders
Automates job submission processes for repetitive tasks, saving time and reducing print errors with a simple drag-and-drop operation.

Fiery Software Uninstaller
Easily removes Fiery applications, Fiery printers, and associated print drivers/files on Mac clients.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery Software Manager

In addition to the Command WorkStation Package, the Fiery Software Manager also enables installation of these Fiery applications:



Fiery Software Manager

Fiery Remote Scan

This application allows users to retrieve scans from a copier and save them, or import them directly into a compatible application. Now a standalone application, users can choose to download and install it on their client workstations.

Fiery JobFlow – Windows only

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; plus 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.

To use Command WorkStation 6 and JobFlow on the same client, you need to update JobFlow to version 2.2.3 or later.

Fiery Color Profiler Suite

The Fiery Color Profiler Suite software provides integrated color-management functions and quality control for print systems. It extends the color capabilities of Fiery Driven printers with the most advanced tools available for profile creation, inspection, editing, and color quality assurance.

Fiery Navigator

Fiery Navigator is a service for proactive control of print operations and device management by capturing key production metrics. It also enables the propagation of standardized configurations across the same types of Fiery Driven devices.

Fiery Integration Package – Windows only

Fiery Integration Package includes Fiery JDF 1.5.1 and Fiery API 4.0. Users must select “Show additional features” in Fiery Software Manager preferences to see the Fiery Integrated Package listed for download.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Value Proposition

Fiery Command WorkStation 6 will help users manage print jobs faster and boost print production with:

1. **Easy transition from version 5**
   Fiery FS350 Pro servers come with version 6 of Command WorkStation. For print environments using version 5.x, version 6 offers a smooth and quick upgrade process where version 5 users can start seeing new benefits right away because the upgrade process will keep their client settings.

   A welcome tour of less than 5 minutes is all that's necessary to get started.

2. **More intuitive and easy-to-use interface**
   The new user interface looks clean and similar to many popular interfaces. It also offers a more engaging interaction to make it more intuitive for current and new users.

3. **Includes more efficient and productive ways to manage and prepare jobs**
   Users can find jobs faster by creating custom job views and using the flexible search and filter functions — so they can take quick action. It also offers faster access to tools by eliminating the need to open additional windows to perform common tasks.

   The new features in makeready solutions offer faster ways to print complex jobs.

4. **New tools for production managers**
   Managers can be more efficient and proactive at managing a print site with better visibility through key print production statistics. The new version also makes it easier to keep Fiery servers up to date with the latest patches and updates.

5. **Ready for the future**
   Fiery Command WorkStation 6 provides the platform to efficiently manage production printing today and into the future. As businesses expand to new print engines, future versions of Command WorkStation 6 will provide a unified interface for all Fiery Driven devices, plus offers tools to efficiently manage print jobs and engines.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Specifications for Fiery Command WorkStation Package

Software applications in Fiery Command WorkStation Package can connect to and be installed on:

- Fiery servers running Fiery software: Fiery System 10 or 10e, Fiery FS100/100 Pro, Fiery FS150/150 Pro, Fiery FS200/FS200 Pro servers, and Fiery FS350/FS350 Pro.
- Mac OS clients:
  - macOS X® 10.11 and newer
  - 4 GB of RAM or more recommended
  - 7 GB of available hard drive space
  - Minimum display resolution: 1280 x 1024
- Windows clients:
  - Processor: Pentium 4, 1 GHz or faster processor
  - Microsoft Windows 7, 8.1, and 10
  - Microsoft Windows Server 2012 and newer
  - 1 GB or more of RAM
  - 16 GB of available hard drive space
  - Minimum display resolution: 1280 x 1024

Please note that Fiery Command WorkStation, Fiery Hot Folders, and Fiery Remote Scan do not connect to Fiery servers running Fiery System 9 R2 and earlier, or Fiery Central servers. To connect to those systems, users should install Fiery Command WorkStation 5.8. Find out how to downgrade from version 6 to version 5.8 refer to this document.

Find out more about the features in versions of Command WorkStation released after version 6.1 at efi.com/cws.

Section 508 conformance

The Section 508 regulation was enacted in the United States to eliminate barriers in information technology, and to make new opportunities available for disabled people.

The Voluntary Product Accessibility Template, or VPAT®, is a report that describes Section 508 compliance for Feiry Command WorkStation. Obtain the VPAT document here.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

New features in Fiery Command WorkStation 6

Easy transition

Smooth and quick upgrade process

The upgrade process from Fiery Command WorkStation 5 to 6 offers a smooth and quick transition that guarantees users can start operating with version 6 in just a few minutes, after an easy installation process.

If users have Command WorkStation 5.6, 5.7, or 5.8, they will be notified about version 6 in Fiery Software Manager. When installing version 6, it automatically uninstalls the earlier version.

Users of Command WorkStation 5.0 through 5.5 can download the Fiery Software Manager from the web at www.efi.com/cws. When they run it, they'll see the option to install version 6.

The Fiery Software Manager needs to be updated to the latest version to offer a guided process of the upgrade that:

- Uninstalls previous versions of Command WorkStation 5.
- Replaces Fiery Extended Applications with Fiery Command WorkStation Package. This new package includes Command WorkStation and Fiery Hot Folders. Fiery Remote Scan is now a standalone application, and users will be offered a choice to download and install that application on client computers

Settings retention

The upgrade from any version of Command WorkStation 5 to version 6 will retain the following settings so users can quickly resume operations.

For Fiery Command WorkStation:

- Preference settings such as units, language, etc.
- The list of connected servers, so when version 6 launches, it will automatically log in to those servers and display them in the server list
- Local presets from Job Properties
- Fiery Impose templates
- Archive locations
- Job list columns

For Fiery Hot Folders:

- Hot folders with different Job Properties settings, filter settings, Fiery Impose options

For Fiery Remote Scan:

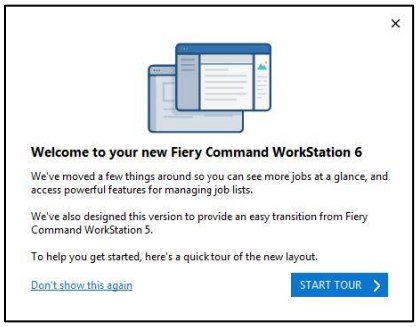
- Folder mapping
- Previously connected servers

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Welcome tour

Command WorkStation 6 offers a welcome tour that walks users through the main changes in the new interface, so they get acquainted quickly and can navigate through the new Command WorkStation with confidence.

The tour starts automatically in Job Center the first time Command WorkStation opens, and is always available from the Help menu for quick review.



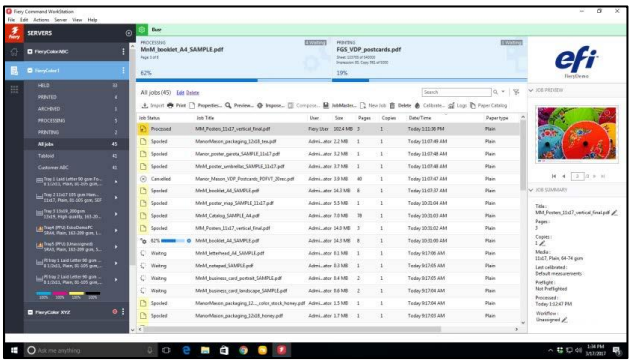
Welcome tour

More intuitive and easy to use

Modern and clean user interface

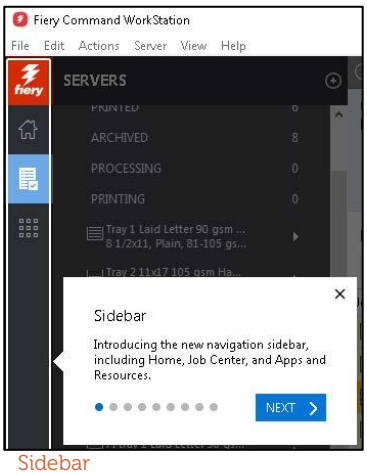
Command WorkStation 6 offers a new user interface that looks cleaner and is consistent with many modern applications. It offers a navigation flow that goes from left to right, starting from the list of connected servers, to the job list, to job-specific information on the far right.

All plug-in applications in Command WorkStation, Fiery Hot Folders, and Fiery Remote Scan have been updated to be consistent with the new design and navigation flow.


Job Center screen

Sidebar

Command WorkStation introduces a new navigation sidebar, and shows users new screens including Home, Job Center, plus Apps and Resources. The new screens help increase product knowledge, simplify access to additional tools and resources, and increase visibility into key productivity metrics.



Sidebar

Home screen

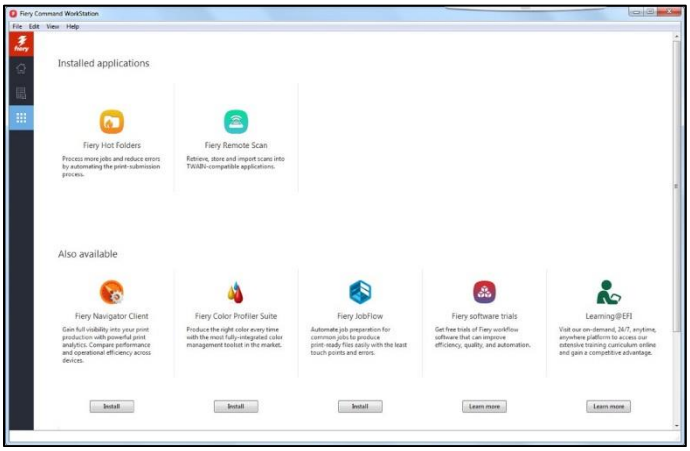
Command WorkStation 6 offers new ways to gain quick insight and better visibility into current print operations. Visit the New tools for production managers section below to learn more about Home screen.

Apps and Resources screen

The Apps and Resources screen facilitates access to and knowledge about new Fiery tools. It lets users easily see Fiery tools already available that can make a difference in their day-to-day operations.

Apps and Resources provides one-click access to currently installed Fiery applications such as Fiery Hot Folders, Fiery Remote Scan, and Fiery Color Profiler Suite. It also adds one-click access to free educational resources at Learning@EFI, the on-demand, 24/7, anytime, anywhere platform for the extensive EFI online training curriculum.

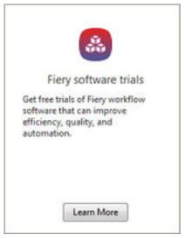
© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Apps and Resources screen

Access to free trials and downloads

The Apps and Resources pane of Fiery Command WorkStation now includes links to free trials and downloads of Fiery options (where applicable), and an easy way to check which Fiery workflow software is supported for your Fiery server model.

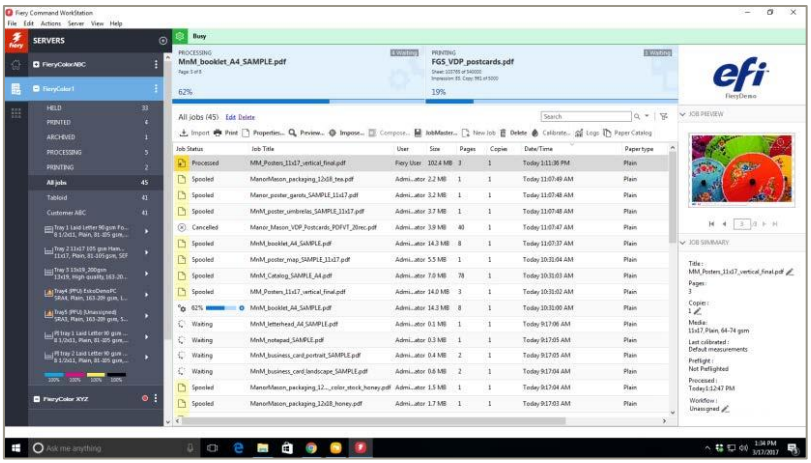


Job Center screen

The Job Center is the main work area of Command WorkStation and a centralized place to access jobs before going to print. It allows users to view all connected Fiery servers and manage all jobs.

In the new Job Center, the queues (for example, hold, printed, or archived) are now listed under the server name. This opens up more space for the main job list, so that more jobs can be displayed at one time, and users can find jobs more quickly.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Job Center screen

More efficient and productive

Automatically remove raster

In previous versions, users had to manually select Remove Raster from the Actions menu before Fiery Impose, Fiery Compose, Fiery JobMaster, Fiery Image Enhance Visual Editor, plus Process and Hold were available in the Actions menu for processed jobs. Now, Fiery Command WorkStation automatically discards rasters for faster access to makeready settings.

The following options are now available for processed jobs:

- Fiery Impose
- Fiery Compose
- Fiery JobMaster
- Fiery Image Enhance Visual Editor
- Process and Hold

When a user selects any of these options, for example Fiery Impose, Fiery Command WorkStation warns that the rasters will be automatically discarded, so that the job needs to be processed again before printing. Fiery Command WorkStation removes the raster before opening the job in Fiery Impose.

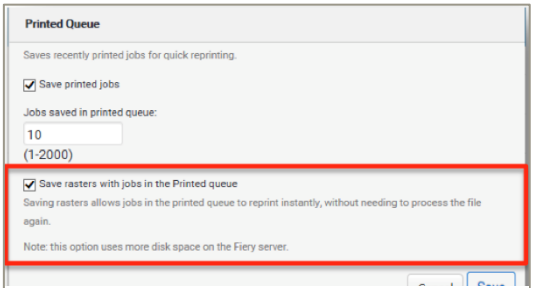
The Job Properties action button is also updated so that the Process and Hold option is available, even for processed jobs, allowing users to reprocess and hold. This saves time when selecting features in Job Properties that cannot be applied until the job is reprocessed.

Fast Reprint

Administrators can keep the raster files for jobs in the Printed queue. When the user needs to reprint those jobs, the files start printing the instant jobs are sent to print, without re-RIPping.

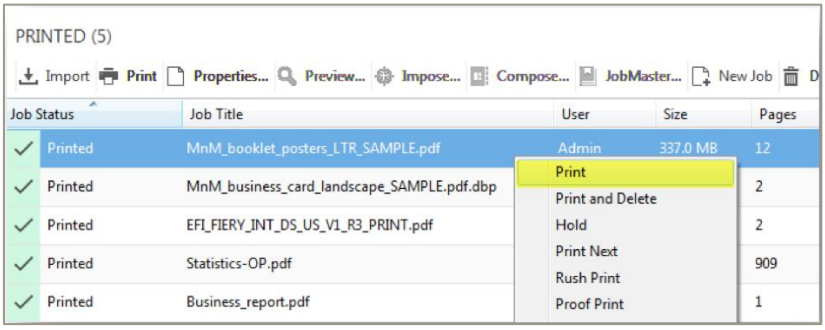
Fast Reprint is on by default and can be disabled from the Configure menu, as the screenshot on the right shows.

This is a great feature when users need to print one copy of a job as a proof, and then print it again for production. All they have to do is change the copy count.



Option to disable Fast Reprint from Configure

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

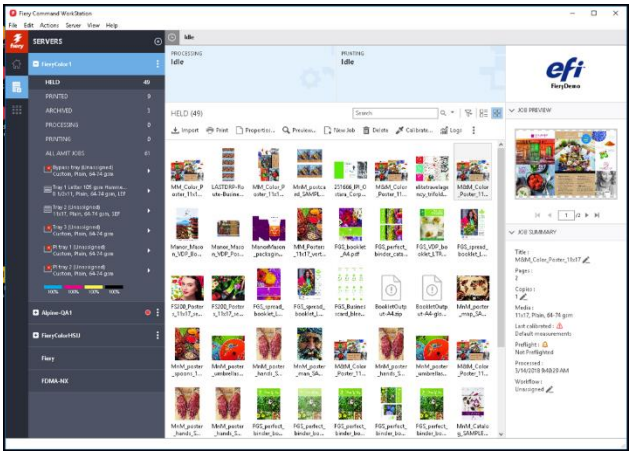


Start printing jobs in the Print queue in an instant

Job preview for all jobs

Fiery Command WorkStation now displays a job preview for all jobs. The preview lets users see the first page of the job, so they can easily identify and find jobs faster. Previewing jobs doesn't impact the Fiery server performance, so the feature is always turned on.

This feature works on external servers running FS350 Pro with PostScript, PDF, PDF/VT, TIF, and EPS files (but not PPML).



Job preview for all jobs

Job search functions

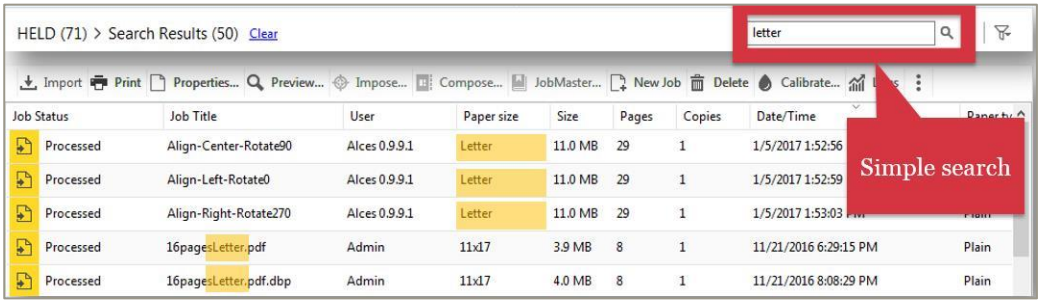
Command WorkStation offers more ways to search jobs. This helps users find jobs faster to take quicker action. They can also customize job views to specific needs such as prioritization and print production planning. The four search functions are:

1. Simple search
2. Advanced search
3. Custom filters
4. Custom views

Simple search

Simple search lets users find jobs containing the search text in any of the columns they've selected for the current view. For example, if the user types "Letter," the search finds jobs that have the word "Letter" in the job title, and also jobs that have "Letter" in the paper-size column.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



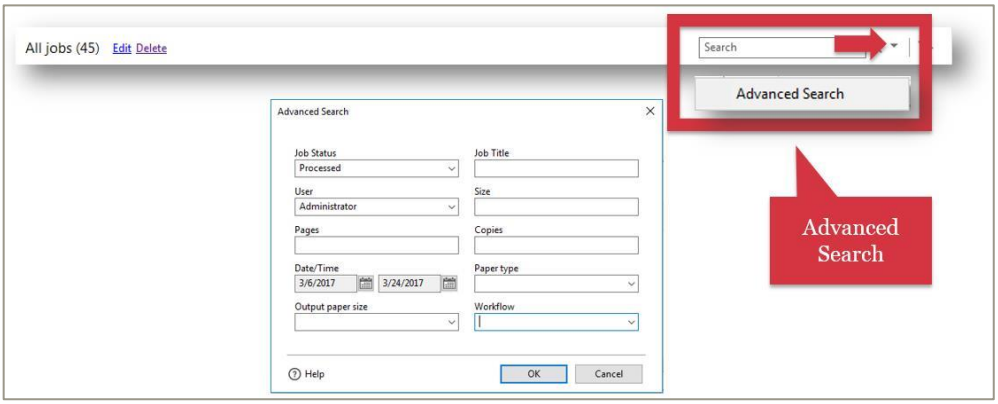
Simple search

Advanced search

For Advanced Search, simply click on the arrow next to the simple search section. Users can search using multiple criteria (columns) simultaneously. The columns listed in the Advanced Search window are the same as the columns listed on the current job list.

If users want to retain that search criteria for their daily operations, they have the option to save the results of an advanced search as filters, and as a view.

Watch video
fiery.efi.com/CWS6-express-videos/job-search

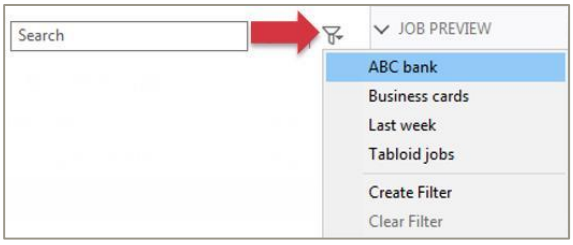


Advanced search

Custom filters

Users can create custom filters when they need to find jobs in the currently selected queue (Held, Print, or others), that comply with an advanced search criteria. All existing filters are available by clicking the filter icon near the search bar.

For example, a user can apply a filter for a list of incoming jobs (Held queue) with a specific paper size, so they can prioritize production.



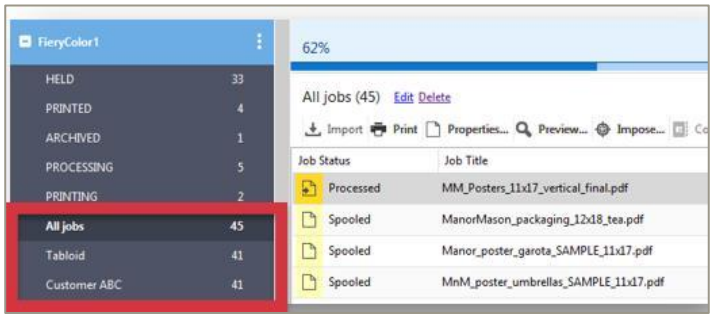
List of filters

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Custom views

In addition to filters, users can create views to find jobs that comply with specific advanced search criteria and consider jobs in all queues. All custom views are listed under the default queues on the server list. Users can create up to 10 custom views.

Views are a great way to create a job list of all jobs in all queues, so users can see dynamic changes in job status in the same job list. They do this by simply opening Advanced Search, clicking OK without entering any search parameter, and then saving the search as a view.



List of custom views

Set Defaults

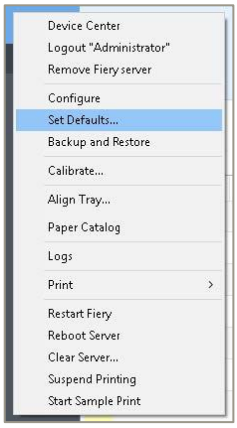
Command WorkStation offers administrators an easy way to change the default Job Properties settings for a specific server.

Administrators can access Set Defaults from the Server menu.

Set Defaults uses the same interface as Job Properties, and settings are applied to jobs waiting to print on the Print and Held queues. These settings then act as the defaults for future job presets or Virtual Printers.

Administrators can lock settings to ensure that users don't modify those settings when using Virtual Printers and jobs follow standard procedures.

With the Set Default feature, administrators have easy control of default settings and can guarantee that all jobs use consistent settings to comply with standard print requirements.



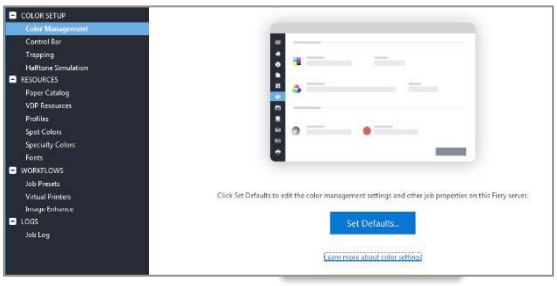
Access to Set Defaults

Watch video
fiery.efi.com/CWS6-express

Color management defaults

Set Defaults is also the new place to edit color management defaults. This way all job settings use the same familiar Job Properties user interface.

To facilitate the transition to this, Command WorkStation 6 keeps the Color Management tab under COLOR SETUP in the Device Center, which now offers an access point to the Set Defaults feature from that tab. There, users can also find easy access to help documentation about color settings and other learning resources.



Color Management tab in Device Center

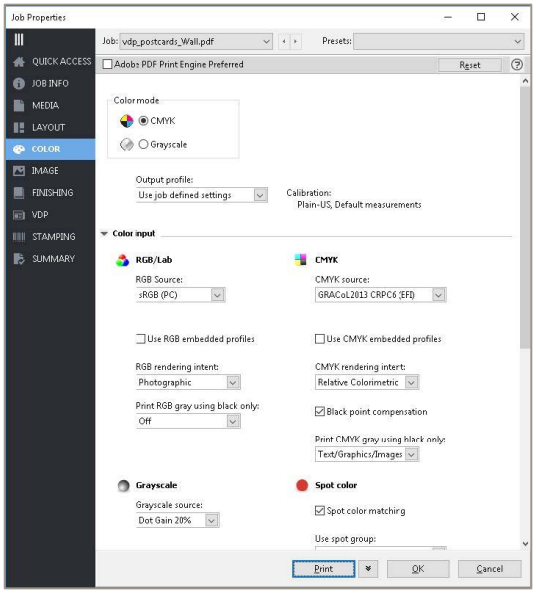
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Color settings in Job Properties

The COLOR tab in Fiery Command WorkStation 6 now presents all the color settings in one location for faster setup without having to open additional windows.

The new COLOR tab presents all settings on the main screen, grouped in three areas, in order of importance.

Watch video
fiery.efi.com/CWS6-express-videos/color-settings



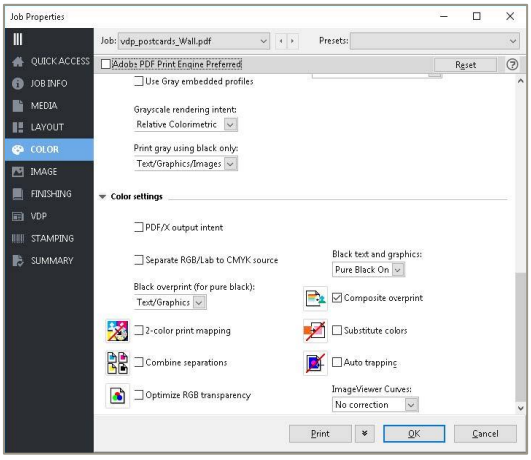
COLOR tab in Job Properties – Color input

The first area shows the color mode selection and the output profile. The output profile shows the date when the calibration was done for the paper associated with the output profile, so users can decide whether they need to do a new calibration.

After this, the Color input area displays the settings for the RGB/LAB, CMYK, and spot-color input sources.

The third area is for Color settings, with features for advanced users or very specific color-rendering needs. All these selections are available in fewer clicks, with no need to go to additional screens.

The COLOR tab also has links to help content about color settings, as well as educational resources to learn more about the new layout for color settings.



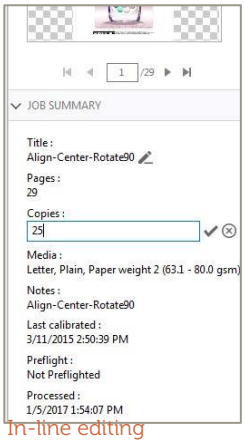
COLOR tab in Job Properties – Color settings

In-line editing

Users can change key job settings without opening Job Properties. In Command WorkStation 6, this function is now in the Job Summary pane to improve the speed and precision of edits.

This allows users to quickly edit job settings such as job name or number of copies, and to apply an automated workflow. The check and X icons provide more precise editing, avoiding errors and waste due to entering the wrong print settings.

Watch video
fiery.efi.com/CWS6-express-videos/inline-editing



In-line editing

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

New tools for production managers

Home screen

The new Home screen provides at-a-glance status of all connected Fiery servers and a snapshot of key print-production statistics.

Server status

Users in a multiple-printer environment can monitor their Fiery servers from a single view to see:

- A fast, high-level view of the current state of Fiery servers
- The status of what's being printed on every printer in the shop
- An alert if a printer requires immediate attention

Quick production metrics

The Home screen also offers a snapshot of key print-production statistics during the last week. The production statistics are presented in two charts.

In the first chart, users can toggle between jobs and impressions. The jobs chart tracks the number of jobs printed and cancelled per day. The impressions chart shows the number of pages produced each day, and displays color and black-and-white impressions in different colors to show variations in the click combination.

The second chart tracks media usage per day. It reports the first five most commonly used media in the week, using different colors for easy identification.

Home view

If users want to gain even more visibility into print operations, they can use Fiery Navigator, a cloud-based platform with powerful print analytics and features that allow them to compare performance and efficiency across devices. Fiery Navigator is free for the first three Fiery servers. Get started by downloading the agent from Fiery Software Manager.

These key production statistics can help managers:

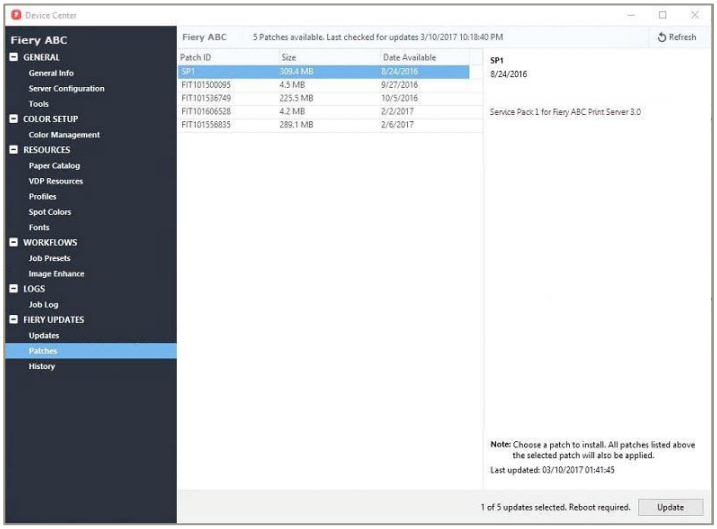
- Identify at a glance when any printers need attention due to print errors or paper jams
- Gain visibility into key production metrics to make proactive management decisions
- Gain better operational control over multiple engines, with a quick overview of all Fiery servers
- Quickly see printer performance over the last week

Fiery Updates

Timely software updates are critical for optimal operation of Fiery servers. Command WorkStation offers administrators a way to get notifications, downloads, and installation of approved and released Fiery system updates.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Administrators access Fiery Updates through the Device Center and can perform updates, even from remote client computers. This way, they can even update Fiery servers that may not be connected to the internet. At the Fiery Updates screen, administrators can also see all the patches and service packs available and waiting to be installed for external or embedded servers



Fiery Updates

Fiery Updates ensures the right sequence of patch updates to guarantee effective installation and avoid incompatibilities.

In addition, Fiery Updates provides an easy way to update Fiery API software. To determine if a Fiery server can receive updates using Fiery Updates in Command WorkStation, users need to simply check the Fiery Updates tab on a client computer connected to the internet to see the list of updates available.

Fiery Command WorkStation 6.3

Fiery Command WorkStation 6.3 offers, among various other new features covered in this guide, a single shared interface for all Fiery Driven printers.

As print businesses expand to new print technologies and commercial opportunities, Command WorkStation 6.3 allows Fiery users to enjoy the same unified job management interface whether driving cutsheet, wide-or superwide-format, or high-speed inkjet printers from various manufacturers. A single shared interface for all Fiery Driven printers delivers production efficiencies such as:

- Reduced learning curves
  - Fiery Command WorkStation is an easy-to-learn interface for new users. It offers free online educational resources to start managing print production the first day.
  - Operators expanding their knowledge to operate different print technologies will need less time than if they have to learn a different print management application.
- Expands in-house expertise for operational flexibility and more productivity
  - Users only need to learn one interface, so they can more easily switch to other tasks in deadline situations, even if it's not their primary function.
  - Print production on multiple printers can be managed from virtually anywhere. Command WorkStation keeps users informed with live status updates on an engine's production status, minimizing walks to the printers.
- Reduced IT overhead and investment

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- Fiery Command WorkStation simplifies installation and setup procedures with a single application that works for both macOS and Windows client computers.
- Fiery Software Manager groups all the installers to ensure all Fiery applications are accessible, and sends notifications of new releases to keep them up to date.

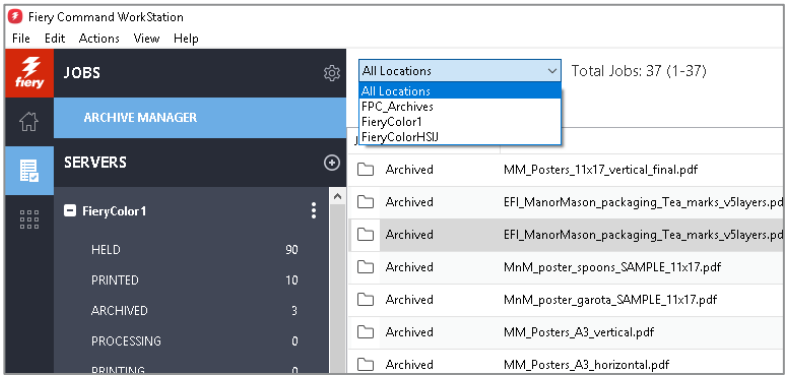
Watch a video to see a unified print room in action.

For additional information on new features, supported clients and Fiery servers visit efi.com/cws.

Archive Manager

Fiery Command WorkStation 6.2 and above includes a new, simple, and safe storage solution for all Fiery jobs.

To start using the Archive Manager, users are guided through a simple process to migrate all currently archived jobs on a Fiery server, for all connected Fiery servers, to an independent location. Users with administrator rights can set up archive folders on the network, cloud, and external storage device, or their own computer.



Archive manager job list

Archive Manager offers a much more flexible solution for job storage:

- Job archives can follow the same IT backup procedures as any other digital asset
- Job archives can be easily shared across all connected Fiery servers
- Users can find archived jobs faster using the basic search function, and find jobs even when the Fiery server is disconnected, or is being upgraded or reloaded
- Users can list all archived jobs in one view where jobs can be previewed and searched

If users have archived jobs on the Fiery server, the migration process moves those files to the chosen location through the Archive Manager. This resolves previous issues such as:

- Losing archived jobs during Fiery software reload or upgrade processes
- Not being able to archive additional jobs after reaching 10,000 jobs per Fiery server in all queues
- Risk of locking up your Fiery server from lack of hard drive memory

Archive Manager is only available for cutsheet and high-speed inkjet engines.

For more details on Archive Manager, watch the overview and migration videos or visit the Help documentation.

Native 64-bit applications

Fiery Command WorkStation 6.3 and all related plug-ins are native 64-bit applications for both macOS and Windows platforms. Apple plans to terminate 32-bit support for the operating system release after macOS 10.14 (Mojave). Microsoft does not have immediate plans to retire their 32-bit support; however, the increasing popularity of Microsoft 64-bit operating systems due to benefits such as increased security, means that native 64-bit support is important to our Fiery users.

Thumbnail view

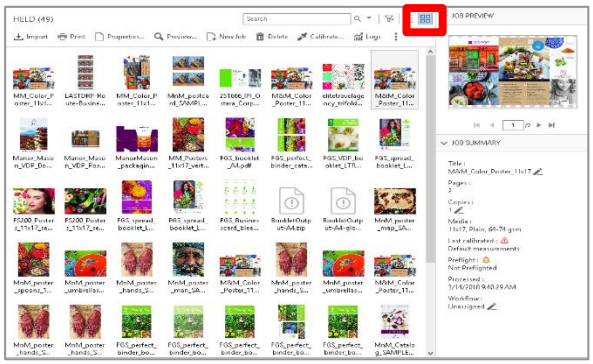
In addition to displaying jobs as a list in the Job Center, Fiery Command WorkStation offers a new way to display jobs within queues or views. The thumbnail view gives users the option to visually identify jobs by the first page preview.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Users can quickly toggle between the job list and the thumbnail view by clicking on the two new buttons on the upper right corner.

With the thumbnail view, users have a quick preview of the content of the job to find jobs faster. They can sort jobs by the same column category displayed in the list view, and see additional information such as complete file name, job status, user name, date, and time by hovering the mouse over the job.

Other available functions include selecting multiple jobs, and dragging and dropping files to other queues or Fiery servers.



Thumbnail view

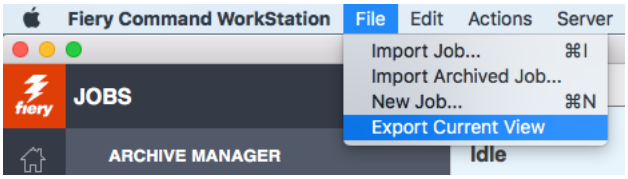
The thumbnail view is the same as the Job Preview view of the first page of the job. This means that:

- All processed jobs display a preview.
- Spooled jobs display a preview on external Fiery servers running Fiery FS300 Pro and above.
  - You can see previews in spooled jobs for PS, PDF, TIFF, or EPS formats.
  - Other job formats that aren't supported by spooled Job Preview will display a generic thumbnail.
  - Changes in Job Properties are not reflected in the thumbnail preview. Examples are:
    - Imposed jobs don't display a sheet layout unless they are processed.
    - Color management changes only show in processed jobs.

HiDPI monitor support

Fiery Command WorkStation fully supports HiDPI monitors, following the Microsoft Windows display scale and layout settings, so fonts and other items can be scaled at a different size to the overall display resolution.

Export current view



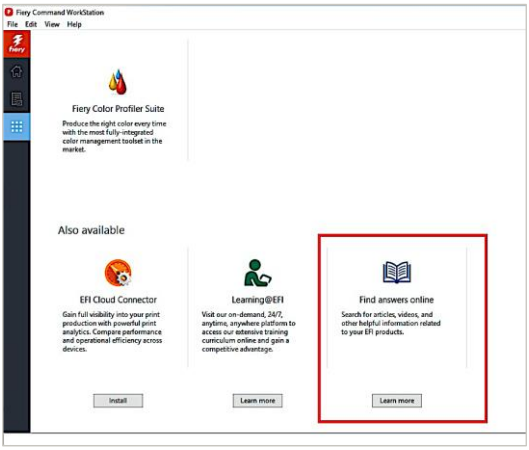
Users can export the information contained in their current Fiery Command WorkStation view to a text file. The view consists of whatever the user is viewing at that time; for example, the Printed queue or a saved search/filtered view, and all columns contained within. The text file can be imported into Microsoft Excel (or similar applications) for data analysis. The user can then import that information into their MIS or other accounting system.

The export current view feature is especially useful for products that support the Fiery Smart Estimator, as users can export cost or ink estimation data back into their appropriate software.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

In-software link to EFI Smart Support

A link is now available from Apps and Resources within Fiery Command WorkStation to take users directly to EFI's online knowledge base. Thousands of self-help articles, videos, and other resources on EFI products are available and easy to locate with just a few clicks.



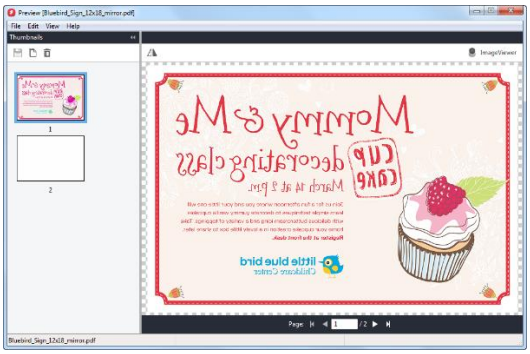
Access to EFI Smart Support

Raster preview from back

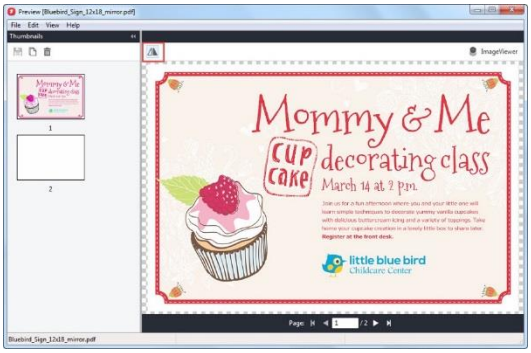
This feature is only available for printers that carry the white specialty color and is useful when printing on a transparent media. In some printing scenarios, the white toner lays on top of the CMYK elements, blocking the preview of the output. If the transparent media is placed on a window display, the resulting printout needs to be viewed from the back.

Raster preview from back provides users with a way to preview how the content on a page will look like when viewed from the backside on a transparent window display.

The feature is only applicable for some engines that are capable of printing white on CMYK. Check your Fiery sever documentation for the availability of this feature.



Raster preview



Raster preview from back

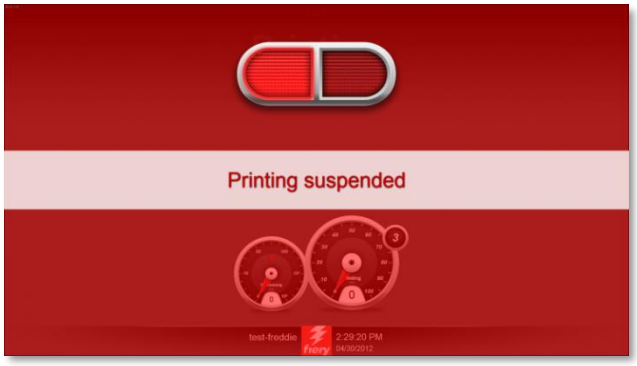
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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.

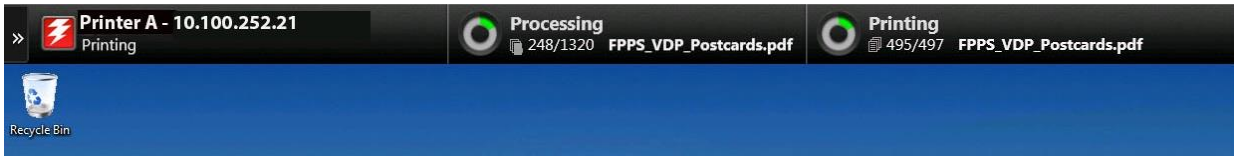
Fiery Ticker shows processing and printing speeds, pages remaining for the current job, error messages, and tray information. It is installed as part of the Fiery Command WorkStation Package on external Fiery servers running System 9 and later. Fiery Ticker will run automatically, providing an at-a-glance view of the activity status of Fiery systems when an operator is not directly using the Fiery server. The user 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. There, it also gives users quick access to Fiery applications such as Command WorkStation and Fiery Hot Folders, can change the color theme; or 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 users greater flexibility
- Gives users 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 user productivity, offering quick access to the most frequently used Fiery applications and information

Fiery Go

Fiery Go allows users to monitor and manage Fiery Driven printers from anywhere with their smart phone or tablet. Using Fiery Go, users 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 users can take immediate action.

Fiery Go provides more flexibility and allows staff 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 to 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

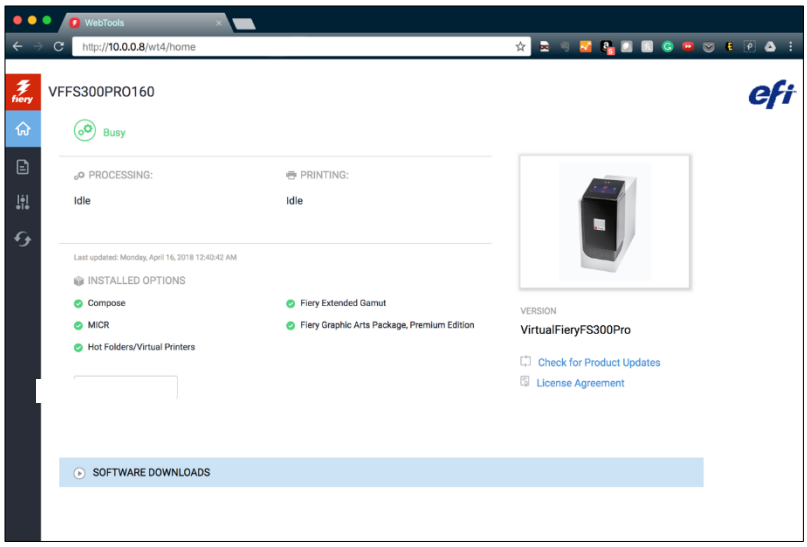
Benefits:

- Allows users 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 for users who don't need the sophistication of Command WorkStation. WebTools is hosted on the Fiery server and can be access with any web browser by entering 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:

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



- 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
- Fiery System Restore — lets users back up a Fiery server for quick recovery later from images stored on the local hard disk, or from a bootable USB drive

Benefits:

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

International support

Language support

Fiery servers running Fiery FS350 and FS350 Pro system software come localized 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 on the Fiery server, without having to reload Windows. This feature saves time during the installation and 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 by the addition of UTF-8 support. In Command WorkStation, users can specify language preferences after the installation.

Benefits:

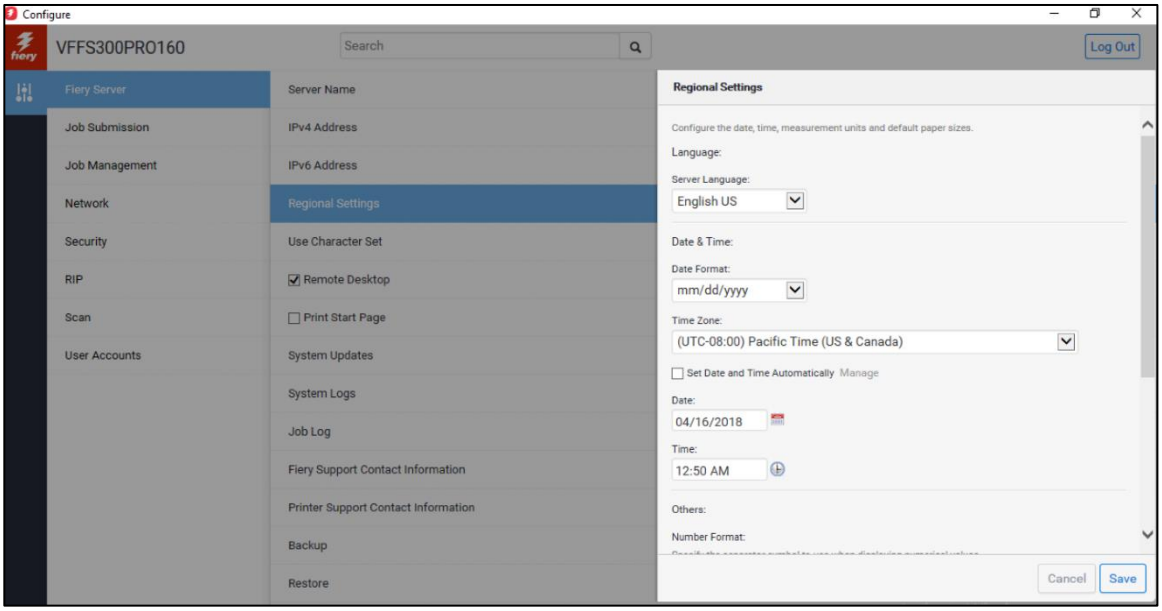
- Improves productivity at installation and in the initial setup
- Improves the application behavior in mixed-language environments and the display of double-byte characters in file names, such as those for the Chinese, Japanese, and Korean languages

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

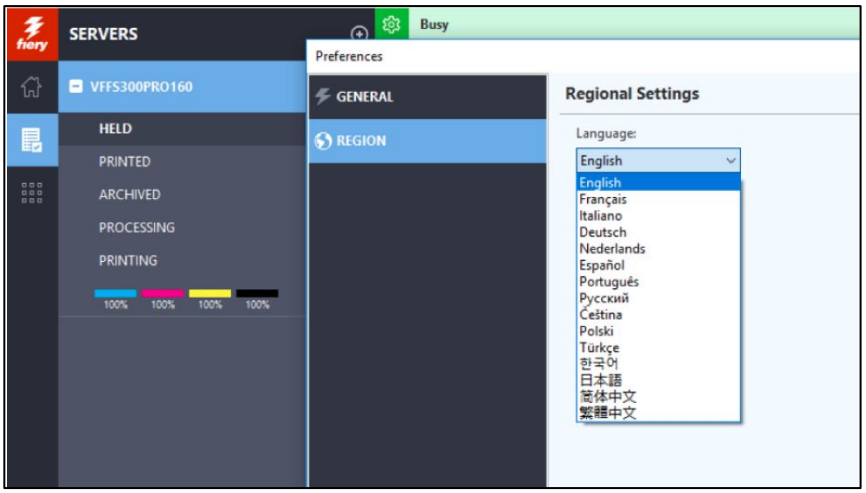
Improved international support

Users can change the language in Command WorkStation and Fiery Hot Folders — independent of the Fiery server. Each user can run Command WorkStation on a client workstation in their 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 color profiles for European and Asian regions.



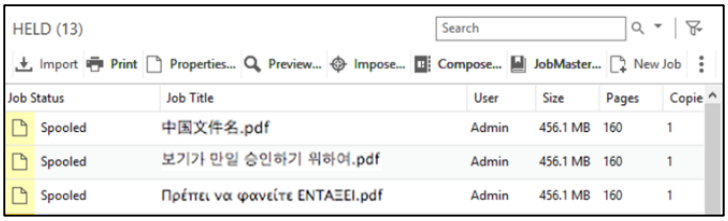
Configuring regional settings



Setting language preferences in Command WorkStation

Fiery servers now also recognize 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 in the Job Log.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Double-byte file names on Command WorkStation

Benefits:

- Displays regional paper sizes and dates for a more user-friendly experience
- Speeds up 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

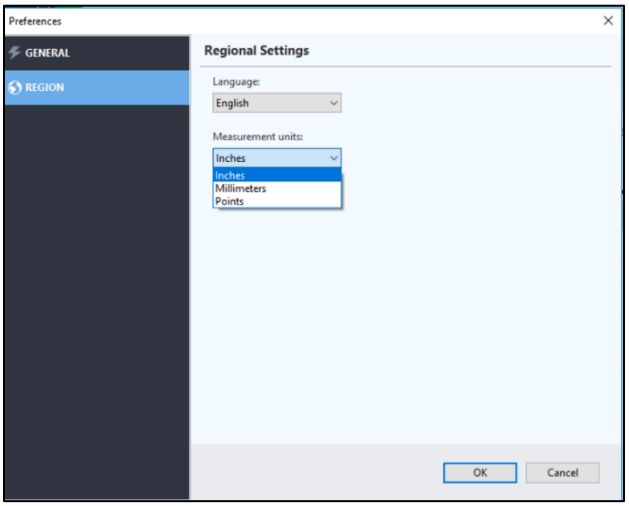
Global Units adds a new item to the Command WorkStation preferences, allowing the user to specify preferred units of measure as millimeters, inches, or points.

This setting then influences the default units displayed for all purchased software products in the Job Properties and Command WorkStation 6 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."

Each connected Command WorkStation client could have different settings.

The areas affected by the Units preference include:

- 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 their whole user experience

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 minimize 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 color profile, the job will be printed with the original tray's color 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, users can use Suspend on Mismatch to hold jobs when they have missing resources or a color profile mismatch. Until the user 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 on the production line, and decreases bottlenecks at the RIPping stage

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 re-prioritize 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 users 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 a job to Print Next ahead of other jobs currently processing.

Benefit:

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

Quick Doc Merge

Quick Doc Merge allows the user 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 user time by eliminating the need to merge PDF files before print submission
- Gives users the flexibility to combine multiple jobs, without needing to open the file and manually merge pages

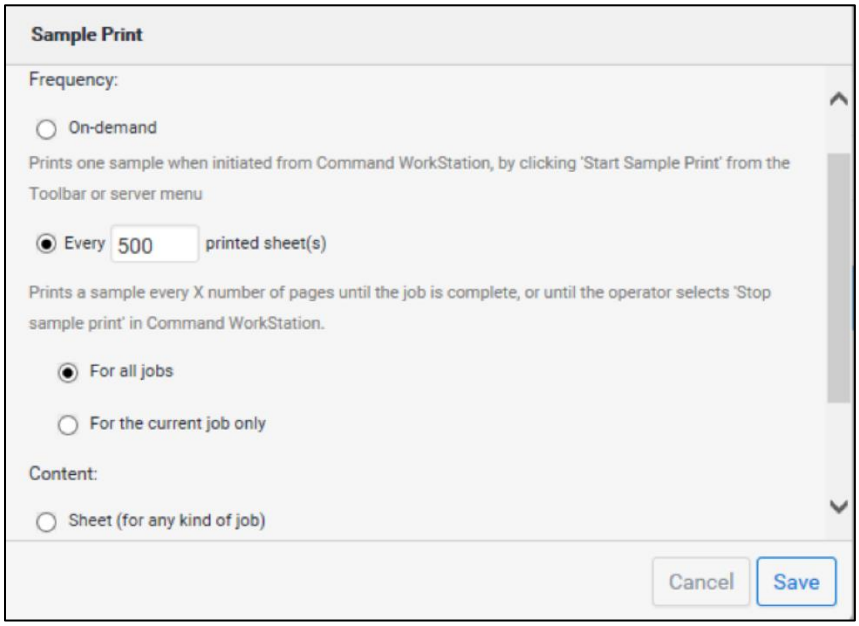
Sample Print

The Sample Print feature allows the user 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 user can take corrective action. While a job is printing, the user 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 user can also configure the Fiery server to print sample prints at a predefined interval. This lets the user 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Configure Sample Print to meet workflow needs.

The user 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 user 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 user 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, minimizing 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.

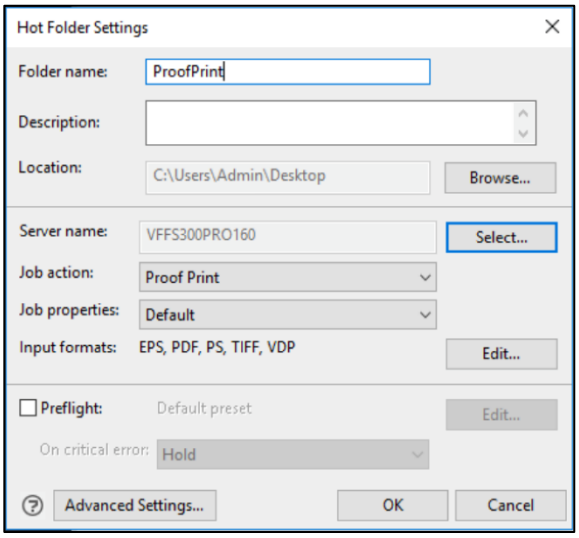
Benefits:

- 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 prioritizing 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 users can schedule the jobs to print when the media is loaded in the printer

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 Fiery Hot Folders.

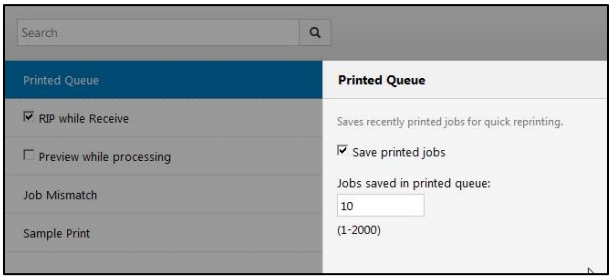
Targeted to Command WorkStation users, the Proof Print feature is particularly powerful in the Fiery Hot Folders workflow because Proof Print can be selected as a Job Action when setting up Hot Folders. After the system produces the Proof Print, the job moves into the Hold queue until it is released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

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 to jobs for reprint. The maximum number of jobs varies between embedded and external servers:

- Fiery embedded servers running FS200 and above software will store up to to 1,000 jobs
- Fiery external servers running FS200 Pro and above software can now store as many as 2,000 jobs

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



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

Once the number of stored jobs reaches the number defined above, the Fiery server starts deleting the jobs in 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- 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 boost productivity are:

- **Fiery Hot Folders:** Automates the job submission process; reducing errors and automating repetitive tasks with a simple drag-and-drop operation. Input formats are: PS, PDF, EPS, DOC, DOCX, XLS, XLSX, PPT, PPTX, PPS, PPSX, and PUB.
- **Fiery 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. 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 currently printing.
- **Print/Process Next:** Queues a job to print immediately after the currently running print job completes.

Benefits:

- Eliminates bottlenecks and optimizes production to maximize throughput
- Automates job submission to shorten setup times and decrease print errors
- Fiery Productivity Package also includes a set of tools for prepress operations. For a complete list of those features, visit the Prepress section in this product guide.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 color control, troubleshooting, and automation of labor-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 printer providers a flexible solution that can be available to either the local press operators or the remote prepress specialist without the need to invest in a dedicated desktop client. The unified working space for all prepress tasks simplifyes labor-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 emphasize color 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 color 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 color adjustments for the overall job if needed. Because Fiery ImageViewer supports softproofing, users can achieve color-accurate visual corrections on a properly calibrated and profiled display.

3. Postflight – Lets users troubleshoot problem jobs by identifying types of content, reporting missing spot colors 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 color bars to each printed page, including the Ugra/Fogra Media Wedge or Idealliance color bars

5. Filters for Fiery Hot Folders – Offers filters for CT/LW, PDF2Go, ExportPS, DCS 2.0, EPS, PDF/X TIFF, TIFF/IT, (1-bit TIFF for some engines) with Command WorkStation 6.2 or earlier

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

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

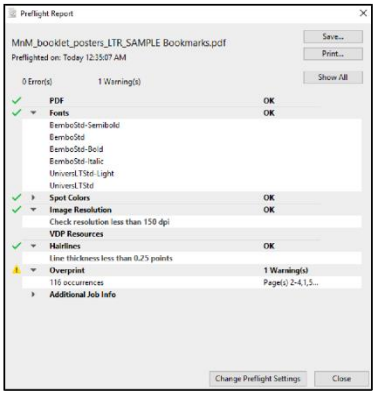
8. Paper simulation editing – Allows the user to manually adjust the white point of CMYK source profiles so they can fine tune proofing of paper white

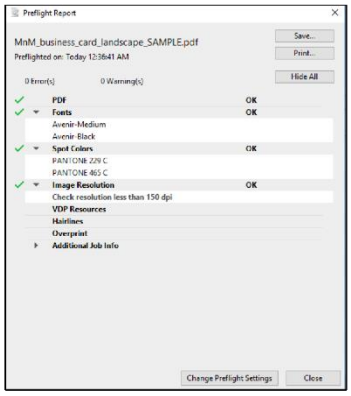
9. Two-color print mapping – Useful for proofing or plate-making for two-color presses

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 color 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 colors
- Low-resolution files
- VDP resources
- Hairlines below threshold
- Overprint
- PostScript errors
- Additional information
  - PDF document security
  - Page size(s) and page boxes (such as trim, media, crop, etc.)
  - Color spaces
  - Flatness

Preflight component	What it checks	Default error level
Fonts	Reports if font not found on server	**Critical**
	Reports if Courier font is present.	**Information**

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

	The presence of Courier font usually means that a font not found has been automatically replaced by a system default font.	
Spot colors	Reports if spot colors 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:

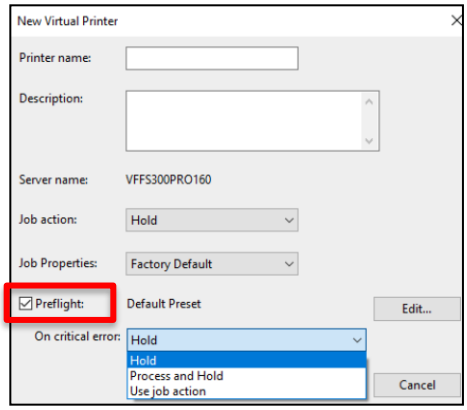
- Eliminates the need for users to purchase third-party applications to perform preflight testing. Preflights VDP jobs to ensure proper availability of VDP resources
- Increases productivity in job-submission and print processes by eliminating printing errors at the printing stage, reducing waste due 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, Virtual Printers and Fiery JobFlow

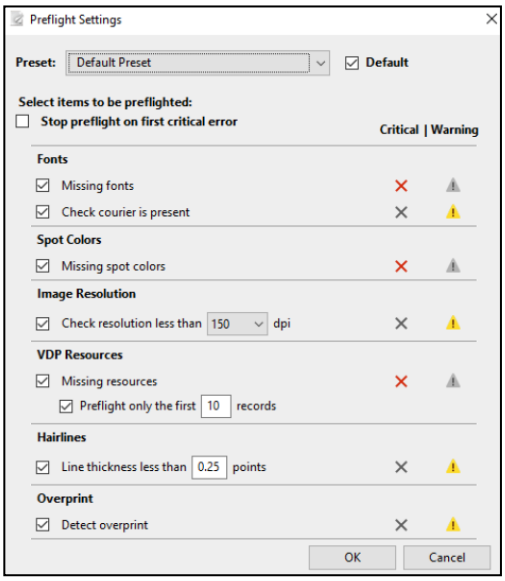
Fiery users can apply Preflight to any jobs that use Hot Folders and Virtual Printers to automatically check files before processing. Automatically preflighting jobs saves time, resources and money, and it increases productivity by rerouting incorrect files before printing.

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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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



Customize 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

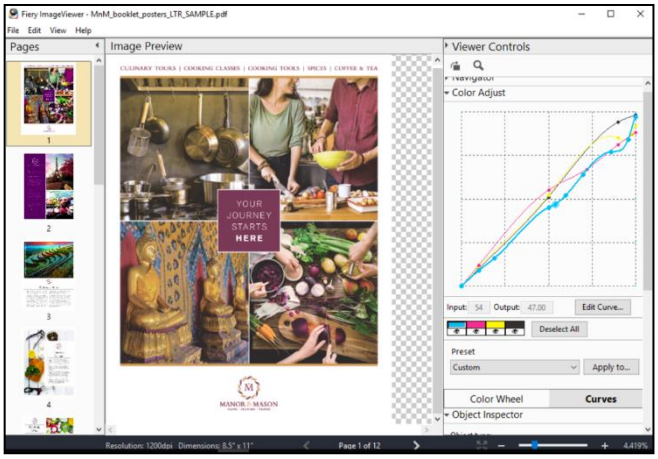
When considering the overall cost associated with producing printed materials, many print providers focus on the final "cost per page" for ink or toner on paper, according to the CAP Ventures study — *The Cost of Business Communication: A Look at the Business Document Lifecycle.* Actually, the real cost 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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

- Local and remote softproofing
- Online and offline softproofing
- Intuitive color-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 color adjustments



Fiery ImageViewer user interface

Key functions and features include:

- Adjusts color on a per-page basis
- Applies color 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 color 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

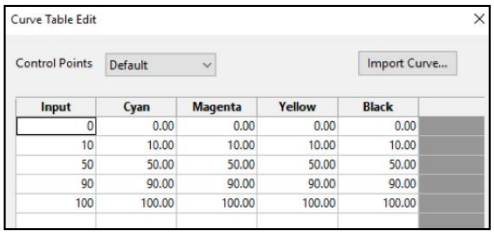
Tabular curve edit

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

Users can also import third-party curves from applications such as Curve2™, Curve3, and similar software.

The Import Curve function gives users a more precise way to edit color curves and better control of color edits. It also helps match G7 tone and gray balance targets for print service providers that choose to disable ICC-based color management.

The new Edit Curve button in ImageViewer



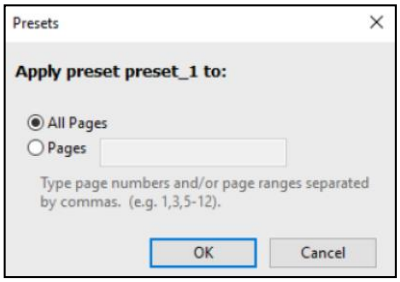
Edit curves more precisely with tabular curve edit

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Apply custom curves per page

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

This gives better control over custom settings throughout a job.



or

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

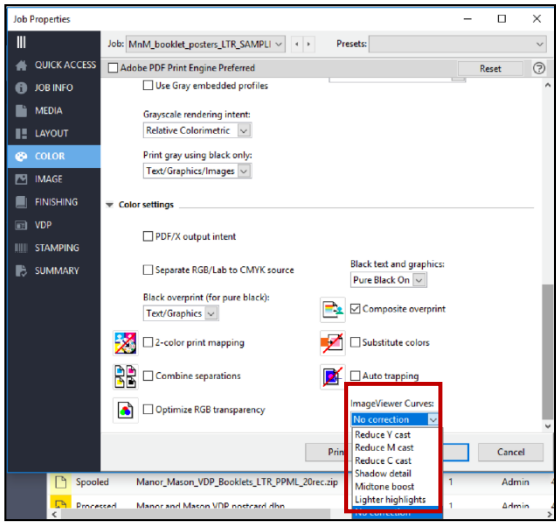
Apply ImageViewer curves in Job Properties and the Fiery driver

With ImageViewer curve presets, users can 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 populate in the ImageViewer Curves dropdown menu in Job Properties.

ImageViewer offers a set of predefined curve adjustments for use on all Fiery FS350 servers, even for 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



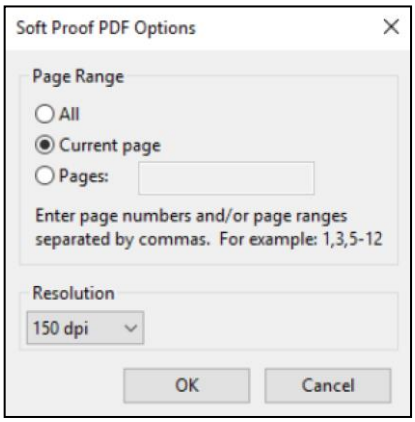
Choose from pre-populated curve adjustments or use a custom curve

This new feature facilitates color matching between similar jobs, and allows users to apply custom or factory default curve corrections — 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.

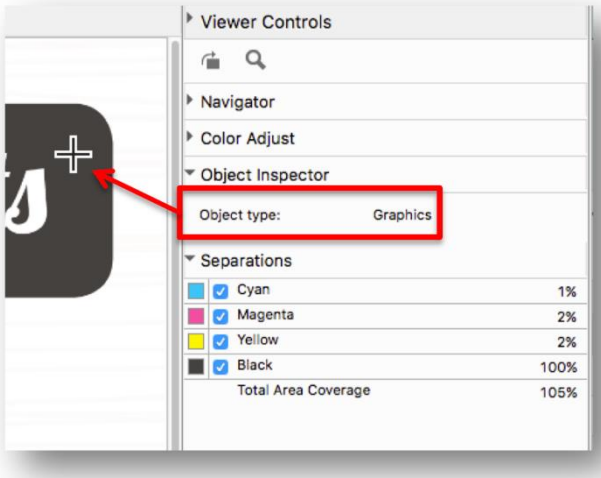


Simplified options make creating softproofs more efficient

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Object inspector

Object Inspector, part of Fiery ImageViewer 3.0, helps identify imaging problems related to specific object types. It's easy to identify the type of page object that was in the original page description file before it was RIPped — such as an image, graphic, smooth shade, text, or edge.

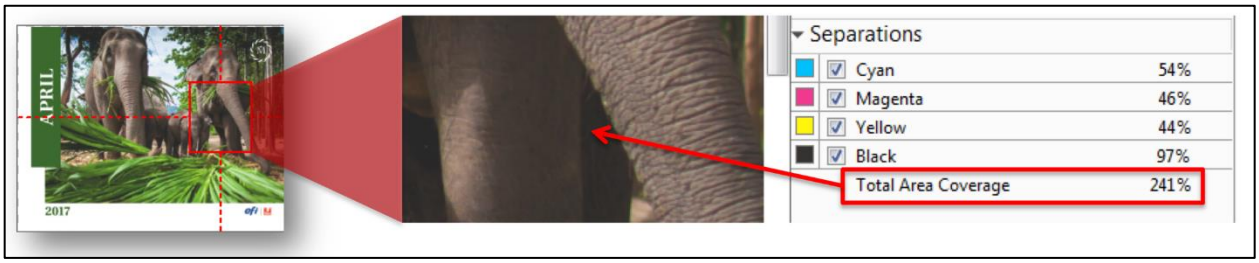


The feature allows users to troubleshoot image quality issues related to page object type more efficiently. Some examples include the ability to:

- Identify a page object that may fail to use black only because gray settings in Job Properties are not set to use black only for that object type.
- Identify cases where a color mismatch within a page is related to how each object type is processed, such as halftone screen. These color mismatches are otherwise hard to identify, since the color looks identical in the raster, but they print with a mismatch when they are screened on the print engine.
- Determine where pixels are being tagged for edge enhancement by features such as Fiery Dynamic HD Text and Graphics or engine-specific edge-enhancement technologies.

Total area coverage

Total Area Coverage, also part of Fiery ImageViewer 3.0, reports the sum of color separation values for a pixel. This can help troubleshoot image quality issues related to toner or ink coverage, and determine whether the toner or ink limit has been reached.



Fiery ImageViewer new features

The following new features are only applicable to Fiery servers driving full-color print engines.

Color replacement

With ImageViewer color replacement, users can replace up to 5 specific color tints in an output raster. This enables users to perform late-stage color replacements without needing to go back to the original file or using the Substitute Colors feature in Fiery Spot-On™. With it, users can:

- Replace color on any object type (text, graphics, spot colors, images, and smooth shades). Color replacements are global and apply to any instance of the original color throughout the job.
- Enter specific CMYK replacement values (if known) or sample another tint in the raster to use as the replacement color – no need to know original color values.
- Re-order color replacements. As color replacements happen sequentially, users may desire changing the order of the replacements and have better control of how a color change may affect previous color replacements.
- Use it with CMYK, RGB, CMYK+, specialty colors (such as clear or white), and grayscale.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- Save color replacements as a preset alone or along with a curve adjustment, then apply via Job Properties in Command WorkStation, Fiery driver, or Hot Folders/Virtual Printers.

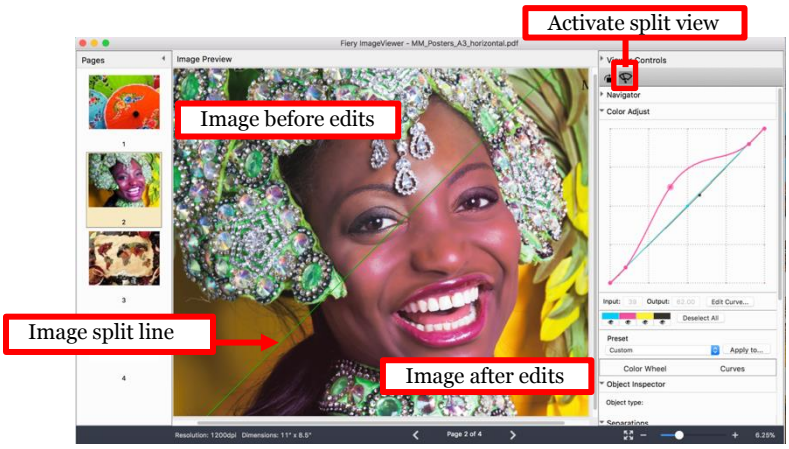
Color replacement options in Fiery ImageViewer

Color replacement example

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Split view

ImageViewer split view allows users to see color curve edits in a side-by-side, before-and-after view.

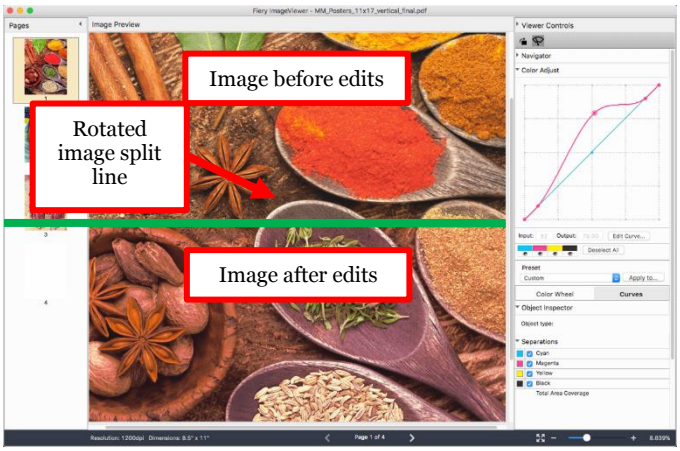


Split view in Fiery ImageViewer

Please note: Fiery ImageViewer 4.0 only works on systems with OpenGL version 3.2 and above with a minimum of 750 MB of memory available to the graphics card. Without these, the previous version of Fiery ImageViewer 3.0 will launch. Fiery ImageViewer 3.0 will launch if you try to log on remotely to the client computer running Fiery ImageViewer 4.0. Users can check the OpenGL version using third-party software, such as OpenGL extension viewer.

Users can also rotate the split view:

1. Activate the split view
2. Hold down Command and Option keys (macOS) or Control and Alt key (Windows), then scroll with your mouse wheel or two-finger swipe on a MacBook
3. The image split line will rotate around the page, enabling a side-by-side view of other areas on the page



Rotation of split view line

Fiery ImageViewer for Black and White

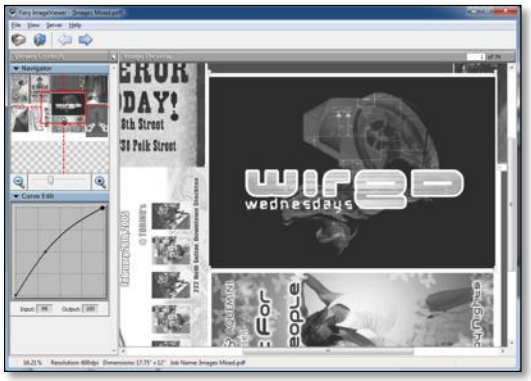
This is an optional plug-in to the Fiery Command WorkStation application for Fiery servers driving black-and-white engines. It allows users to preview full-resolution print data so they can see exactly how a black-and-white job will look before they print it — saving time, plus reducing waste and mistakes.

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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

Before



After

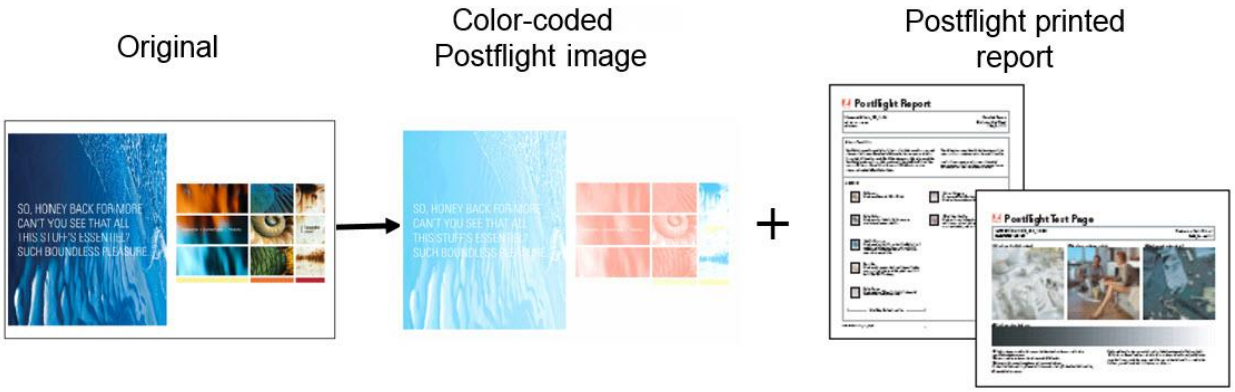
Benefits:

- Full-resolution previews allow users to review the content and check for missing fonts or images, PostScript errors, and layout issues without the need to print the job — saving clicks and minimizing 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.

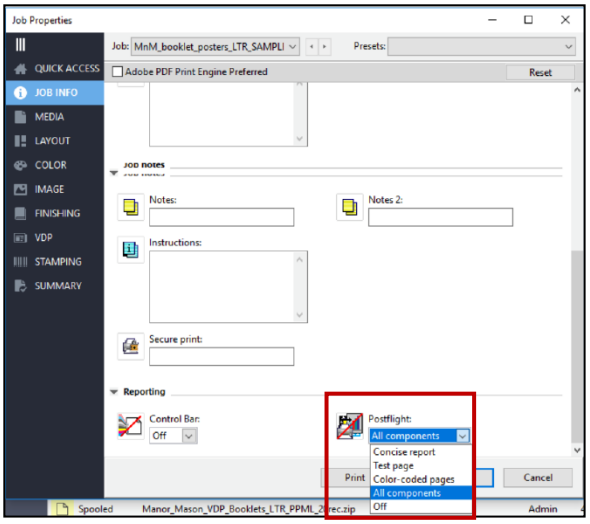
Postflight

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 color-coded version of the job to indicate the source color space of each element for color print troubleshooting. The color coding is explained in an appended report that describes which color 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 color test page to verify the condition of the print engine.

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



© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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

Benefits:

- Decreases the amount of time a user has to spend troubleshooting jobs, increasing efficiency, reducing turnaround time, and maximizing profitability
- Reduces the learning curve by teaching users 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 color information that is translated differently for CPSI. Therefore, users need a Postflight feature that supports the native PDF printing path without converting the PDF file to PostScript for CPSI.

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

This feature only works on Fiery external servers running FS200 Pro and above. Users need to enable APPE 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 color control bar is commonly used on conventional press work and contract proofs. Without a color bar, it is difficult to determine the color precision of the print.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Control bar displayed at side of page

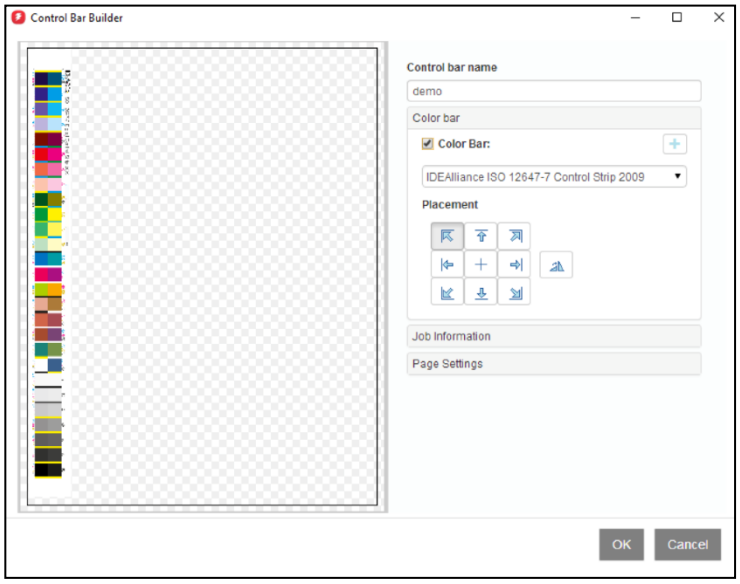
The control bar also adds dynamic job information. Users select color bars for each printed page, and can customize the printed information by entering settings/preferences into the fields provided in the user interface. They can also save these settings for future use.

Control Bar Builder

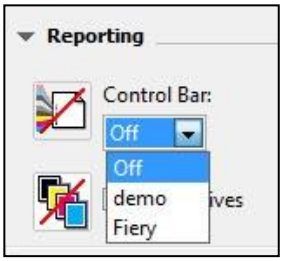
The new Control Bar Builder has a visual interface to design custom control bars. This allows for different color bars or job information, depending on the print application. Each custom control bar can be used across all media sizes, reducing setup time and simplifying the ability to use custom control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

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

They can customize font, text size, color, and the order of information in the job ticket portion. And place the control bar vertically or horizontally on the sheet, and in different locations. The Fiery driver and Job Properties provide a selection of default and custom control bars created with the Control Bar Builder.



Control Bar Builder user interface



Control Bar selection in Job Properties and Fiery driver

Benefits:

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

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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 get a set of expert-level filters that allow Fiery 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 Fiery 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 color 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 Fiery 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 standardized 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 rasterized CT and LW, each with a different resolution. The Fiery 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

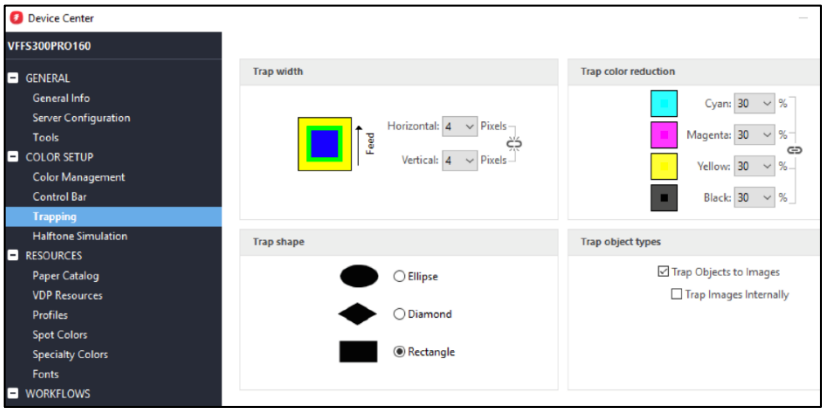
Filter	Description
PDF/X PREFLIGHT	The PDF/X-1a option is not a file converter, but a preflight check that verifies compliance of the job with the PDF/X-1a specification (defined in ISO 15930-4:2003). Essentially, all fonts and images must be embedded. The PDF/X-3 option is not a file converter, but 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 optimized 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
- Color reduction
- Shape
- Image trapping option



Benefits:

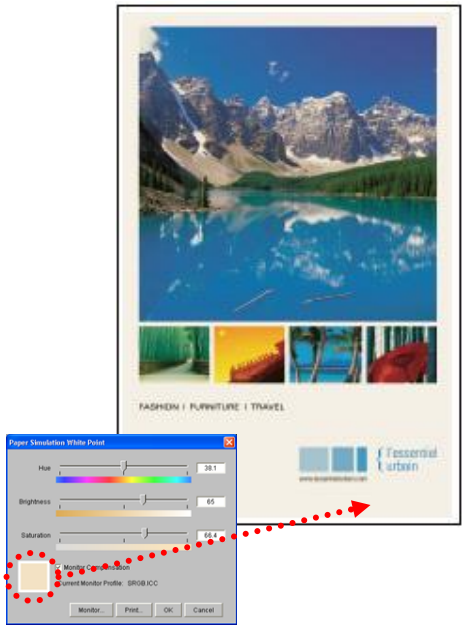
- Trap edges without performance impact, allowing users to trap complex jobs without slowing down production
- Gain full control over trapping values to adapt to different printing environments and job characteristics
- Hide registration imperfections that can occur when printing on stiffer media, opening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

Paper simulation with White Point Editing

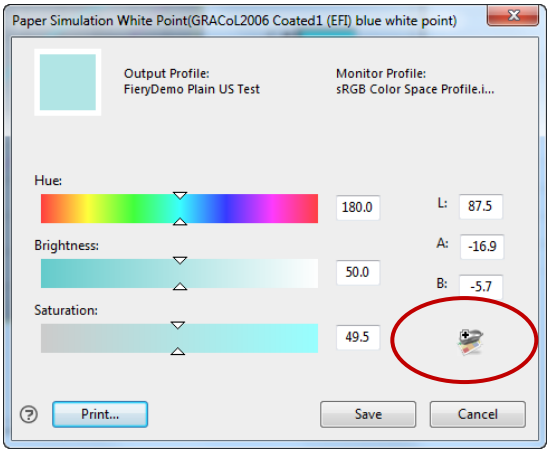
When printing proofs, it is sometimes desirable to simulate the color of the paper that will be used on the actual press run. Users can find the White Point Editing feature in Fiery Graphic Arts Package, Premium Edition under Profiles in Device Center, after selecting Edit on a given profile. It provides users with intuitive tools to enter and edit the white point of a CMYK source profile so they 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. Before, users had to manually enter the L*a*b values defining the white point of the paper. Now, operators can use an ES-2000 spectrophotometer to read the white point value of the paper and populate the L*a*b values directly into the Paper Simulation feature.



© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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

Benefit:

- Let's users create custom paper simulations to match the paper white point of special media, then store and reuse those simulations for specific customers and/or print applications

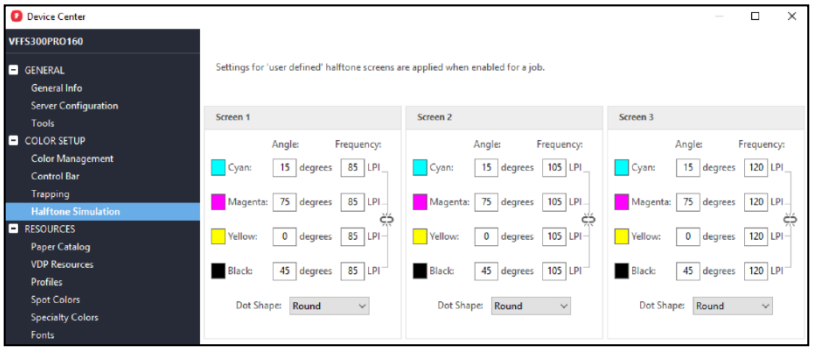
Halftone simulation — with frequency per color

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 color
- Screen angles for each color
- Custom or application-defined dot shape



Benefits:

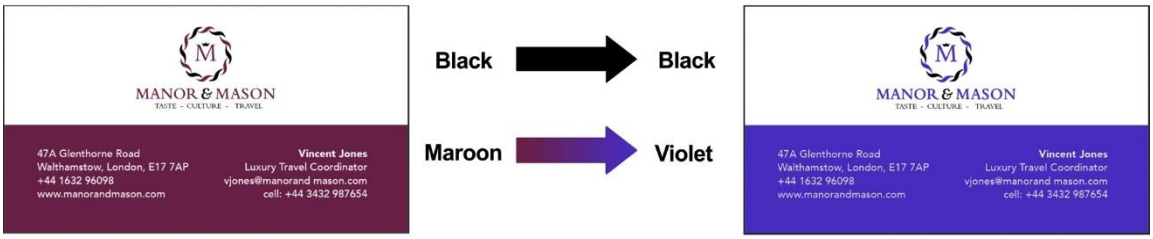
- Combines with the Paper Simulation feature, allowing users to simulate conventional press output for proofing
- Allows users to make adjustments before plating the job
- Provides accurate simulation of the screened appearance for newspapers and packaging

2-Color Print Mapping

When artists design two-color jobs that will run with black and one spot color, they might not always know the spot color at the design stage.

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Benefits:

- Ensures accurate spot color matching from Fiery Spot-On when printing the final spot colors
- Allows for last-minute decisions about spot colors

Fiery Graphic Arts Package

The Fiery Graphic Arts Package option has been discontinued in 2012. Some features in the package are available as standard features in Fiery external servers. Those features are:

- Softproofing that provides color-corrected previews of RIPped jobs
- Paper Simulation to simulate the color of the paper to be used for final output and the effect that the color 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 colors in a job
- TIFF/IT Fiery 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 color 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 colors — including all PANTONE, HKS, Toyo, and DIC names. In addition, users can create custom colors with a user-specified name and CMYK value.
- **Composite Overprint for Spot Colors:** Automatically recognizes overprinting spot color elements from composite files and properly renders them, eliminating the submission of separated files from the native software application.
- **Fiery ImageViewer:** Provides fast local and remote softproofing tools for amazing preview and color editing capabilities in Fiery Command WorkStation.
- **Fiery Image Enhance Visual Editor:** Interactive toolset for optimizing image appearance. Adjusts brightness, contrast, highlights, shadows, color balance, and sharpness; and makes red-eye corrections on any image.
- **Postflight Report:** Job diagnostic tool delivers color-coded reports to quickly and easily identify potential printing issues such as mixed-source colors and missing spot colors.
- **Control Bar:** Delivers effective color quality control, consistent results, and job identification on every printed page by applying customized job information and images including logos, company names, or color bars.
- **Fiery JobFlow support:** Fiery JobFlow is supported in Fiery embedded servers with Fiery Productivity Package.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- **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 color as it will appear on the actual paper to be used in production.
- **Fiery Hot Folders:** Automates the job submission process, reducing errors, and speeding repetitive tasks with a simple drag-and-drop operation. Input formats are: 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 Fiery 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:** Provides built-in JDF-based integration support to automate processes from job submission to output by integrating print workflows and business management systems so that job information can flow through the systems with fewer touchpoints and errors.

Benefits:

- Troubleshoots color issues effectively to get jobs printed correctly and quickly
- Simulates other printers' output to produce cost-effective proofs
- Eliminates bottlenecks and optimizes production while maximizing 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery Workflow Suite: Makeready solutions

Producing manuals, calendars, personalized cards, business cards, newsletters, tickets and coupons, forms, and catalogs 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.

To help do that, Fiery Workflow Suite includes Fiery makeready components 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. These plug-in applications include Fiery Impose, Fiery JobMaster, and Fiery Compose.

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 to invest in a dedicated desktop client. The unified workspace for all document-layout tasks simplifies labor-intensive document preparation activities and shortens job setup times for even the most complex jobs.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery makeready solutions feature set comparison

Fiery makeready features	Fiery Impose	Fiery Compose	Fiery JobMaster
Fiery Command WorkStation plug-in (Mac/Windows)	✓	✓	✓
Centralized job preview	✓	✓	✓
Adobe Acrobat and Enfocus Pitstop Edit integration	✓	✓	✓
Paper Catalog integration	✓	✓	✓
Export as PDF for content proof and printing	✓	✓	✓
PDF-based in-RIP makeready with reversible edit functions	✓	✓	✓
Gangup and booklet imposition	✓		
Best fit gangup repeat	✓		
Variable data printing support	✓		
Imposition automation with Hot Folders, Virtual Printers, Presets and Fiery JobFlow	✓		
Offline slitter/cutter/creaser integration	✓		
Inline finishing definition		✓	✓
Mixed finishing sets programming		✓	✓
Chapter creation		✓	✓
Tab insertion		✓	✓
Convert to grayscale		✓	✓
Quick page selection			✓
Scan image import and cleanup			✓
Image stamping			✓
Advanced page numbering *(includes custom header, footer, and date stamping)*			✓
Page editing (masking, rotation, size)			✓
Job duplication			✓
NCR form creation			✓
Bleed-edge tab creation			✓
Auto tabs			✓
Tab sets creation with images			✓
Tab conversion and insertion in one job			✓

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

New features in Fiery makeready products

New versions of Fiery Impose, Compose, and JobMaster are included in the Command WorkStation 6 download. These new versions of Fiery makeready products will enable users to produce high-value print products more profitably, in less time, and with fewer clicks.

There are features that help simplify imposition layout creation and automation setup, making it easier for users to create new layout templates and automate job imposition.

Users also gain more control over late-stage edits, without the need to go back to designers for content modification. This will speed up turnaround time and help print shops achieve higher profitability.

Usability enhancements

There are six great new features that improve the ease of use in all Fiery makeready solutions:

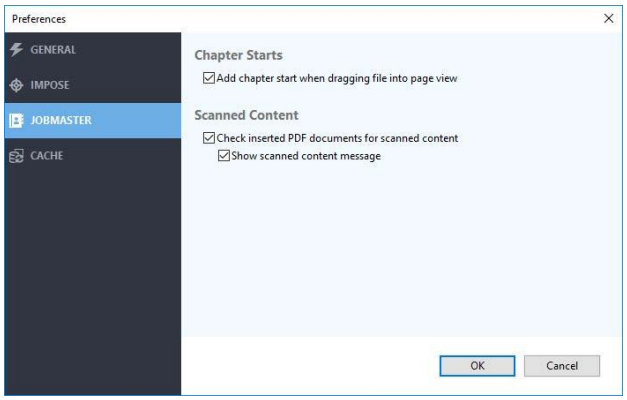
1. Easier preference setting
2. Preserve window and pane size
3. Show media color
4. Enhanced page insertion
5. Faster job saves
6. Quicker sheet size selection

Easier preference setting

User preferences for Impose, Compose, and JobMaster can now be managed from within those applications. This way, users can control their preferences without leaving the makeready application.

Fiery Impose adds a barcode format preference, specifically for Duplo finishers with 3-digit barcode support.

The new Fiery JobMaster preferences include options that help speed up job assembly:



Preferences in Impose, Compose, and JobMaster

- Add chapter start when dropping files into page view — Many times, users insert entire chapters or sections in to a job. If this preference is checked, JobMaster will automatically add a chapter start to the first page of each dropped file, saving clicks and time.
- Check inserted PDF document for scanned content — For users who frequently need to clean up scanned PDF documents using Fiery JobMaster, the application will pop up the Preview and Edit window when JobMaster detects scanned images in an imported PDF.
- Show scanned content message — This preference gives users an option to review and clean up scanned images when they are detected in the imported files. This is useful to review and edit scanned files occasionally, rather than all the time, and helps speed up the import process when no preview is required.

Preserve window and pane size

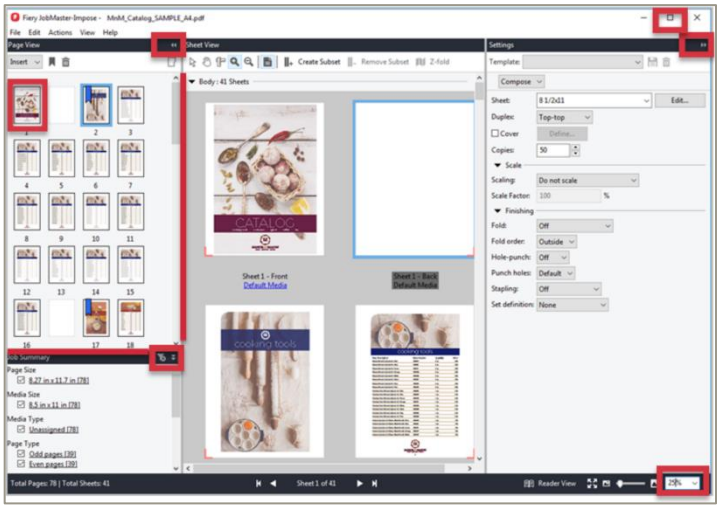
Different users have different ways they prefer to preview jobs and to access makeready tools.

Now Fiery Impose, Compose, JobMaster, Preview, and Raster Preview preserve the window size and layout of the different panes so that users have a consistent experience when re-opening the Command WorkStation application. Users can preserve:

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- Size and location of the main window
- Separation bar positions
- State of collapsible panes
- Zoom levels, including thumbnail-size levels

Preserving preferences in the interface layout not only makes Command WorkStation easier to use, it also saves time because users don't have to repeatedly set up their preferred view.

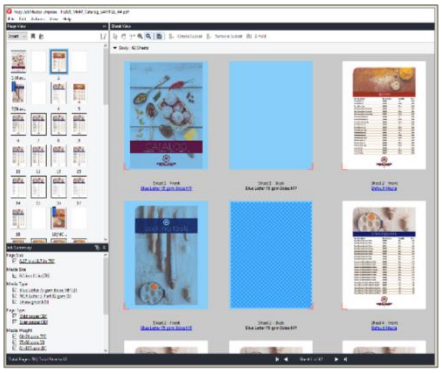


Preserve window and pane size

Show media color

This feature displays the color of the media in the Sheet View pane, for a visual confirmation of the media selection and fast media identification in long documents. It also gives a quick preview of the printed output. This gives users:

- Fast media identification
- Fewer errors in media assignments, with better visual confirmation
- A way to easily spot different media colors set for sheet(s) in a job

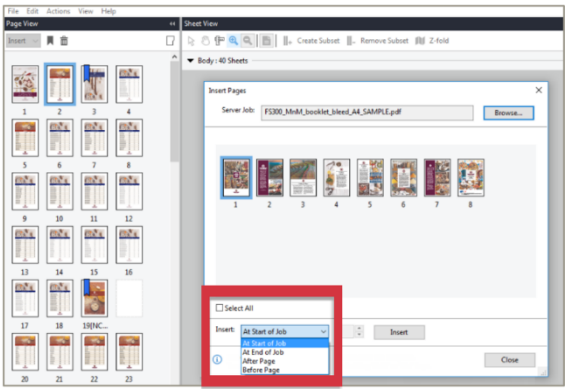


Show media color

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Page insertion enhancements

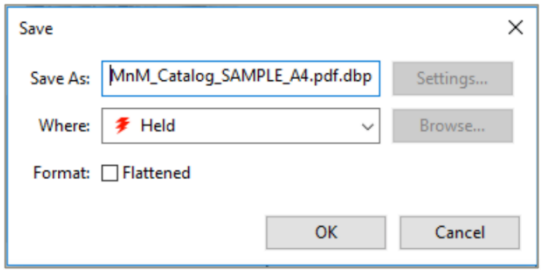
When assembling a long document, it is sometimes hard to insert new pages by dragging and dropping them into the exact location by scrolling in the Page View. The Insert Page interface provides users with a way to specify exactly where to insert the selected page(s). With it, inserting a page into a specific location in a hundred-page document is a breeze.



Page insertion options

Faster job saves

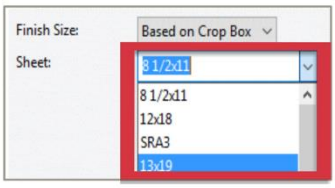
We've streamlined the save job interface. The save dialog now remembers the last settings used when saving a job, making future selections faster.



Save options

Quicker sheet size selection

It can be a time-consuming and tedious task to scroll through the long list of sheet sizes to pick out the right size, and repeat it for every job a user sets up. This new feature speeds up the sheet size selection by remembering the last five sheet sizes used. For each layout mode, (compose, normal, booklet, gangup layout), users have a separate last-used sheet-size list

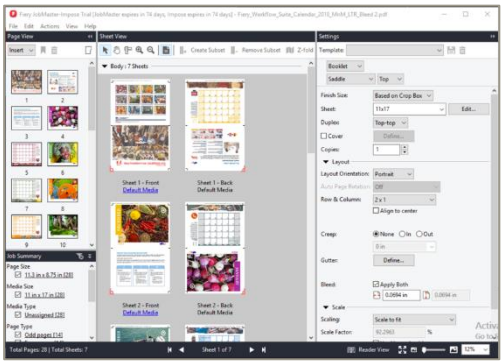


Sheet size selection

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 optional Impose software launches on Command WorkStation 6, so it can run on the user's computer desktop or locally at the Fiery server.



Fiery Impose fully visual and interactive interface

Fiery Impose offers multiple workflows to optimize and automate the layout of multi-up jobs; considering the properties of the source file, media size, and other considerations. 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 to invest in a dedicated desktop client. The robust toolset delivers a fast, automated approach to tedious, time-consuming tasks that leave users 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 products such as booklets, books, coupons, and business cards.

Productivity features streamline workflow and leverage automation. Users can create unlimited user-definable imposition templates; and can apply imposition templates from Job Properties, Fiery Hot Folders, Virtual Printers, and Fiery JobFlow.

Fiery Impose has a quick and easy way to view thumbnails, or full-screen previews of actual page content in the imposition signature. It also offers page and sheet views of the imposed job. In addition, users can manage the production of imposed jobs with mixed-media requirements.

Features of Fiery Impose:

The solution works with the Fiery Command WorkStation 6 interface, and lets users perform a wide array of imposition tasks at the Fiery server or remotely on Windows or Macintosh client workstations.

- **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:** Displays 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 a control strip for quick identification of spoiled sheets
- **Unique cut and stack:** Allows 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
- **Gangup automation by media size**: Calculates the best layout (n-up and orientation) on the fly using the Based on Trim Box finish size, considering a given media size.
- **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 optimize the finishing process

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- **Cover setup:** Dynamically adjusts pagination 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
- **Mixed Media for VDP booklet covers**: Allows users to set media for the covers of VDP booklets that is different than the body pages
- **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 multi-page document
- **Customizable trim and fold marks:** Defines the color, length, width, and type of trim and fold marks independently; and creates presets for faster setup in future jobs
- **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 optimize paper use for small items. Saves on click charges with page double-up feature
- **Auto page rotation**: Automatically detects and rotates pages in a job to ensure that all pages have the same orientation
- **30-day free trials**: Offers users a chance to experience Fiery Impose for free before purchase at efi.com/fieryimpose
- **Late-stage editing:** Allows users to apply last-minute edits with Adobe® Acrobat® Pro and Enfocus Pitstop Edit

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

Benefits:

- Provides a flexible makeready solution that can be available to either local press operators or remote prepress specialists, without the need to invest in a dedicated desktop client
- Reduces print errors and saves significant time with job previews of printed output
- Minimizes 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, and improves accuracy with specified placement in long documents

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 user 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.

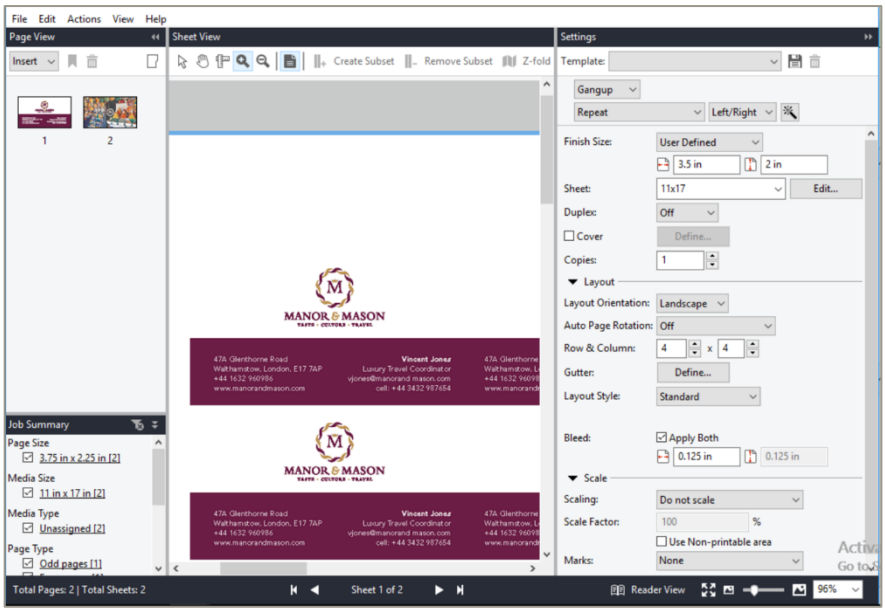
Previously, users had to set up files for imposition by using Fiery Impose bleed values to set the finish size. Additionally, users or designers sometimes needed to modify original files and define a custom page size to define a bleed, which affected the positioning of content on the page.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

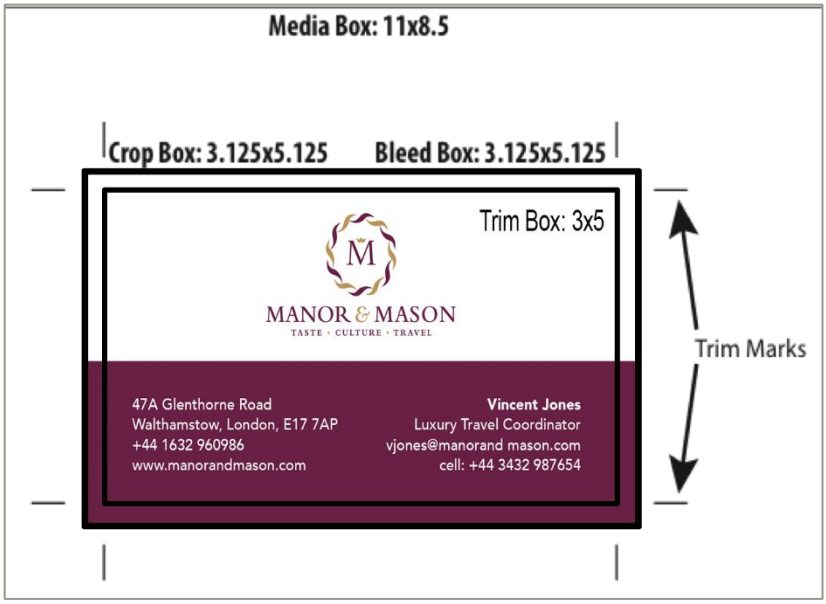
With Command WorkStation, Fiery Impose takes advantage of the designer-defined trim box and bleed-box information incorporated in the file. The user can select User Defined as the Finish Size setting. This maps the trim-box value in the file to the Impose Finish Size setting. The system also reads and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

Support for 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.

In addition, 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

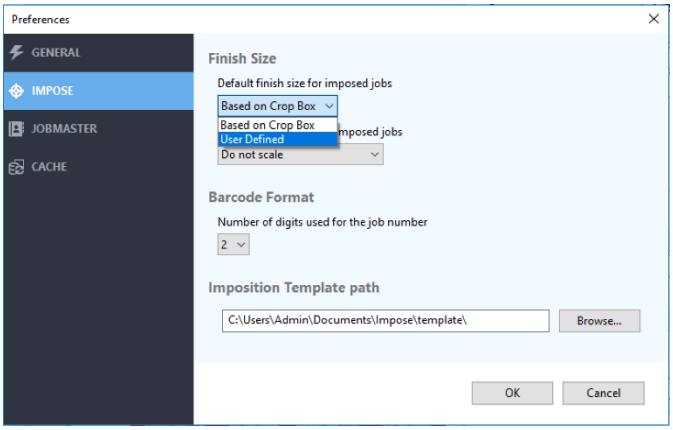
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Benefits:

- Improves usability, as the designer defines the desired trim and bleed sizes in the document, and allows imposition to be done with 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.



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

Layout Offset

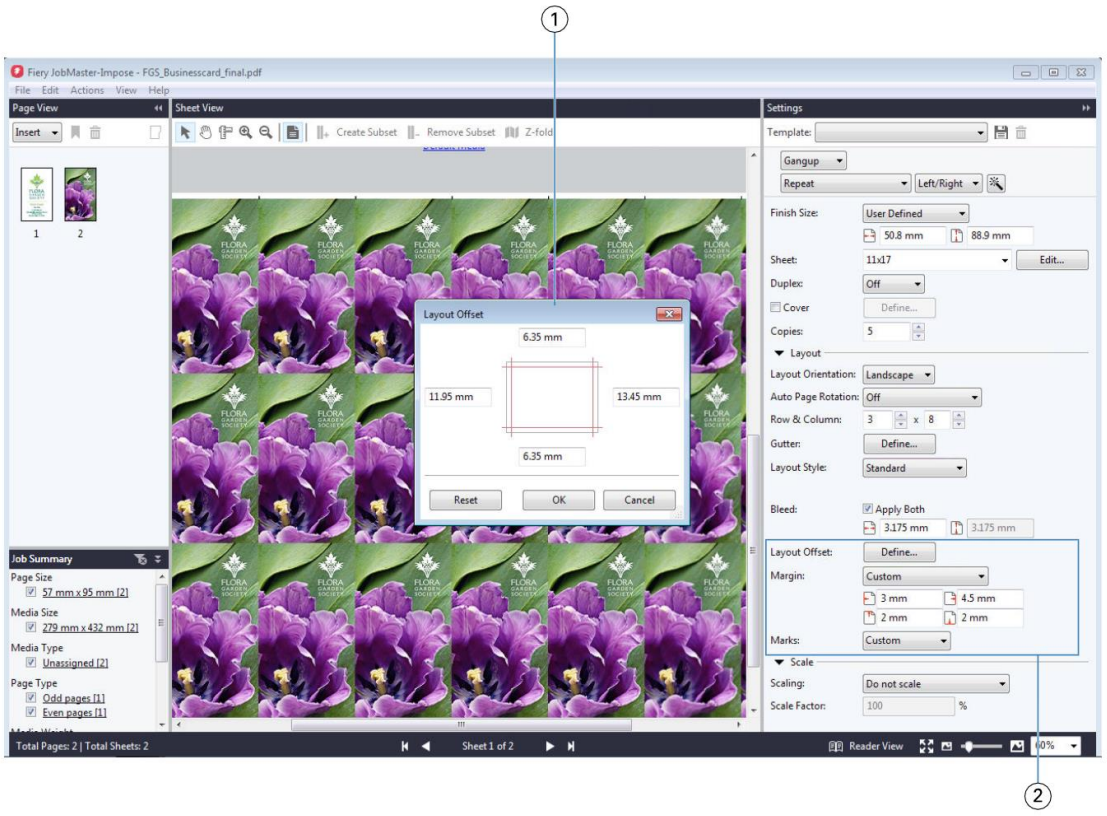
Layout Offset moves the entire layout on the sheet surface to accommodate additional space required by finishers for gripping or trimming a sheet. Using the Layout Offset option, users can define the distance between the edge of the sheet and the layout trim box, in all four sides, so that the layout is off-centered. Save the Layout Offset settings in Fiery Impose templates, so that you can use these settings for future jobs with workflow automation.

Custom Sheet Margins

This feature allows users to define margins on each side of a selected sheet size. Layout margin is the distance between the sheet edge and the layout edge. By default, the sheet margin is the non-printable area.

Users can adjust these margins to maximize the layout area and meet the margin requirements of an offline finisher.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



1 Layout Offset option to define the distance between the edge of the sheet and the layout trim box

2 Custom margin option to define margins on each side of a selected sheet size

Automation workflow support

This section clarifies licensing requirements by Fiery system software and automation workflow type.

A Fiery Impose license is always required wherever users create an imposition template. Licensing requirements differ when using imposition templates, depending on the type of finish size chosen for the template.

Requirements for User Defined and Based on Trim Box finish size

- Fiery Hot Folders and Fiery JobFlow require a Fiery Impose license on the client workstation
- Virtual Printers, Server Presets, and Job Properties require a Fiery Impose license on the Fiery server (FS200 Pro and above only)

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery system version	To use Impose templates for User Defined and Based on Trim Box finish sizes				
	Requires Impose license installed on the client computer		Requires Impose license installed on the Fiery server		
	Hot Folders	JobFlow	Job Properties	Server Presets	Virtual Printers
FS350 Pro, FS300 Pro, FS200 Pro,	✓	✓	✓	✓	✓
FS350, FS300, FS200, FS150 Pro / FS150, FS100 Pro /FS100 System 10 / 10e	✓	✓	Not supported	Not supported	Not supported

Starting with Fiery FS200 Pro system software, users no longer need to upgrade their Fiery server to benefit from new imposition capabilities; especially imposition automation with User Defined and Based on Trim Box finish size templates through Job Properties, Server Preset, and Virtual Printers. Fiery users can get new capabilities built for these finish sizes, simply by:

- Installing the latest Fiery Command WorkStation version on the Fiery server
- Activating a Fiery Impose license on the Fiery server for server-based workflows

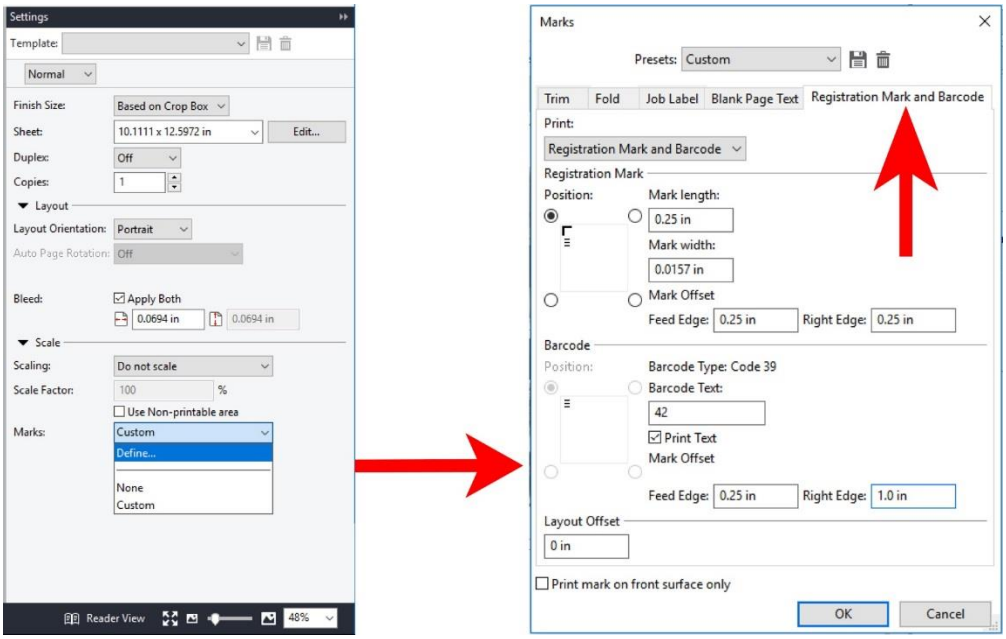
Duplo support for barcode and registration marks

Fiery servers support the Duplo USA DC-615, DC-616, DC-645, DC646, DC746, 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 tell the Duplo finisher 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 trimming of job content.

Duplo DC-645 slitter/cutter/creaser

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Barcode reader automatically sets up preprogrammed jobs.



Impose settings include definition of registration mark and barcode.

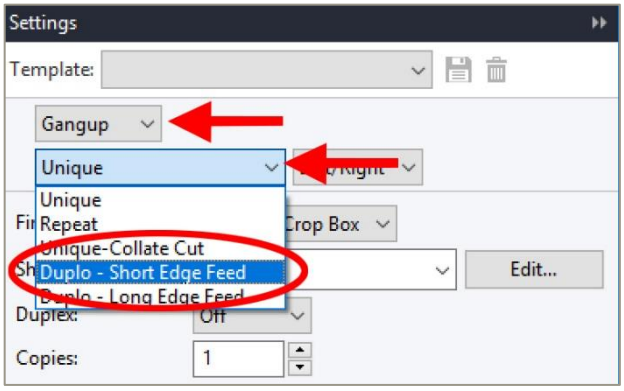
Benefits:

- Increases productivity by working with industry-standard Duplo finishers
- Saves times and minimizes 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 these Duplo offline finishers.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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

Benefit:

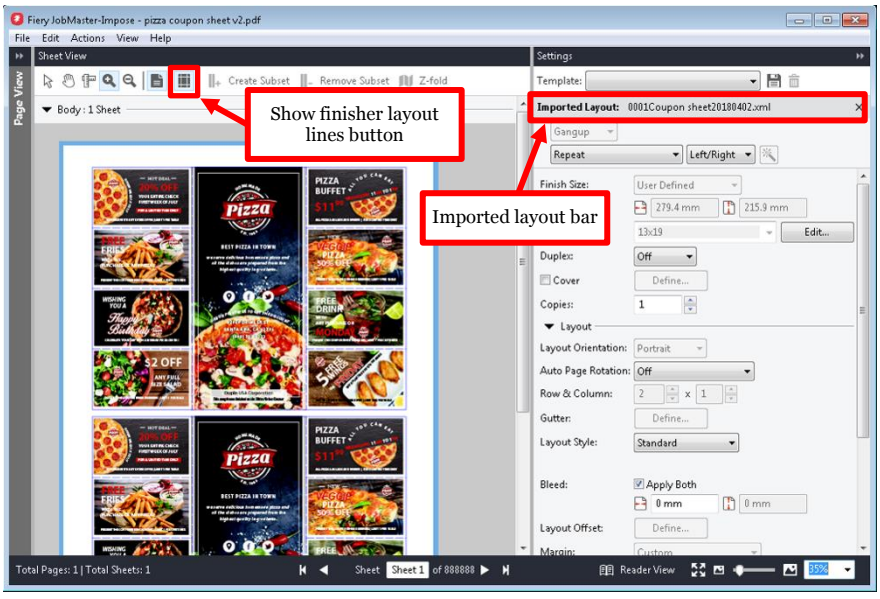
- Extends Duplo offline finisher support to streamline print production from job prep to finishing

Duplo finisher layout import

Fiery Impose has been introducing significant improvements to the integration between Fiery Impose and Duplo finishers since Fiery System 10 software. The improvements first introduced in Fiery Command WorkStation 6.2 bring increased automation of offline finishing for custom layouts. With this feature, users can import the layout file for the Duplo finisher into Fiery Impose to set up imposition in seconds and automate future jobs to eliminate manual setup on the Duplo finisher.

When users create the layout file on the Duplo finisher, they can import this file into Fiery Impose. This will automatically set up the imposition layout as defined by the Duplo layout file, which ensures a perfect match with the finisher's settings and minimizes user errors and rework.

While working on the layout in Impose, users have the option to apply additional Impose settings, such as duplex, that will affect only the settings that aren't grayed out. Settings that are grayed out, or not enabled, are ones controlled by the layout file and necessary to guarantee precise finishing by the Duplo finisher. For additional flexibility, Fiery Impose offers users the option to unlock those disabled features by closing the Imported Layout bar in the Settings panel.



Duplo finisher layout import

When applying the Duplo layout file to a job with Fiery Impose, users can preview the alignment of the page content with finishing lines set up on the Duplo finisher, such as fold and perforation lines. Just click on the new "Show finisher layout lines" button on the toolbar.

Users can create a template to automate future jobs. These templates save all the layout settings and let users preview the finishing lines. Templates can then be used in all automation workflows including Fiery Hot Folders, Virtual Printers, server presets, and Fiery JobFlow™.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

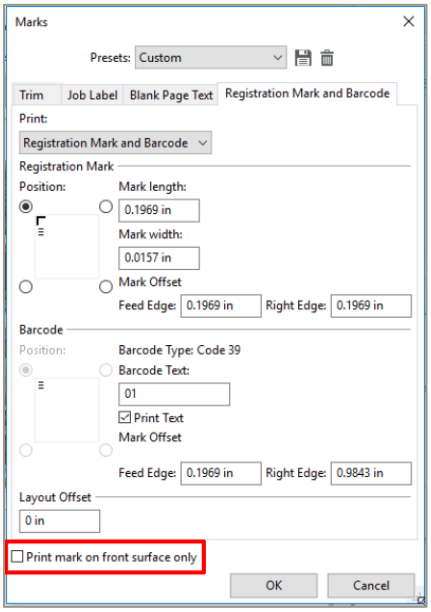
Before the first use, turn on the import feature for the Duplo finisher layout in the Fiery Impose Preferences section.

Supported Duplo finishers include the Duplo DC-646 / DC-746 Slitter/Cutter/Creaser.

Learn more about this feature by watching this Express Video, following the easy set up procedures in this how-to guide, or visiting www.efi.com/impose.

Print marks on front surface only

The checkbox Print marks on front surface only 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 only necessary on one side of a page, this prevents unwanted marks on the second side of a duplex page.



Print mark on front surface only check box

Benefit:

- Prevents unwanted marks that might not be trimmed off if the marks don't line up exactly on both sides of a duplex page

25x25 gangup

The Fiery Impose gangup row and column repeat limit has been extended 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

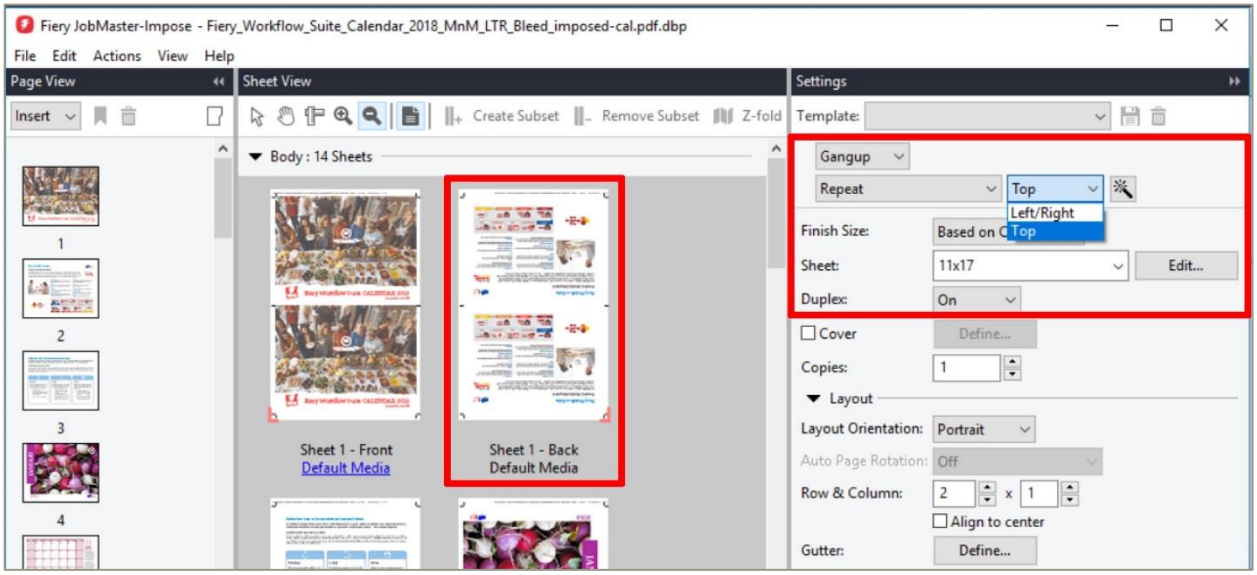
Gangup finish-edge selection

Print 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 the rotation automatic for all back pages in a gangup imposition. Just choose the new Top binding edge selection when imposing a job with duplex gangup-repeat, unique-collate cut, or Duplo styles.

Calendars using gangup-repeat imposition style and top binding edge

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



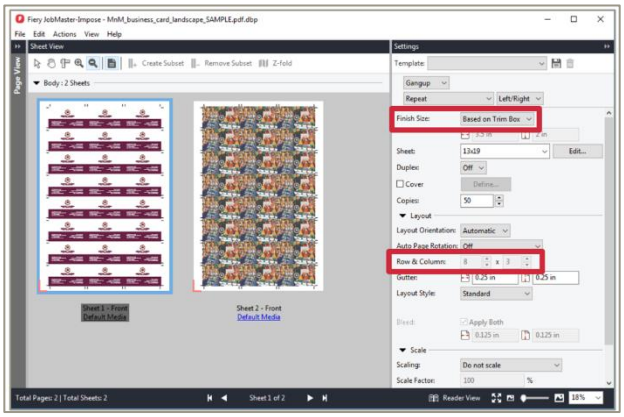
Gangup finish-edge selection is enabled when choosing Gangup, Repeat, and Duplex: On settings. See how the pages on the back of sheet 1 were rotated 180 degrees.

Benefits:

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

Gangup automation by media size

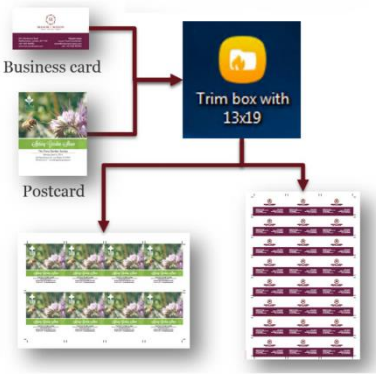
Gangup imposition templates can use the new Based on Trim Box finish size that uses the trim box defined in the document. Fiery Impose calculates the best layout (n-up and orientation) on the fly, considering the desired media size.



Based on Trim Box finished size

Based on Trim Box finish size reads the trim box of the first page of the document, and disables the row and column fields. When the user selects the sheet size, Impose automatically calculates the row and column values to maximize the sheet surface.

The best-fit for gangup feature can be saved as a template to automate layout. However, gangup unique and repeat is a different layout type. Each type requires a separate template per media size. Even with that, users will have fewer gangup templates to manage, with only one imposition template per gangup type and sheet size.



Imposition templates created with the Based on Trim Box finish size setting can be used in Fiery Hot Folders and Fiery JobFlow* workflows.

For example, users can set up a single hot folder for 13x19-inch media to process business cards and post cards. Fiery Impose will produce the best-fit layout for each product size, while maximizing the paper usage. This type of workflow will greatly reduce the time and effort required to set up gangup automation

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

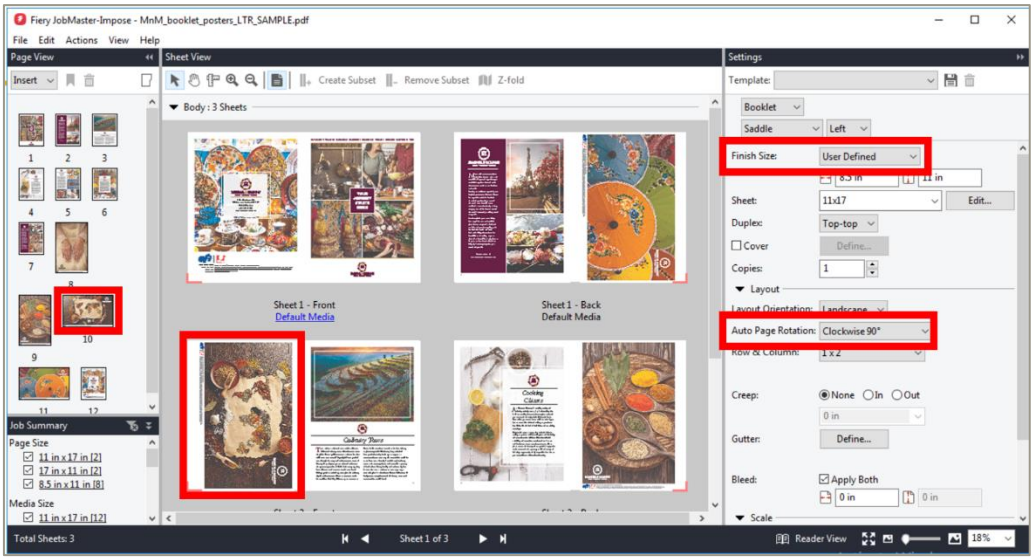
Auto page rotation

When jobs come in, they sometimes contain pages created with a different page orientation than the rest of the document. This requires users to pick out those pages, and rotate them to print with the right orientation and paper size.

With Auto Page Rotation, Fiery Impose can automatically detect and rotate pages in a job to ensure that all pages have the same orientation. Users can also include the rotation requirements in a Fiery Impose template, and apply it to automation workflows using User Defined or Based on Trim Box finish sizes.

This capability is especially important for transactional printing, where a job contains hundreds or thousands of pages, and some pages need to be rotated before the job can be imposed.

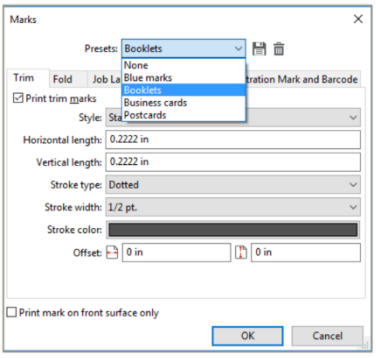
Auto Page Rotation can be automated with Imposition templates using Fiery Hot Folders and Fiery JobFlow workflows.



Auto page rotation

Presets for marks

Users tend to use the same printer marks repeatedly. Now they can save their preferred mark settings as presets on a client computer and reuse them for future jobs. The ability to reuse mark settings with one click will help users speed up their imposition setup.

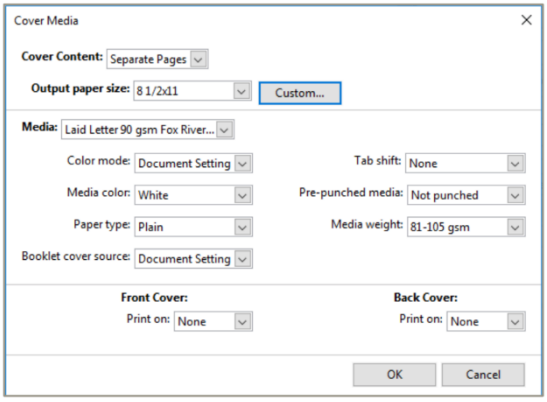


Presets for marks

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Mixed Media for VDP booklet covers

With variable data printing becoming more popular, users like the capability to define a booklet layout for VDP jobs with Fiery Impose. This new feature will allow users to set media for the covers of VDP booklets that is different than the body pages. It's supported in external Fiery servers running Fiery FS150 Pro software and above.



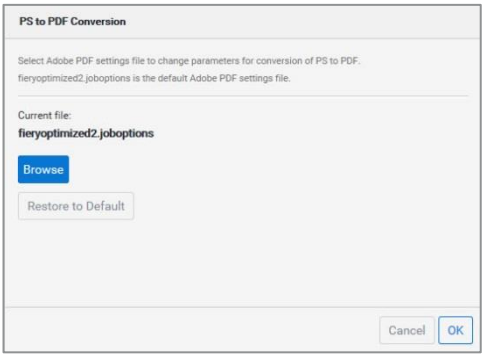
Cover Media definition for VDP jobs

Modify PS to PDF conversion option

The PS to PDF conversion occurs every time a PostScript (PS) file requires the use of imposition functions in the print driver, Job Properties, or a server preset.

These imposition functions are found at the Layout tab in Job Properties and include booklet, gangup, and Impose settings.

The conversion of PS to PDF is defined by a jobOptions file created with Acrobat Distiller. A variety of settings control how the conversion occurs. The factory jobOptions file is "Fieryoptimized2" and users can see all settings using Acrobat Distiller.



Select a different jobOptions file in Fiery Configure

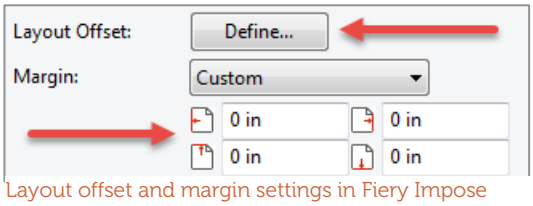
In some specific scenarios, users may need to change some of the settings in Fieryoptimized2 to adapt the PDF conversion to their workflow needs. For example, a user could use a jobOptions file that ensures all pages print with black toner only, preventing a color click charges, or use a jobOptions file that reduces the file size, therefore speeding up the RIP time. Any setting that Distiller offers could potentially be set in a jobOptions file to help solve a specific workflow problem.

This new feature provides users with the flexibility to customize the Adobe Distiller jobOptions file by uploading the new file to the Job Management section in Fiery Configure.

Automation for layout offset and margin settings

This feature enables users to save the layout offset and sheet margin settings in Fiery Impose to a template. With this template, they can then automate the offset using Fiery workflows through Fiery Hot Folders, virtual printers, server presets, and Fiery JobFlow.

For more information on the layout offset and margin settings features visit the Fiery Command WorkStation 6.1 what's new document.



Layout offset and margin settings in Fiery Impose

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

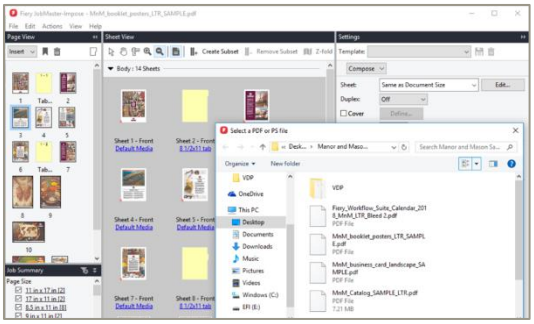
Free 30-day trials

Similar to Fiery JobMaster; Fiery JobFlow; and Fiery Graphic Arts Package, Premium Edition; users have a chance to experience the benefits of Fiery Impose for free for 30 days. Users can request a 30-day trial license at efi.com/impose.

A Fiery Impose trial license will not give users access to Acrobat Pro or Enfocus PitStop Edit. Those additional tools are available in the full Fiery Impose, Fiery Compose or Fiery JobMaster licensed products.

Fiery Compose

Fiery Compose provides centralized document assembly, page-level ticketing, content preview, and powerful editing features including a tab creation interface. Compose is designed to be the core toolset that operators use to prepare documents for printing. Because Compose launches from Command WorkStation 6, it can run on the user's desktop computer 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 users to perform complex document functions. In addition, sophisticated tools with familiar Fiery user interfaces reduce training requirements and increase the user's resource base.

From a single integrated window, users manage tabs and specify mixed media, taking advantage of the fully automated digital printing process to produce finished documents with minimal user intervention. Integration with the Paper Catalog's centralized paper warehouse database also makes it intuitive for users 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 workspace 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 labor-intensive document preparation activities and shorten job setup times of even the most complex jobs.

Compose provides centralized document assembly, page content preview, and editing. Functions include:

- **Page view:** Simplifies document setup and navigation in large jobs. Enables users to view the entire document — including inserts, tabs, and chapter starts — and visually confirm media color 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.
- **Tab printing:** Provides intuitive tab printing functions; allowing users to insert, add, or remove tabs. 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:** Easily specify any page or sheet surface to print in black and white during the makeready stage to save on click charges.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- **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 and apply them 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 local press operators or remote prepress specialists, without the need to invest 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

Fiery Compose to Fiery JobMaster upgrade

Fiery Compose customers who have a Fiery server that supports Fiery JobMaster can upgrade from Fiery Compose to Fiery JobMaster by purchasing an upgrade license. Check the Fiery JobMaster supported printers list at http://fiery.efi.com/jobmaster/supported-printers.

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, stamping, 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, users 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.

Fiery JobMaster includes the following features in addition to the ones found in Fiery Compose:

- **Quick page selection:** Allows users to accelerate job preparation by navigating long documents and locating pages quickly by filtering page properties
- **Advanced tab creation with visual content preview:** The preview changes dynamically as users specify tab ear settings and content that can include images, color background, logos, and formatted text.
- **Import scanned images:** In addition to scanning documents directly into JobMaster using Fiery Remote Scan or supported 3rd party scanners, users can insert previously scanned documents into the job assembly process with advanced cleanup tools.
- **Cleanup tools for scanned documents:** 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:** Users 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.

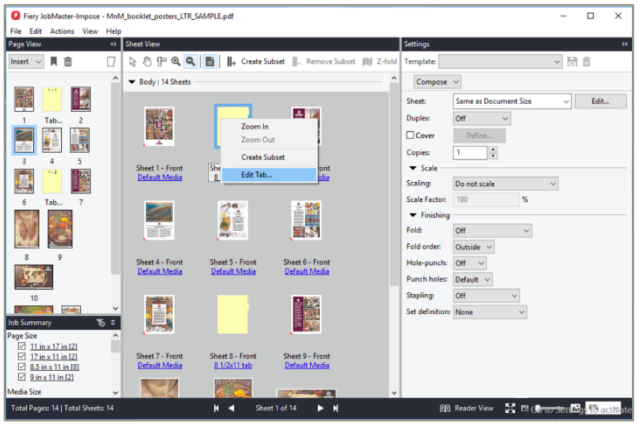
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- **Image editing:** Users can touch up scanned pages without leaving Fiery JobMaster. With it, users can open any third-party image editor installed on a client computer. This might include Microsoft Paint, GIMP, Adobe® Photoshop®, and Preview for macOS.
- **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.
- **Image stamping:** Easily adds company logos, watermarks, and graphic illustrations to documents in the makeready process. This allows users to customize a job quickly, without requiring a designer to go back to the native application.
- **Job duplication:** Replicates a page or a set of pages to produce forms, coupons, and ticketing jobs with ease
- **NCR form creation:** Allows users to quickly create multi-part forms and fulfill complex numbering and stamping requirements

Benefits:

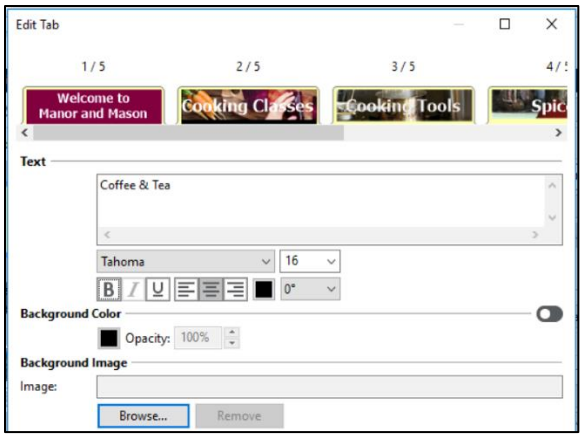
- Provides a makeready solution that is fully integrated with Fiery Impose
- Provides a flexible makeready solution that can be available to either local press operators or remote prepress operators, without the need to invest in a dedicated desktop client
- Offers the ability to edit a job by adding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

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



Fiery JobMaster visual interface

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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 color at the edge of the page, the finished job needs to be trimmed at the edge of the book.

Benefits:

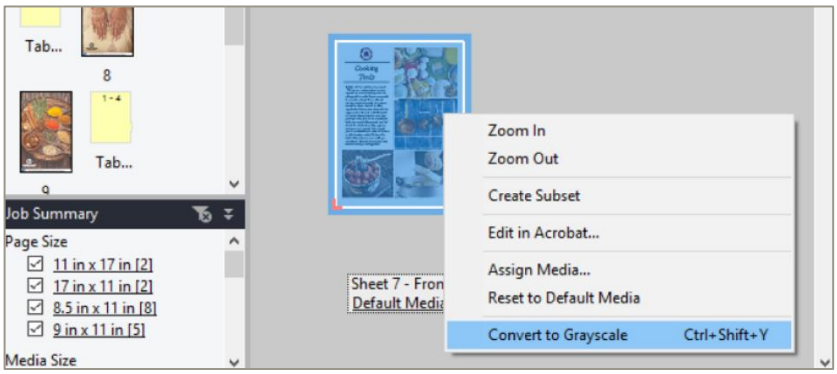
- Helps produce fully finished jobs with well-defined sections, without the use of special tab media
- Offers printers a new and different type of value-added application to provide their customers

Convert to Grayscale

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

Users can easily specify for 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 as 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 scenarios such as these:

- A long manual that is heavy on text has blue hyperlinks throughout the document. If the customer doesn't care if hyperlinks print in blue, the user can turn all body sheets into grayscale in Sheet View to save on click charges, after laying out the booklet.
- A customer wants the back of her business card printed in black and white. The user selects the back page in the Page View panel and converts it to grayscale.

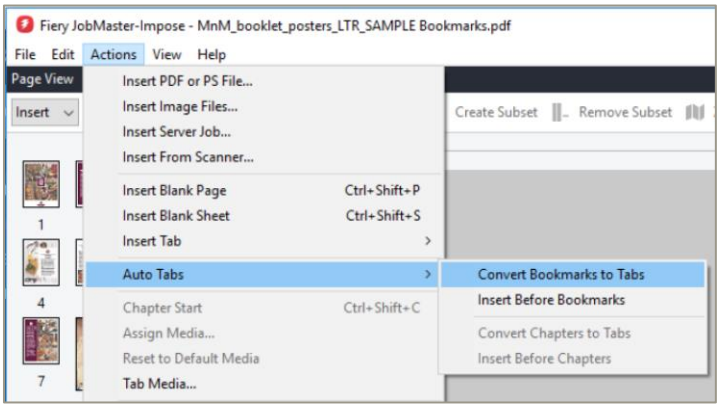
Auto Tabs

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.

This 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.



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

This feature is useful in these scenarios and more:

- The print buyer provides a PDF file for each section of a training manual. The user 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.

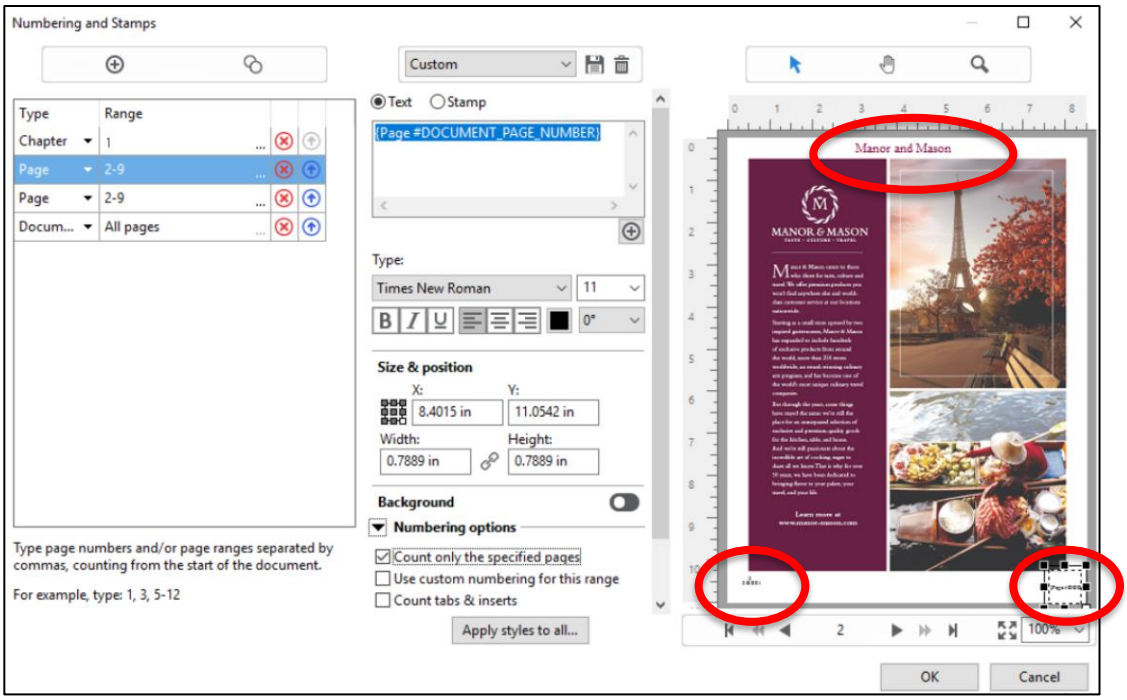
Advanced Page Numbering offers ease of use and flexibility to meet various document numbering requirements in long documents. It allows users to create unique numbering sequences for one or multiple sections, using a combination of custom text, formats, and macros.

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 users can define all page numbering formats at once.
- A job requires restarting page numbers because of inserts and dividers that should not be numbered. Advanced Page Numbering can automatically detect chapter starts to skip and restart numbering.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- 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.

Image stamping

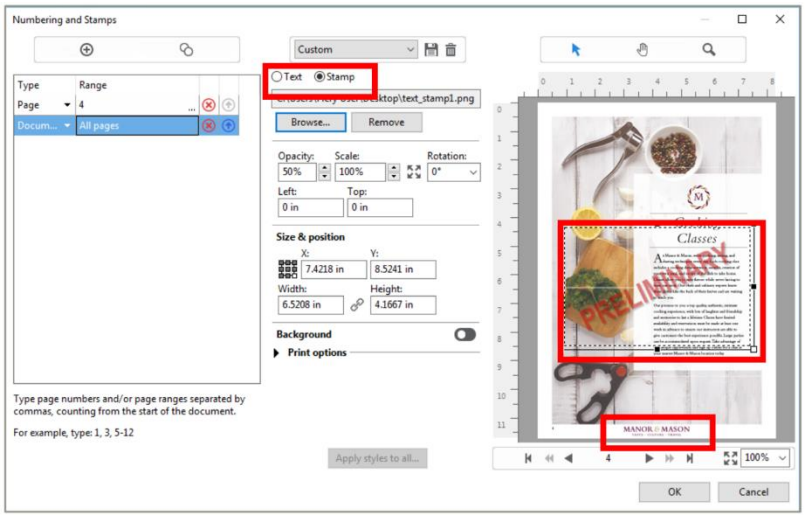
Users now have an easy way to add company logos, watermarks, and graphic illustrations to documents in the makeready process. This allows users to customize a job quickly without requiring a designer to go back to the native application.

They can add images to a page or a range of pages with just a couple of clicks. There is no limit to the quantity of images users can add, and pages can have more than one image on them.

The Image Stamping feature offers a wide variety of adjustments that provide finer control of stamp placement, and give users more confidence that they can comply with a customer's job requirements and deliver a more polished job.

Users can preview all image adjustments with instant visual feedback. Some of the adjustments include image location, opacity, size, rotation, offset, and background color.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Stamp options

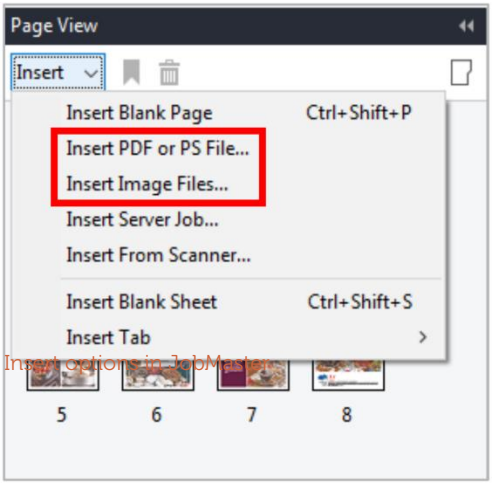
Import scanned images

In addition to scanning documents directly into JobMaster using Fiery Remote Scan or other supported 3rd party scanners, users can insert previously scanned documents into the job assembly process with enhanced cleanup tools.

Users can insert scanned documents in PDF or in all commonly used image file formats (bmp, gif, jpg, jpeg, pdf, tif, png, and tiff).

When users insert files, JobMaster automatically detects scanned pages in the document and will display only the scanned pages in the Preview & Edit window for cleanup.

Poorly scanned documents may need additional manual de-skewing. New fine rotation controls in the Preview & Edit interface let users apply up to 15 degrees of rotation to the selected pages.



Insert options in JobMaster

With this feature, there are now three ways users can insert scanned documents:

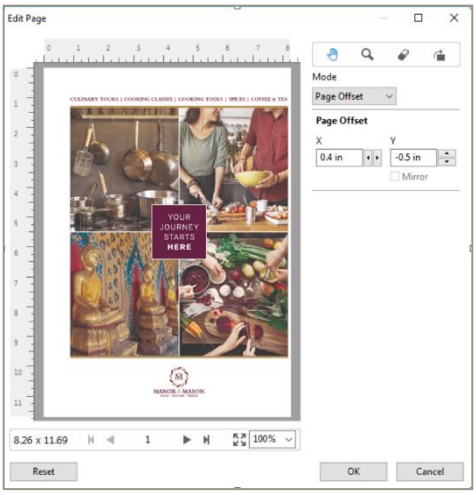
- Inserting PDF files — JobMaster can automatically detect if there are scanned pages in the document, and will display only the scanned pages in the Preview & Edit window for cleanup before inserting the file.
- Inserting an image file — Users select one or multiple image files, and JobMaster will display the scanned pages in the Preview & Edit window for cleanup before inserting the files.
- Inserting from scanner — JobMaster performs the scanning process and presents the Preview & Edit window before importing the file.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Page offset

Now users can easily move page content to accommodate various finishing requirements in the Page Edit interface. They can move the page placement up and down vertically, and left and right horizontally to make room for finishing such as hole punch, bleed-edge tabs, staples, or coil binding. They can also mirror the new page placement in duplex jobs.

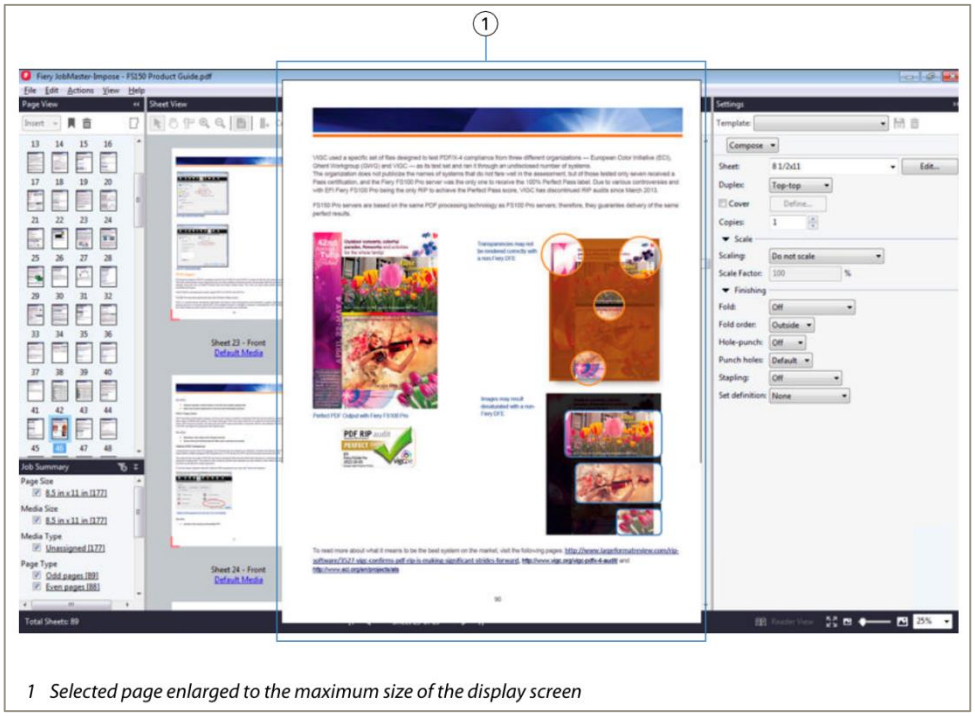
This type of fast page-content adjustment helps users deliver professional-looking print products quickly.



Page Offset mode in Edit Page window

Quick zoom

The Quick zoom feature helps users quickly and efficiently identify pages that need to be edited. Press the Alt key and right-click a page in the Page View of Fiery Impose, Fiery Compose, or Fiery JobMaster to show the selected page enlarged to the maximum size of the display screen. Release the right-click to close the enlarged page image.



1 Selected page enlarged to the maximum size of the display screen

Enlarged view after pressing the Alt key and right-click on a page

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

New features in Fiery JobMaster

Image editing

The image editing feature enables users to touch up scanned pages without leaving Fiery JobMaster. With it, users can open any third-party image editor installed on a client computer. This might include Microsoft Paint, GIMP, Adobe® Photoshop®, and Preview for macOS.

Then users can apply image-editing functions offered by user-preferred third party image editor. Commonly used image editing functions include adding content, deleting content, pasting or moving content on the page or between pages, and more.

Once the user saves the edits and closes the image-editing application, the edits are instantly available to preview in Fiery JobMaster to make editing a seamless and error-free task.

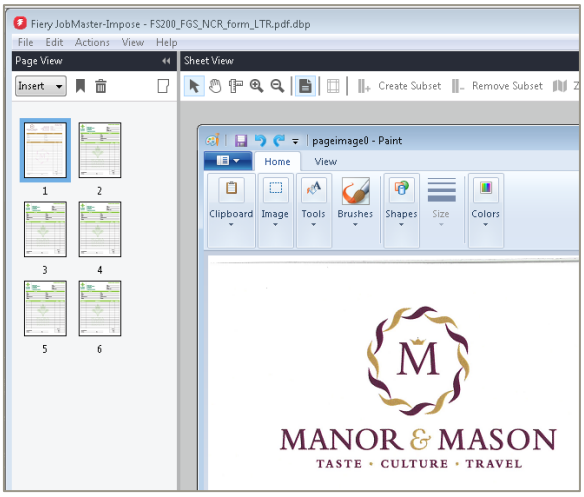
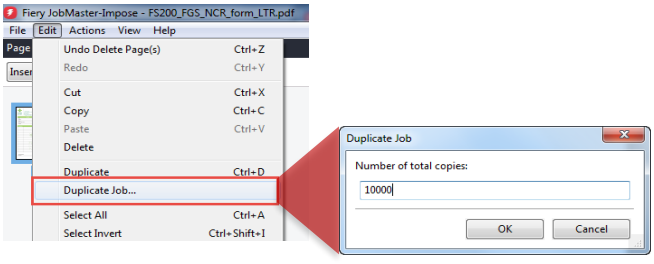


Image editing in Fiery JobMaster

Reduce file size for duplicate pages

Fiery JobMaster significantly reduces the file size after assembling a job that requires page duplication. The improvement is clear when producing jobs such as tickets, coupons, forms, or postcards that require a large number of duplicate pages. Users will notice much faster times for saving and job RIPping.



Duplicate Job in Fiery JobMaster

Fiery Remote Scan updates

The Fiery JobMaster version included with Fiery Command WorkStation 6.3 only supports 64-bit macOS and Windows operating systems. While previous versions of JobMaster supported the 32-bit TWAIN driver, this version of JobMaster no longer supports it. Most scanner manufacturers don't provide a 64-bit version of their

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

TWAIN driver. Instead, they use the native OS scanning protocols, WIA for Windows computers and ICA for macOS computers. This version of JobMaster adds support for WIA and ICA drivers as well as support for the new Fiery Remote Scan plug-in released as part of Command WorkStation 6.3.

These protocol changes don't affect the scanning functionality offered by Fiery JobMaster.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 functions are consistent across different Windows and Mac operating systems, as well as in the Job Properties user interface.

Fiery Driver 6.3

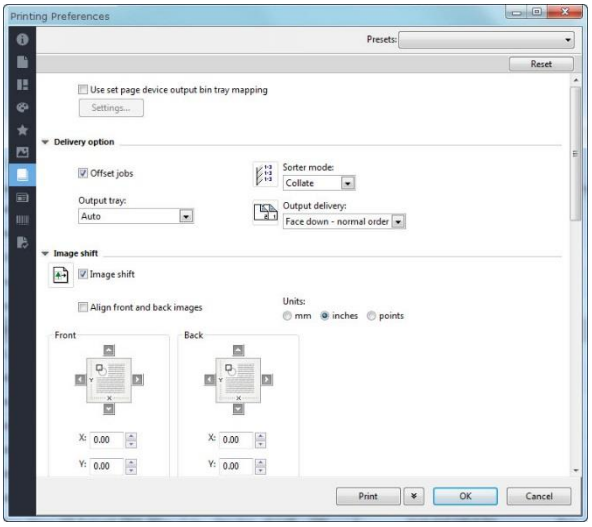
The Fiery Driver in Fiery FS350 Pro servers has been upgraded to version 6.3 that offers a highly improved user experience with a modern design that is consistent with Fiery Command WorkStation 6.

Print settings' sections are presented vertically with sidebar navigation tabs that take less space and expand the print settings area to minimize scrolling down to find settings.

Fiery Driver 6.3 also complies with:

- EV Signature, Microsoft's more stringent code signing certificate requirement
- Command line installation that enables the use of enterprise deployment tools

For Windows clients, users no longer need to access print properties to find the duplex or "Print of both sides" selection. The duplex setting can be found in the application's print dialog.



Fiery Driver 6.3 modern design

Fiery Driver 6.3 fully supports HiDPI monitors, following the Microsoft Windows display scale and layout settings, so fonts and other items can be scaled at a different size to the overall display resolution.

Supported operating systems include Windows 7, 8.1, 10, Windows server 2008 R2 and higher and Mac 10.11 and higher.

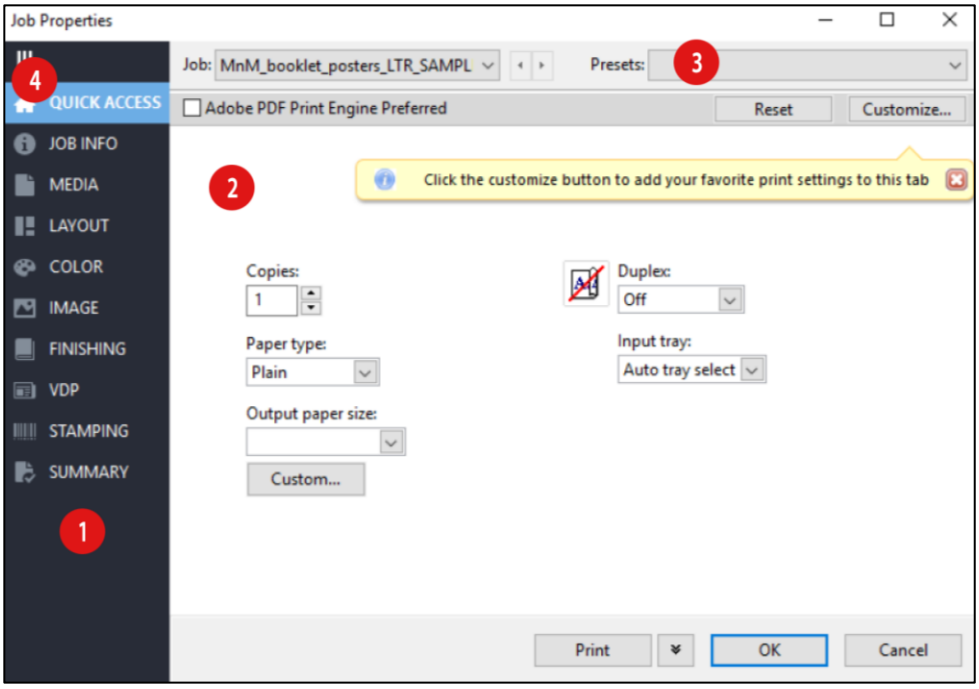
To download the latest Fiery drivers for your print engine visit this web page.

User interface

The simple-to-use user interface (UI) presents the quick access tab with the basic printing options most commonly used in a distributed print environment. For more advanced users, printing options are categorized into tabs based on an user-centric model.

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, users see a scroll bar to show all the available print options.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Presets (3) allow the user to save predefined print settings as a retrievable template. The templates let users define settings based their own common printing scenarios. Administrators can also create Server Presets, and share those settings with Fiery users.

A customizable, quick-access tab (4) allows users to quickly and easily access the PPD settings use most often in their particular workflows.

Available for Windows and Mac platforms, Fiery drivers provide consistency across all supported client platforms.

Mixed Media settings

Users select the Fiery Mixed Media settings directly from the Fiery driver and Job Properties, and specify various finishing options and media types for certain sections or chapters. The feature also integrates with other features such as VDP and Fiery Impose.

Benefits:

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

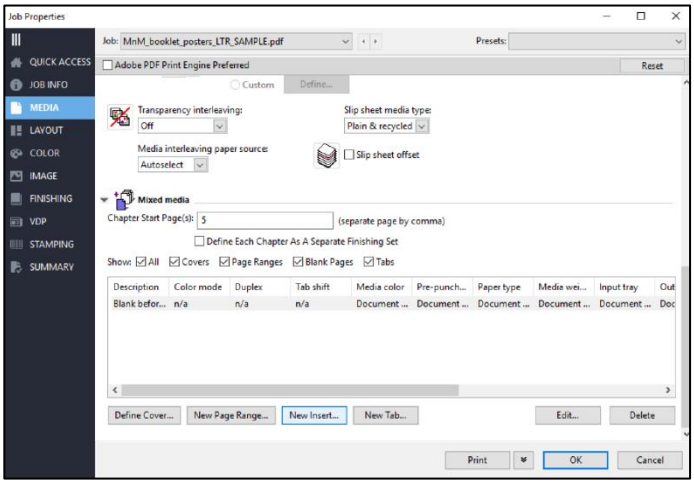
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Mixed Media viewer for perfect binding

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

Users can specify multiple types of media for perfect-bound books. Plus, it automatically handles pagination so that perfect-bound jobs with different media print as expected. It shows users how a spine is included as the last page of the document.

The viewer adds a mixed-media interface directly into the perfect-binder user interface, and a wireframe mode to the perfect-binder mixed-media interface — giving users quick and easy visual feedback.



Mixed Media viewer user interface in Fiery driver and Job Properties

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

Benefits:

- Gives the user precise controls over pagination
- Provides quick and easy visual feedback for 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 pages that are affected by a media definition

Tab Shift

Most software 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 user 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:

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- 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.
- The tab media. Users select the media type, paper size, paper source, and paper catalog.
- Tab sequence (forward/reverse). This 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. Here, the user 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 functions 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 needing to know 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 dialog 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 ways to select the output profile from the Fiery driver or Job Properties on Command WorkStation 6. If the Output Profile option is set to Use Job Defined Settings, the Fiery system's Media Defined Profile feature automatically applies the color profiles defined for that particular media. 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 for each sheet surface, specifying the correct profiles for front and back independently.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Benefits:

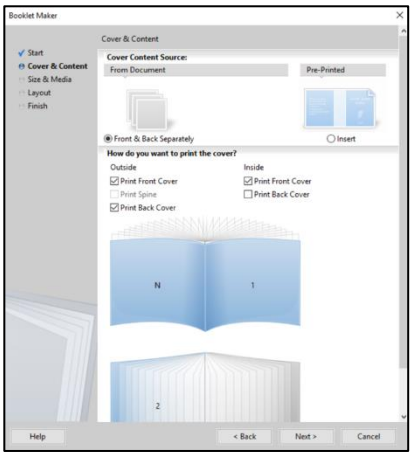
- Provides the most accurate color output for mixed-media jobs with media-driven color profiling
- Offers easy-to-match color profiles for each media through the simplified interface, for best quality color output

Booklet Maker

The Fiery Booklet Maker is an imposition tool in Job Properties that comes standards with all Fiery servers that allows users to print multiple pages of a print job, from any software 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, so it can 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 minimizes training requirements, and a graphical and intuitive wizard-based interface guides the user in setting up professional-looking booklets more quickly and with fewer errors
- Meets basic imposition requirements, with an upgrade path to Fiery Impose for expert users

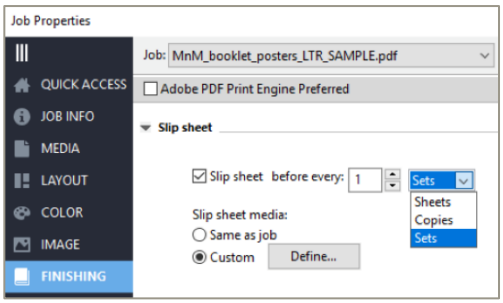
Support for offline finishing

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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Slip sheet

The slip sheet setting allows users to inject blank or preprinted sheets 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 users to see the breaks in the job. This feature also handles interleaving of various media, including transparencies.



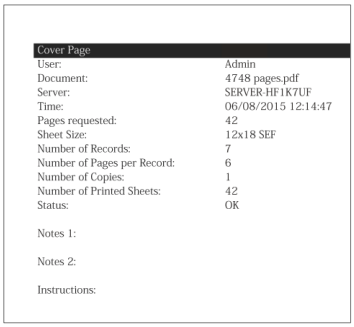
Slip Sheet setting in the Finishing tab of Job Properties.

Users 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

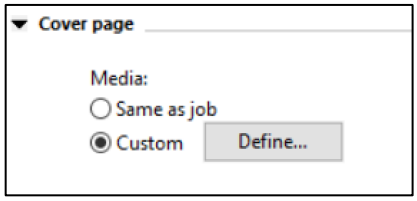
The job cover page prints a cover page containing job information after the last sheet of the job. This gives users another way to better identify the beginning and the end of a job and additional job details.



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

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, and cannot be modified by the administrator.



Cover page setting in the Finishing tab of Job Properties

Offset by sheets, copies, or sets

The Offset feature shifts the placement of the output during printing, so that the job can 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

Offset setting in the Job Properties' Finishing tab.

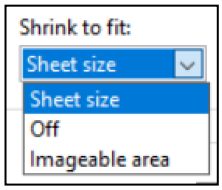
This feature is also available in Fiery Configure, in case administrators require all jobs to be offset between jobs.

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 the setting:



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

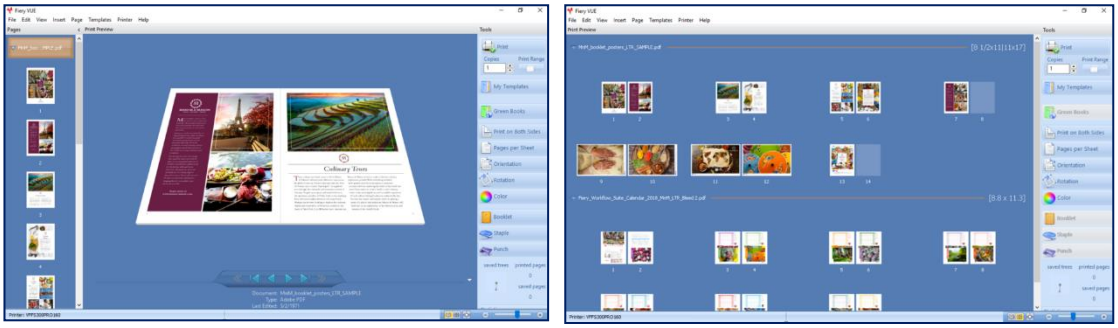
- Sheet size: scales the image to the sheet size of the selected media
- Imageable area: scales the image to the printable area of the sheet

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 minimizing waste and using Fiery VUE Green Statistics to monitor the ways a job can be produced to be more "green."



Fiery VUE runs on 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 Fiery VUE settings 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
- Simplifies document assembly with drag-and-drop operations to combine or re-order Microsoft Office files and pages
- Saves time and money with desktop document controls that produce customized materials in a short time
- Reduces eco-footprints with the interactive 3D preview mode, Green Books auto-templates for booklets, and the new Green Printing Statistics which allows users to track paper savings by weeks and months

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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:
  - USB thumb drives
  - USB adapters for removable media (such as compact flash, smart media, and memory stick)
  - USB hard drives
- Fiery QuickTouch browsing capabilities on NX external servers such as:
  - 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 is essential in a successful document-production facility.

The Fiery Paper Catalog is a centralized paper database that stores attributes of the media stock at the production site. Users 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.

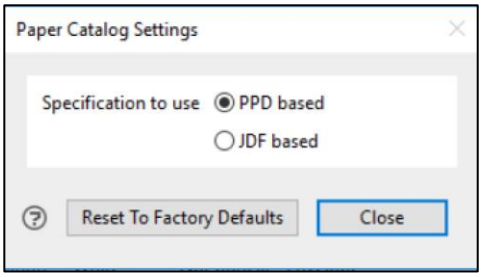
Instead of defining media for each job (with attributes such as size, media type, tray, media weight, color, etc.), Paper Catalog lets users define each media in the shop just once, and then select that definition for each job.

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 are the same displayed on the media packaging, making it very easy to define new media on the system. This reduces the number of times users 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:

- Defines a name for each media attribute combination
- Facilitates media selection at job submission by:
  - Associating trays with loaded media stock
  - Automatically using predefined color profiles for each media (Media Defined Profiles)
  - Facilitating a centrally maintained paper catalog
  - Allowing PPD-based jobs and Paper Catalog–based jobs to coexist in the server

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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 catalog into Paper Catalog
- Export or delete selected entries
- Associate color profile for printer/copier catalog 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 color profiles for each media through a simplified interface, for the best quality color output
- Translates the paper selection to the shop's classification system for paper stock, helping keep inventories up to date and reducing obsolescence
- Provides an engine-agnostic approach to paper catalog management
- Integrates use of Fiery JDF to reduce the number of times a user needs to configure the same media for the same job in different workflow steps

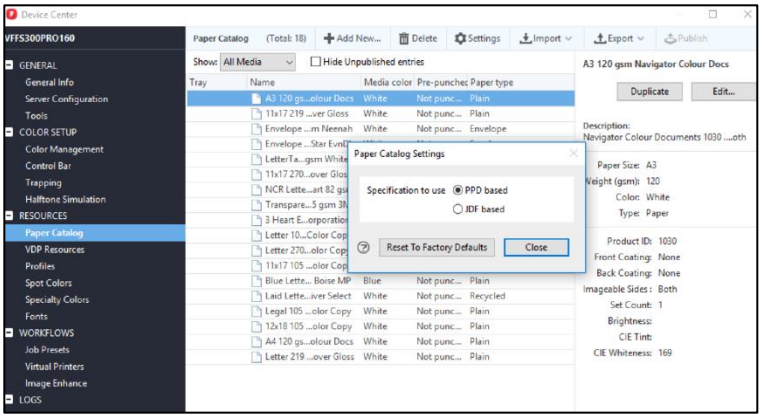
Paper Catalog based on PPD specifications

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 color profile.

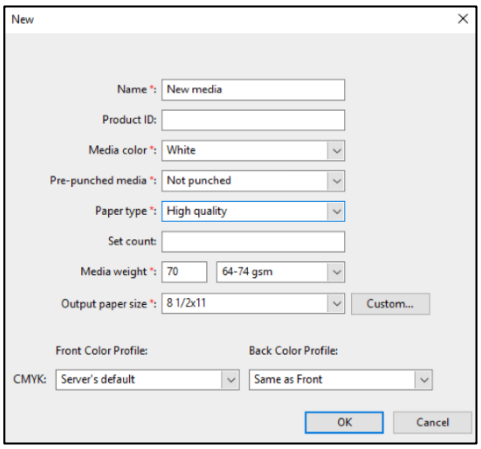
JDF media specifications can have over 35 different attributes per media entry in the Paper Catalog. However, customers can now also use Paper Catalog with non-JDF workflows.

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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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

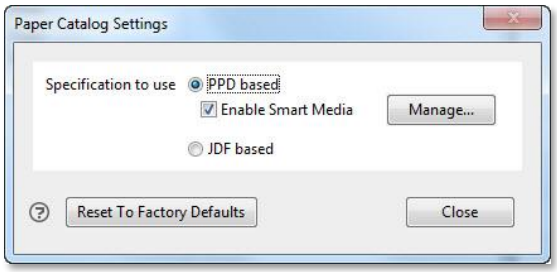


Benefits:

- 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

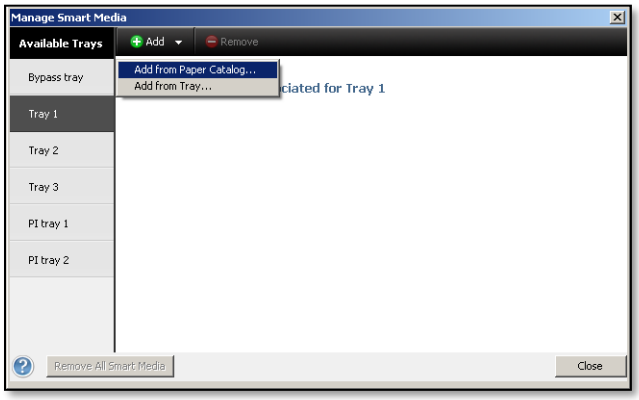
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 users which paper to load. Smart Media allows the Fiery server to remember these favorite 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.

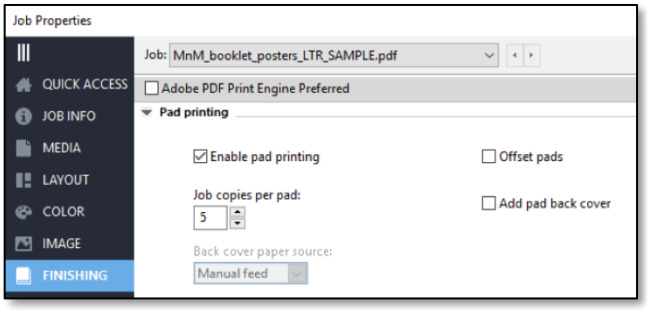
Benefits:

- 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 favorite (smart) media is loaded in a tray
- Increases reliability for media-driven workflows: minimizes errors when setting up media and user intervention

Pad printing

Pad printing gives users the ability to print multiple copies of a job without having to perform unnecessary mental calculations or multiple steps. Previously, the user 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 user specify pad-printing parameters. The user 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



Users can select the number of copies per pad.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 users 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.

Benefits:

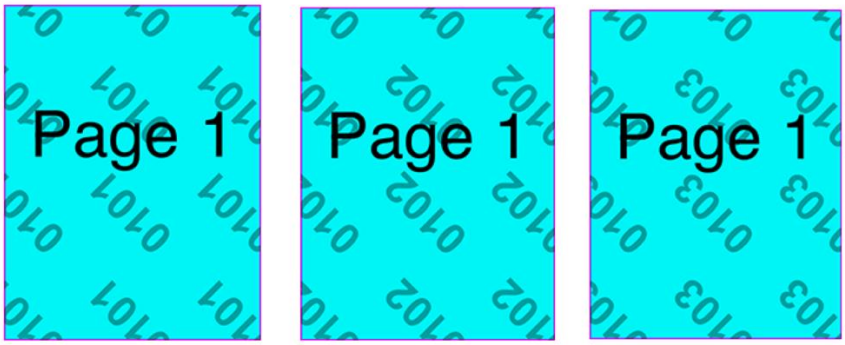
- Simplifies and streamlines pad printing
- Enables the user to create a pad easily from a single-page job
- Minimizes manual collation of the printed output

Copy Numbering

This feature provides the option of adding a simple copy number watermark that repeats over the pages of a job. It is useful for legal and government documents to provide identification, copy protection, and automatic consecutive numbering of pages.

The copy numbering feature is only available in external Fiery servers and is an entry-level version of the advanced numbering capabilities offered in Fiery JobMaster™.

Users can access the feature in Job Properties and save settings for future automated workflows using Fiery Hot Folders, job presets, and Fiery JobFlow™. Users can configure the angle, transparency, font size, and starting number of the watermark.

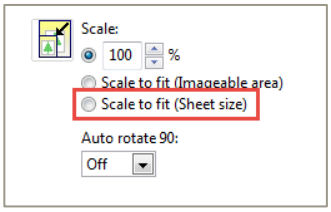


Three copies of a page with copy numbering:
Start number: 101, font: 100 pt., transparency: 35%, angle: 135°

Scale to fit sheet size

The Fiery driver and Job Properties include a setting to scale the page layout to fit the sheet size, in addition to the imageable area.

This new setting allows printing full bleed when supported by the printer or maximizes the printed surface when the design has white background.



Setting in job properties and Fiery driver

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery Remote Scan

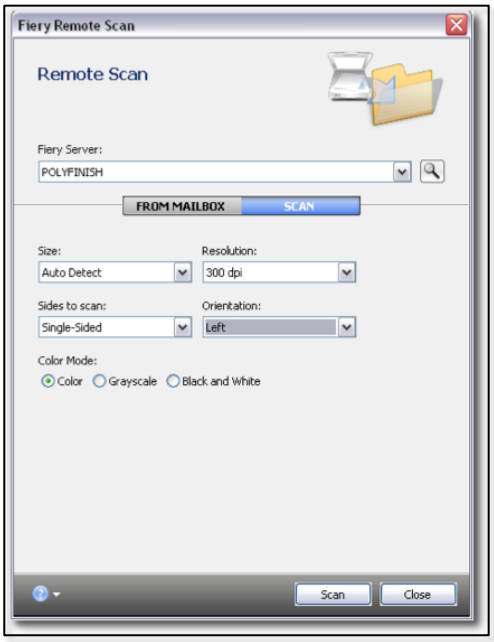
Nearly all new documents today exist in digital form. Most corporate and print-production workflows are designed to handle digital documents efficiently. However, there are still substantial volumes of hardcopy documents that users sometimes need to include in their digital document workflows. Scanning 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 application runs on both Windows and Macintosh operating systems, and allows the user to initiate new scans.

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 incorporates auto discovery, making it easy to add networked Fiery servers to the list of available servers.



Fiery Remote Scan auto discovery

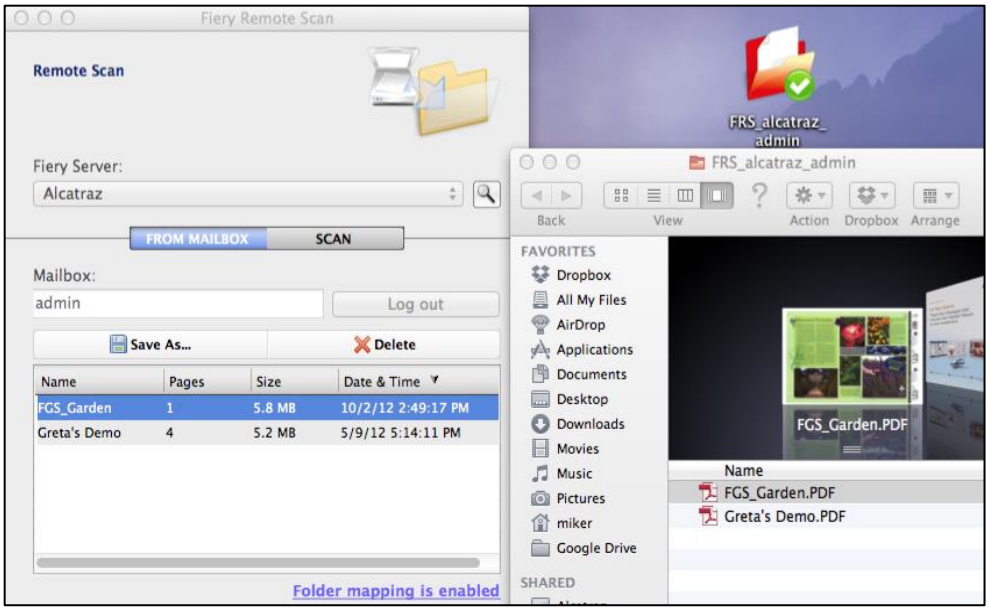
Benefits:

- Turns any Fiery Driven device into a high-quality scanner
- Reduces the need to store and track hardcopy documents, decreasing overhead costs and improving efficiency
- Provides flexible scan initiation options, including the copier scanner

Folder Mapping

Folder Mapping allows users who scan from the Fiery server to synchronize 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Color & Imaging

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

Every Fiery server is PANTONE® Color-enabled and comes with press-manufacturer-approved color profiles for common printing stocks. These profiles are used to manage process color output, and are also used to create spot-color-matching tables for Fiery Spot-On, so that spot colors 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 — even for reprints. Fiery Calibrator includes features such as the ability to use an ES-2000 spectrophotometer, job-based calibration, and calibration guard. In addition, users can take advantage of the print engine's inline measuring devices for calibration and profiling from Fiery color management tools, making these routine processes run much faster and more efficiently.

Users 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 PDF or PostScript print files.

The following table represents the standard configuration for each respective Fiery server platform and system version combination driving color digital printers. ***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.***

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

Feature name	NX Premium	NX Pro	NX One	E400
CMYK/grayscale				
CMYK source profile	✓	✓	✓ (color only)	✓
CMYK rendering intent	✓	✓	✓ (color only)	✓
Grayscale input profile	✓	✓	✓ (color only)	✓
Pure primaries	✓	✓	✓ (color only)	✓
RGB/Lab				
RGB source profile	✓	✓	✓ (color only)	✓
RGB rendering intent	✓	✓	✓ (color only)	✓
Device Link Profile support	✓	✓	✓ (color only)	✓
Media Defined Profiles	✓	✓	✓ (color only)	✓
Embedded profile support and override	✓	✓	✓ (color only)	✓
Spot color processing support	✓	✓	✓ (color only)	✓
PANTONE Color-enabled	✓	✓	✓ (color only)	✓
HKS, DIC, Toyo Ink named color profiles	✓	✓	✓ (color only)	✓
Fiery Spot-On	✓	✓	✓ (color only)	⊙
Spot color group priority	✓	✓	✓ (color only)	⊙
Substitute colors	✓	✓	✓ (color only)	⊙
Composite Overprint for Spot Colors	✓	✓	✓ (color only)	⊙
Specialty colors	SFM	SFM	SFM	SFM

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Feature name	NX Premium	NX Pro	NX One	E400
Color processing				
Composite overprint for CMYK	✓	✓	✓ (color only)	✓
Composite overprint for grayscale	✓	✓	✓ (color only)	✓
Combine separations (CMYK)	✓	✓	✓ (color only)	✓
Unlimited separations	✓	✓	✓ (color only)	-
Auto Trapping (fixed)	✓	✓	✓ (color only)	⊙1
Optimize RGB transparency	✓	✓	✓ (color only)	✓
ImageViewer curve presets	✓	✓	✓ (color only)	✓
Use maximum printer density	SFM	SFM	SFM	SFM
Proofing				
PDF/X output intent	✓	✓	✓ (color only)	-
Paper simulation (fixed paper white)	✓	✓	✓	-
Halftone simulation	✓	✓	✓	-
Softproof - ImageViewer	✓	⊙	⊙	⊙1
Image settings				
Text/graphics quality (engine dependent)	SFM	SFM	SFM	SFM
Image Enhance (in-RIP)	✓	✓	✓ (color only)	✓
Image Enhance Visual Editor	✓	✓	⊙1 (color only)	⊙1
Dynamic HD Text and Graphics	SFM	SFM	SFM	-
Image smoothing	✓	✓	✓	✓
Color Editor	✓	✓	✓ (color only)	✓
Profile Manager for ICC profiles	✓	✓	✓ (color only)	✓
Edit profiles	✓	✓	✓ (color only)	✓
Device Link profile support	✓	✓	✓ (color only)	✓
Calibration				
Calibrator	✓	✓	✓	✓
Color Cal (with autogray)	✓	✓	✓ (color only)	✓
ES-2000 support	✓	✓	✓	✓
Calibration comparison page	✓	✓	✓ (color only)	✓
User Defined Calibration	✓	✓	✓ (color only)	✓
Calibration Guard	✓	✓	✓	✓
Job-based calibration	✓	✓	✓	✓

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Feature name	NX Premium	NX Pro	NX One	E400
Fiery Graphic Arts Package, Premium Edition	✓	⊙	✓ (color only)	-
Fiery ImageViewer	✓	⊙	✓ (color only)	⊙[1]
Object Inspector	✓	⊙	✓ (color only)	⊙[1]
Total area coverage	✓	⊙	✓ (color only)	⊙[1]
Automatic preflight	✓	⊙	✓ (color only)	-
Postflight	✓	⊙	✓ (color only)	⊙[1]
Paper Simulation (white point editing)	✓	⊙	✓ (color only)	⊙[1]
Halftone simulation w/ freq. per color	✓	⊙	✓ (color only)	-
2-color print mapping	✓	⊙	✓ (color only)	-
Configurable Auto Trapping	✓	⊙	✓ (color only)	⊙[1]
Graphic arts filters for Fiery Hot Folders	✓	⊙	✓ (color only)	⊙[1]
Control bar	✓	⊙	✓ (color only)	⊙[1]
Control bar builder	✓	⊙	✓ (color only)	⊙[1]
Progressives	✓	⊙	✓ (b&w only)	-
Fiery ImageViewer for black and white	-	-	✓ (b&w only)	-
Fiery Color Profiler Suite	⊙	⊙	✓ (color only)	⊙
ES-2000 spectrophotometer	⊙	⊙	⊙	⊙
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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Integration with Adobe PDF workflows

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 end-to-end PDF workflow, and helps them improve the consistency and flexibility of the printed output from design to print.

With the support of APPE v4, Fiery NX Premium server platforms achieve new performance efficiencies and breakthrough rendering features. PDF Print Engine 4 shares the same core technologies used in Creative Cloud applications, and has been updated and optimized for them. This guarantees consistency and reliability across proofing cycles, minimizing errors and the need for last-minute fixes. The v4.0 enhancements announced by Adobe can be found at: adobe.com/bg/products/pdfprintengine.

Fiery FS350 *Pro servers include* version 4.4 of the Adobe PDF Print Engine (APPE) interpreter. Version 4.4 adds support for the following features:

- Overprinting of up to 123 spot colors
- A fix for an Adobe defect on CMYK+ transparency rendering
- Multi-threaded transparency blending: improves processing performance for jobs with transparencies

For additional information on APPE 4.4 visit this web page.

Fiery servers offer extended support for APPE that enabled them to pass the Perfect PDF standards defined by the VIGC group in 2012. This is important to professional print providers. 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 for unnecessary color clicks.
- Applying different halftones for text, graphics, and images — to optimize 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 Colors — to match brand colors in Microsoft Office documents

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

This dual interpreter configuration is standard for external Fiery servers shipping with Fiery Software System 9 R2 and above. This feature guarantees workflow interoperability. It also gives users the option to process PDF files using the APPE or conventional PostScript interpreter with a simple click of the mouse, and to meet the specific print output requirements.

Feature 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, 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

printers face today in producing creative, effective, and accurate documents. Because of this, 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 transparencies, especially when the transparency interacts with black backgrounds
- The shop that wants to unify offset workflows operating with APPE with digital print workflows to ensure that the designer's intent is accurately reproduced on both types of press
- 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 color spaces, and layers are accurately reproduced.**	Yes. Fiery CPSI is a PDF/X-compliant interpreter, 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.
JDF compatibility	Yes	Yes
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.

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 files for offset, digital, and VDP — allowing the same PDF file to have a consistent output among print devices

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

CPSI 3020

Fiery FS350 and FS350 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

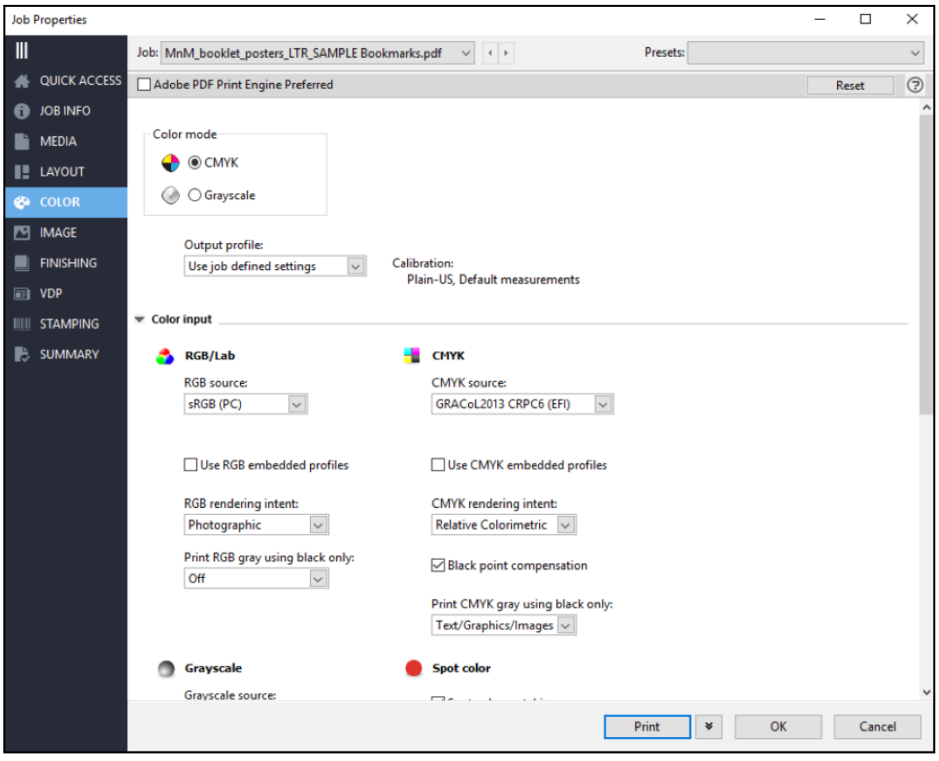
Color management settings

Fiery color management settings give the user maximum control over color 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 color management technology included in every Fiery server supports any input color space including CMYK, RGB, spot color, and device-independent. Controls allow operators 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 color, and have an intuitive and easy-to-use interface for configuring color management settings.

High-precision ICC-based color management

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

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



Fiery color setup in Fiery Command WorkStation

ICC-based color management for precise color matching

Fiery color technology offers great out-of-the-box color with features that color manage source files to deliver stunning color prints quickly, easily, and consistently. Fiery servers use ICC profiles for accurate color 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 color spaces, and use top-quality

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

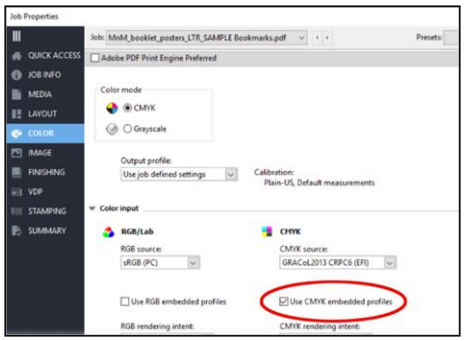
factory output profiles for the type of paper the job will run on. The Color Editor allows users to edit the tone curves in Fiery output profiles to provide visual matching or correction if required.

Benefits:

- Achieves maximum color control
- Minimizes user errors with an easy user interface
- Provides excellent color quality for professional digital color production
- Shortens learning curves 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 colors can be properly converted later in the workflow. For documents with a variety of color spaces defined by separate color profiles, Fiery servers are able to respect the source color profiles embedded in a document. The checkbox, Use embedded profile when present, specifies whether the server should use embedded color profiles or ignored them for RGB and CMYK sources.



"Use embedded profile when present" setting in Job Properties

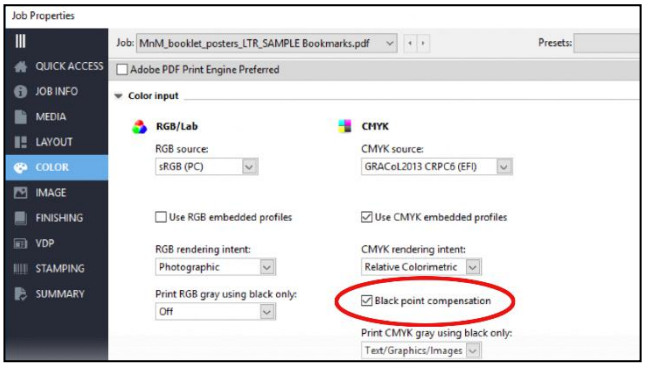
Benefits

- Gives users the flexibility to handle a variety of input color spaces based on embedded ICC source profiles
- Ensures that printed output will match the expectations of the document creator by using the embedded profiles in design documents

CMYK black-point compensation

CMYK black-point compensation uses Fiery color management to control shadow detail when converting CMYK colors. 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, users can disable the feature to more accurately render colors as they would appear with the reduced color gamut of such a press. Black-point compensation is always enabled for RGB color objects being color managed with the relative colorimetric 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 color for small-gamut processes such as printing on newsprint

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

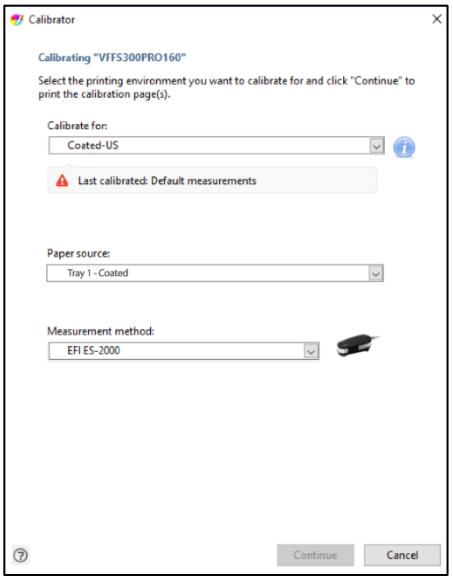
Calibration

Fiery Calibrator

Digital print engines are susceptible to gradual shifts in color 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 standardized color appearance. Users can do this by re-calibrating for paper stocks at regular intervals, or before printing jobs with critical color requirements. When the user re-calibrates, the Fiery server corrects for the current color behavior of the print engine.

Fiery Calibrator gives 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, users 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 color 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

EFI recommends the ES-2000 spectrophotometer for calibrating Fiery Driven print systems. Using a spectral meausuring device ensures the best color precision, and takes just a few minutes. The ES-6000 is a network-connected scanning spectrophotometer that reduces the time and effort required to color 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 letting any user 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 users to calibrate frequently and efficiently so that color output quality and system productivity are enhanced
- Ensures these same users do not have control over global color settings for the print system

Calibration Guard

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

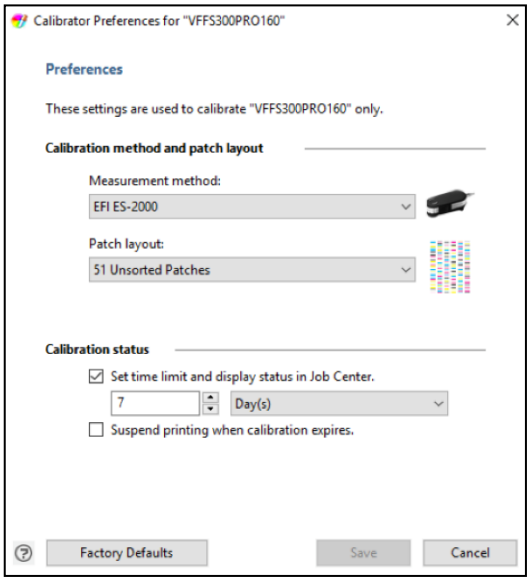
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

If a calibration has expired, Calibration Guard can warn the user or prevent jobs from printing to ensure color 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 they do a re-calibration.

Benefits:

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



Set time limit and display status in Device 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:

- Improves color consistency by re-calibrating for the specific media(s) a job uses
- Increases efficiency as users calibrate the media they need at the time they need it

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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.

Similar to color calibration, grayscale calibration measures tonal variance from the desired target 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 optimizes 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 to 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

Inline measurement device support for calibration

Many cutsheet print engines include built-in inline measuring devices that can automatically measure color patches, rather than manually measuring them after printing.

Fiery Command WorkStation supports these inline measurement devices for calibration and, in some cases, for profiling purposes making the routine calibration process much faster and easier.

This guide covers inline measurement for calibration. To learn more about profiling support, visit the Fiery Color Profiler Suite web page at www.efi.com/cps.

There are three types of inline measuring devices:

1. **Inline spectrophotometers** read color patches on paper, return spectral measurements, and can be used for both calibration and profiling purposes.
2. **Inline scanners** and colorimeters read color patches on paper and can be used for calibration purposes. In contrast to spectrophotometers, inline scanners can only return RGB values and therefore are not recommended for profiling or color verification.
3. **Belt sensors** read color patches on the belt, provide density measurements, and can perform automatic calibration updates that don't necessarily replace a recalibration process, but can maintain system calibration for a longer time.

Inline measurement devices can be used to:

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

1. Recalibrate

These calibration sets are also compatible with the EFI™ ES-2000 spectrophotometer or other instruments supported by Fiery Color Profiler Suite.

The recalibration process doesn't require the user to measure the calibration patches manually, making the calibration process much faster and simpler.

2. Create new calibration sets

The calibration process with inline measurement devices offers a faster calibration process that doesn't require much operator training or skilled knowledge and reduces errors. In the case of inline spectrophotometers, it also doesn't require investment in additional measuring devices.

3. Automatic calibration updates (new in Fiery FS350 Pro)

Some print engines without an inline spectrophotometer or an inline scanner can take advantage of their belt sensors to automatically update calibration sets with the current state of the engine, without any operator intervention. The update process is performed every time the engine requires self-adjustment. These automatic updates only affect the factory calibration settings (coated and uncoated).

All print engines have belt sensors that are used by the engine during warm-up, and for periodic self-adjustment procedures to bring engines back to a stable stage. Some belt sensors can retrieve and send measurement data to the Fiery server. With this data, the server updates its own calibration.

Automatic calibration updates offer the following benefits:

- Produces consistent output for a longer time without the need to recalibrate as often
- Print environments such as offices can rely on more consistent output without calibrating as frequently

The support of inline spectrophotometers and scanners for calibration is also available in Fiery Color Profiler Suite and doesn't require software licensing.

Consult your Fiery server user manual to learn the instrument support and capabilities for a specific Fiery server and print engine combination.

Inline measurement device support table

Inline measurement device	Recalibration	Create new calibration sets	Profiling	Automatic calibration updates
Inline spectrophotometers	Yes	Yes	Yes	N/A. Only by engine
Inline scanners Some models require a spectrophotometer such as ES-2000 to calibrate the RGB scanner for each paper type on first use and periodically thereafter.	Yes	Yes	Yes, but with limited precision	N/A. Only by engine
Belt sensors	N/A	N/A	N/A	Yes. Done by engine and synchronized with Fiery calibration measurements

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery Color Profiler Suite

Fiery Color Profiler Suite, a set of additional color 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 provides the best color precision to match spot colors and print industry standards. It extends the color capabilities of Fiery Driven printers with the most advanced color management tools available, and makes the process easy through integrated communication with the Fiery server. Fiery Color Profiler Suite offers modular functions, to ensure color 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.

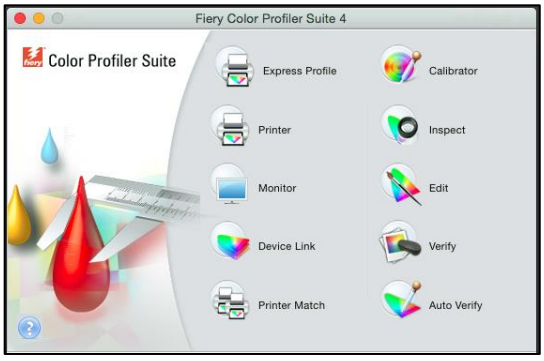
Integration with Fiery Color Profiler Suite

Fiery Color Profiler Suite makes world-class display and output profiles for Fiery systems. Users can also create Device Link profiles 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 user to create output profiles and linked calibration sets, verify color precision, match multiple Fiery Driven engines, compare color 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-color 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 color match to the reference from day to day
- Improve spot color matching by measuring samples and optimizing
- Create monitor profiles for softproofing.

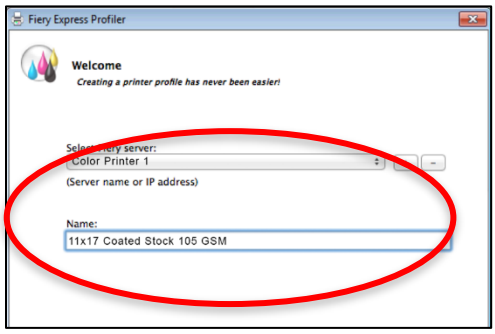


Fiery Color Profiler Suite launch pad

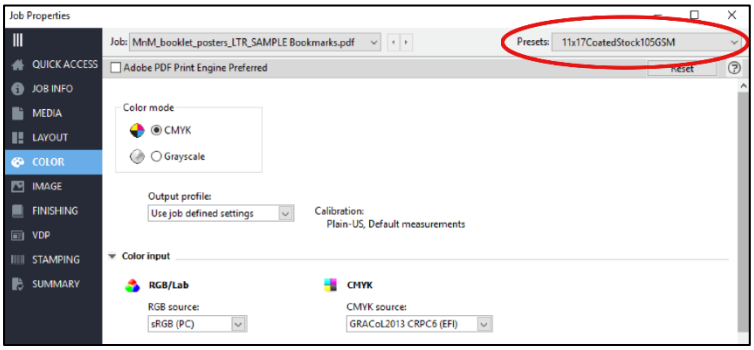
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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, it creates a server preset and Virtual Printer to ensure the user can access the new profile and calibration, along with the print settings the profile was created for.



Fiery Express Profiler minimizes operator errors when selecting the correct profile and print settings for a job



Use the same preset to ensure the use of the right output profile

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery spot color

PANTONE Color-enabled

EFI and PANTONE® have a long-established partnership to provide the best spot color 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 color output is accurate and consistent for all print jobs.

PANTONE Color-enabled Fiery servers provide state-of-the-art matching of spot colors

PANTONE Color-enabled Fiery servers automate the color matching process from job submission to output. This automation eliminates guesswork and costly rework by controlling how colors will print.

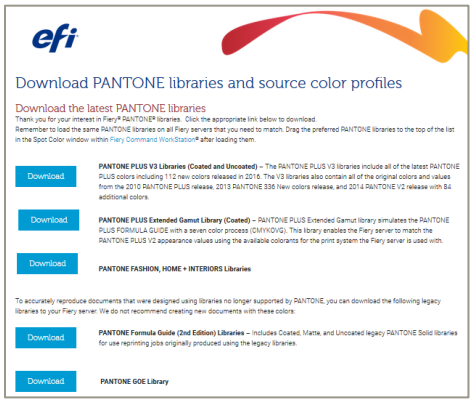
The built-in color lookup tables in the Fiery system automatically convert the PANTONE color to optimized CMYK tints, based on the output profile for the paper that will be used. Operators can use Fiery Spot-On to further fine-tune the output of any PANTONE color.

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

Spot color 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 color libraries: Includes the spot colors used in Europe (HKS) and Asia (DIC and TOYO)



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

PANTONE color libraries and color reference charts

The Fiery system currently supports a number of PANTONE color libraries, including the following:

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

PANTONE PLUS v.2

Fiery FS350 allows users to reproduce even more PANTONE colors accurately, with new support for the PANTONE PLUS v.2 and PANTONE FASHION + HOME libraries. The PANTONE PLUS v.2 library provides updated color definitions for legacy PANTONE Coated Second Edition colors, and additonal colors included in the v.1 PANTONE PLUS libraries, the PANTONE 336 libraries from 2014, and additional colors added in 2015 and 2016 years.

Benefits:

- Meets the brand-color expectations of demanding customers
- Properly matches the latest PANTONE colors, including new colorimetric definitions

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Users can also download the full array of PANTONE libraries, including the updated PLUS SERIES of the PANTONE MATCHING SYSTEM® with 84 new colors, from download.efi.com/FieryPANTONE.

Fiery Spot-On

From corporate branding to high-level color matching in commercial print settings, it's essential to print consistent, predictable spot colors the first time, every time. With the growth of digital workflows, more users are able to create and influence color in documents. This new level of control does have drawbacks, such the misuse of color 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 color print producion for jobs that use spot colors.

Fiery Spot-On is a standard tool in all external color Fiery servers, and is often 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 color on a given printer and media. It also lets users create custom spot colors with specific names. With Fiery Spot-On, users can achieve accurate color matching for spot colors used in logos and branding with spot color libraries such as PANTONE, HKS, TOYO, and DIC.

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

Built-in spot- and substitute-color capabilities

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

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

Spot color management

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

Spot color group priority

Spot color group priority enables users to easily ensure that custom spot color representation is honored, to satisfy customers' expectations.

This is very useful for print providers that frequently edit the appearance of specific spot colors to match the expectations of print buyers. These spot color edits are saved as new groups of colors using the Spot-On interface in Device Center.

The spot color group-priority feature allows users to set which of the color libraries in Spot-On takes priority for a given job from the Color tab in Job Properties or Fiery driver. This means that, if the requested spot color adjustment for one customer is created in a custom spot color library, the library can be given priority when printing that customer's jobs — without forcing the spot color edit for all future print jobs. This is also beneficial when print providers have multiple customers requesting different edits to the same spot colors.

Define color library order by job with spot color group priority

This feature can save a lot of time because users don't need to constantly check the order of the color libraries or groups in Spot-On.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Substitute Color

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

Benefits:

- Delivers accurate and simplified corporate color matching from Office applications
- Allows late-stage spot color correction and replacement for spot colors that were converted to process in error when producing the print job
- Eliminates spot color rework with late-stage color 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 Color Every Time.*

Specialty color support (engine specific)

Specialty Color lets operators use custom-output-device colorants or special effects. This includes transparent coatings, white colorant for printing on specailty media such as metalic substrates, and specific colors such as red, neon colors or metallics.

Specialty colors can be applied in the original design file, then managed on the Fiery Driven print system to enable the use of specialty colors available at the print device. Fiery Specialty Color controls can also be used on jobs for which specialty colors were not defined in the original document. Controls allow users to flood coat entire pages with a specialty color such as clear, or to apply the specialty color to specific page object such as images, graphics, pre-defined spot colors, or fonts.

Users can also automatically apply specialty colors as a watermark. This automatic generation of specialty color watermarks is unique to Fiery servers.

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

Benefits:

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Image quality optimization

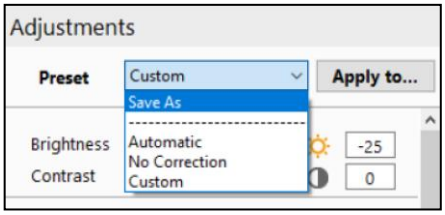
Fiery Image Enhance Visual Editor

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, color, and image sharpness. Users can see image adjustments before they save changes.

Before Image Enhance Visual Editor

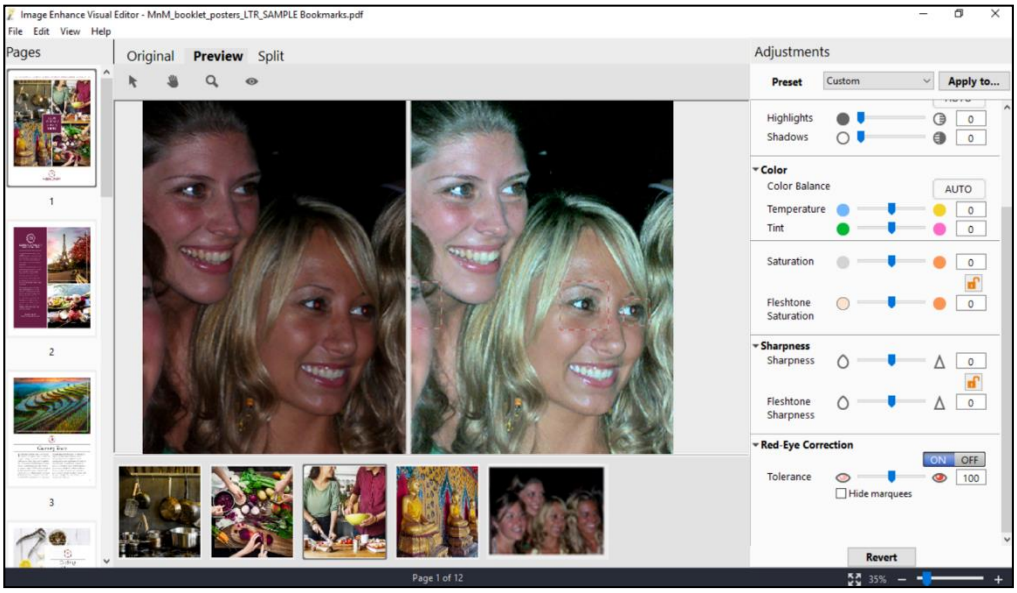
After Image Enhance Visual Editor



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, they'll see a preview 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 user can make the correction without wasting time and money by printing a sample.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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

Once a user 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, users 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 colors 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 color 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.

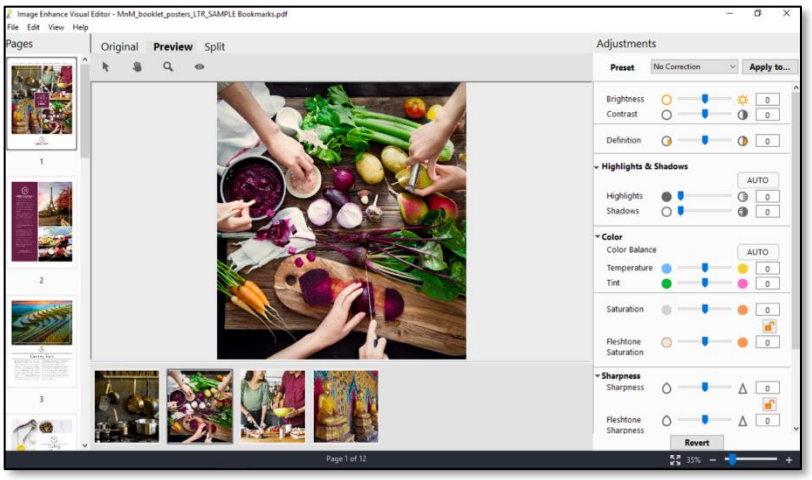
Visit the Resources section at the Fiery Command WorkStation website at efi.com/CWS to watch the Image Enhance Visual Editor video demonstration.

Benefits:

- Reduces turnaround time because users do not need to return to the originating software application to correct images
- Saves money, because print providers don't need expensive image retouching softwar at every workstation
- Corrects saturated colors 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 user to enhance images with automated tools

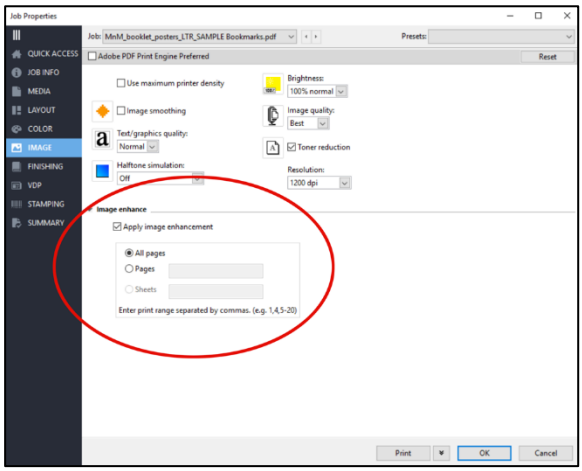
Image Enhance Visual Editor can be launched from Command WorkStation (highlight job, right-click).

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



The 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.

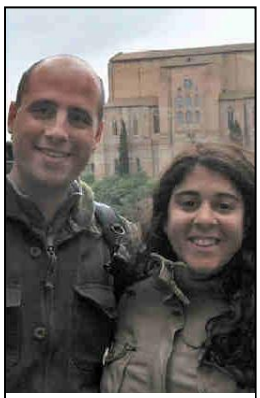
Image Enhance automates optimization so users don't need to preview or tweak images before printing. Simply turn it on in Fiery Job Properties. It also works with Fiery Hot Folders, Job Presets, and Virtual Printers.

This feature is standard on all Fiery color 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 user intervention to enhance images in every job produced
- Reduces waste from jobs printed with less-than-optimal quality

Before Image Enhance



After Image Enhance

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 effects have been used in the design applications
- Optimizes 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 color or imaging artifacts

Composite Overprint for spot colors and CMYK

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

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

Fiery server users can automatically enable the Fiery Auto-detect Composite Overprint feature for objects specified to overprint. This means that objects will be represented with the correct overprint simulation. It also eliminates the long processing times common on other DFEs when composite overprint is enabled. Use this feature for best results with all jobs except pure RGB files such as digital photobooks.

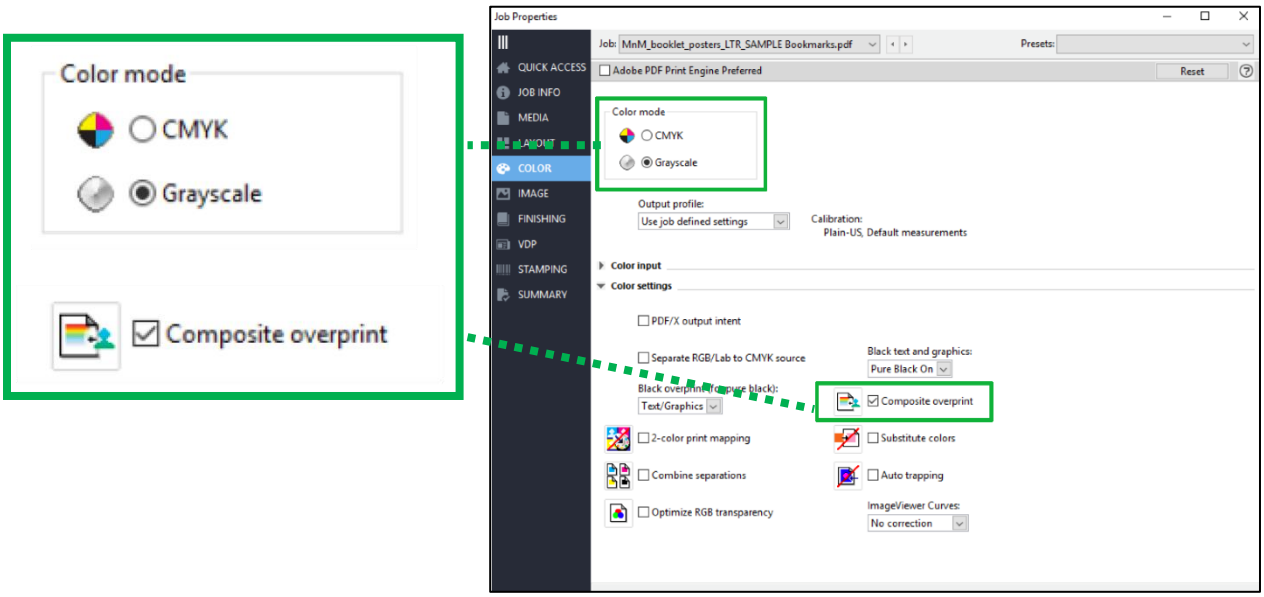
Benefits:

- Further speeds up file processing times compared to competitors
- Produces overprints specified in design applications for perfect printed results that match the designer's expectation every time

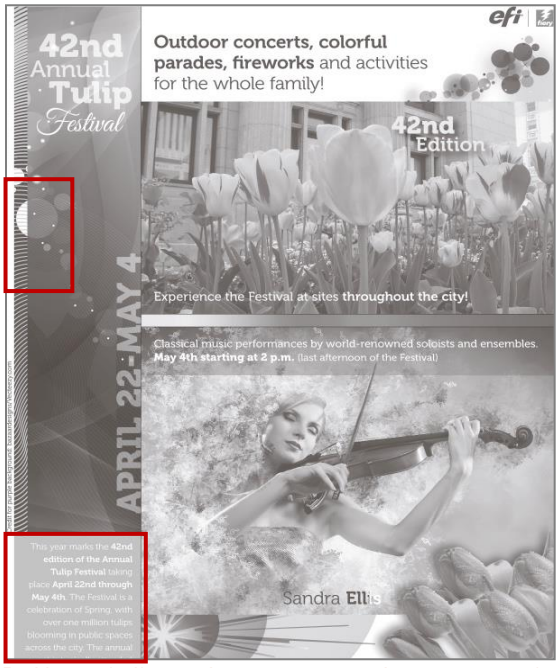
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Grayscale Composite Overprint

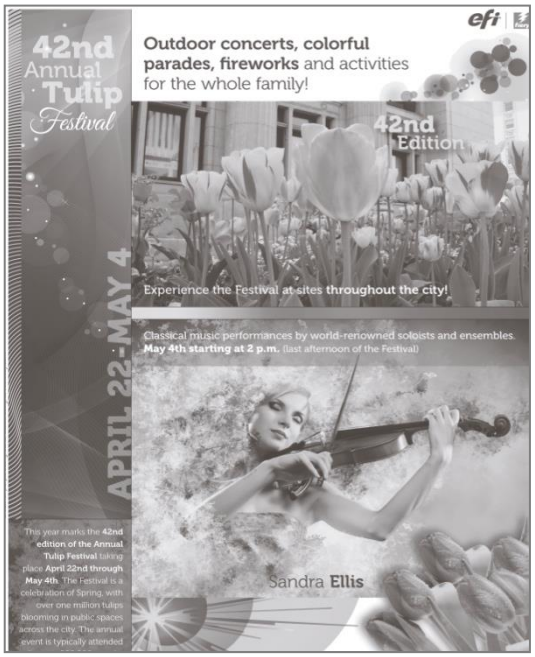
The Grayscale Composite Overprint feature allows overprints, drop shadows, and transparencies in color print jobs to render accurately when printing in grayscale mode on full-color print devices. This unique Fiery feature works when printing in grayscale color mode with the Composite Overprint setting 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, even if the designer has used techniques such as overprinting

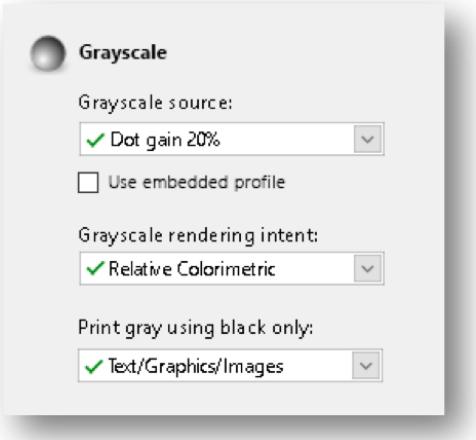
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- Saves click charges, while producing black-and-white output that preserves the appearance of complex design elements

Grayscale input profile

The grayscale input profile provides specific control over the color management of grayscale page objects by adding grayscale settings to the Color tab in Job Properties and the Fiery driver.

When grayscale page objects are created in a design application, such as Adobe Photoshop, a grayscale ICC profile is used to define their intended appearance. Now operators can set the same profile to be used on the Fiery server so that the expected appearance can be maintained when printing grayscale images, vector, or graphic objects.



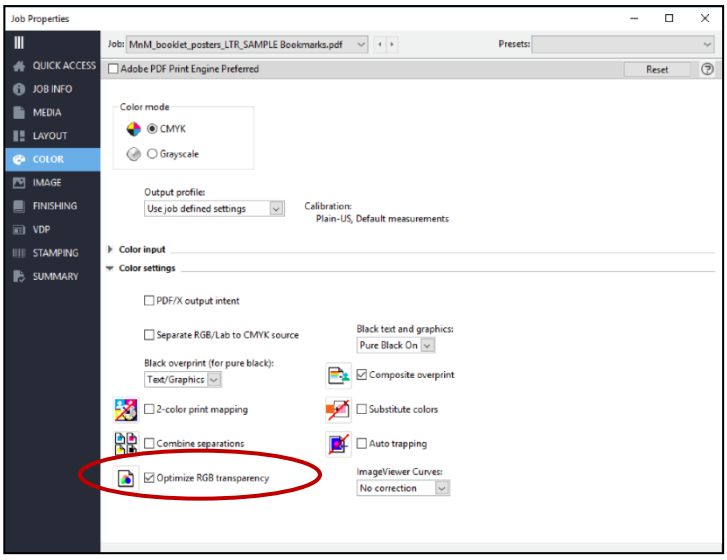
Grayscale settings in Color tab in Job Properties and Fiery driver

Optimize RGB Transparency

It's easy to create transparent page objects in modern design applications. Unfortunately, it's also easy for designers to accidentally cause problems when they use drop shadows or other effects that rely on transparency blending from these 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 color space used when blending transparent regions in the PDF. However, the Adobe APPE interpretter does not consistently respect the intended blending of color spaces, and defaults to the same color space for all jobs.

On the Fery server, users can enable the Optimize RGB Transparency setting at the Fiery driver or in Job Properties. This forces the interpreter to use the blending color 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 colors.

To use this feature, users check the Optimize RGB transparency box in the color tab of Job Properties.



Optimize RGB transparency box in the color tab of Job Properties

Benefit:

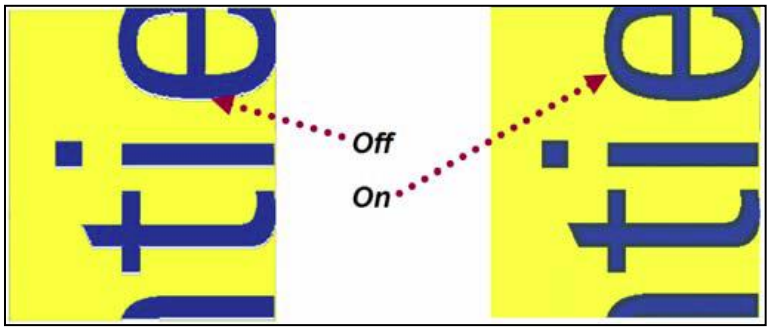
- Increases color accuracy when printing PDF files

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Auto Trapping (fixed)

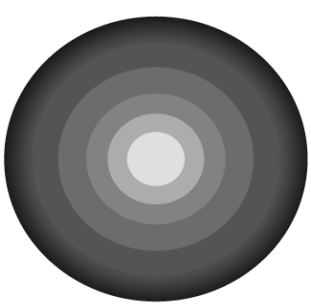
Professional-quality color documents are created by managing all aspects of color on the page, including how colors interact with one another. Traditionally, this interaction of color on a page was managed by skilled operators using complex tools and techniques to accomplish the highest-quality results. 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 color into the darker colors 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 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.

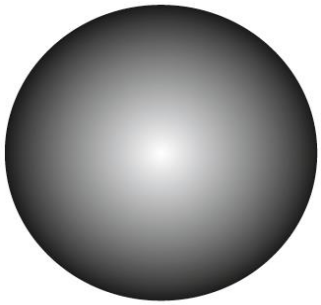


Enhanced gradient smoothing

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 color 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 color.

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

Users can apply enhanced gradient smoothing by enabling the Image smoothing setting in the Image tab in the Fiery driver and in Job Properties.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

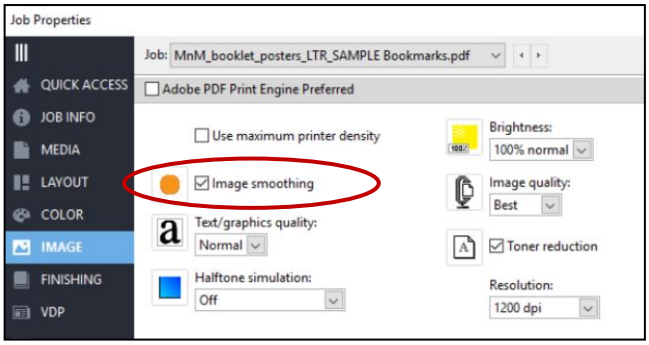


Image smoothing setting in Job Properties and Fiery driver

Text and graphics quality (engine specific)

The Text/Graphics Quality feature applies processing enhancement to text and graphics, sharpening the edges of text and graphic images. Text/Graphics Quality is applied only when 100% color 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 colors — the feature is mostly used in black elements for a sharper and smoother text and line art with minimized "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.

Benefit:

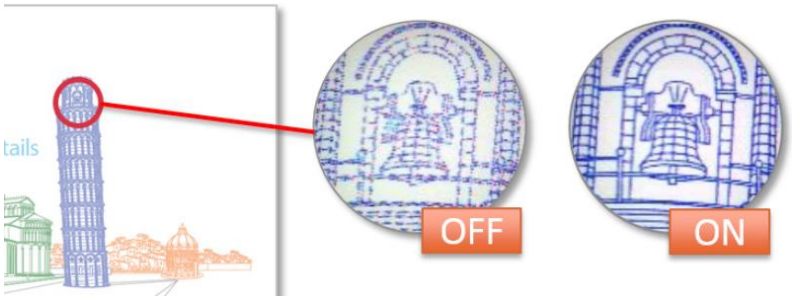
- Increases output quality, achieving better definition of black text and optimized full-color images

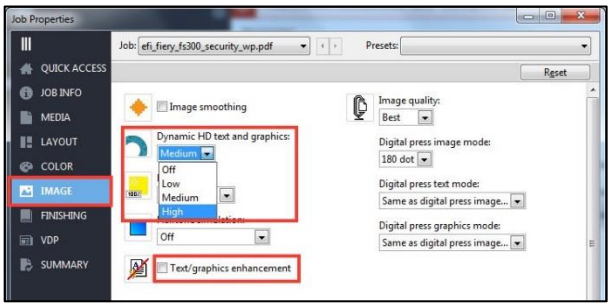
Dynamic HD Text and Graphics (engine specific)

Dynamic HD Text and Graphics is an exclusive Fiery feature that accurately reproduces ultra-thin lines, small text, and fine details in printed output. It also delivers lead/trail edge correction — a unique function that evens outs the color of the leading edge and the trailing 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 server to process files at 1200 dpi, preserving high detail content and reducing jaggedness associated with half-toned, non-saturated objects.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 is in the Image tab in the Fiery driver and in 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

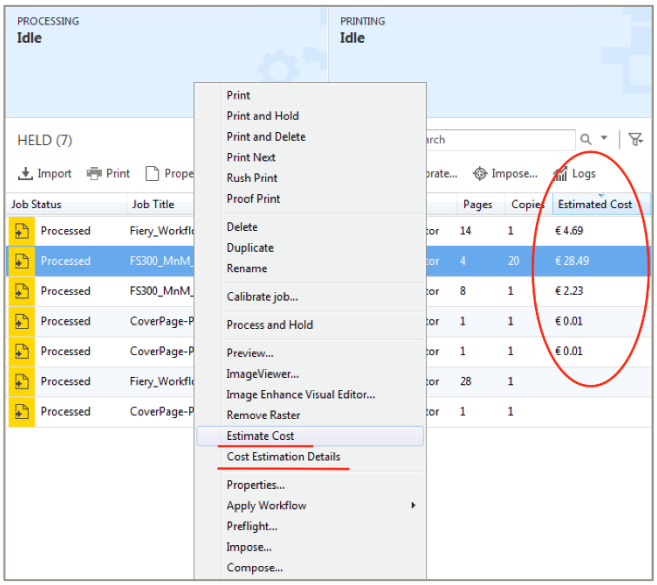
Fiery Smart Estimator in Command WorkStation

Accessible from Command WorkStation, the Fiery Smart Estimator provides a cost estimate for toner or ink usage before printing a job.

The estimate is done by the Fiery server and is based on the raster data of the RIPped jobs.

This feature is most useful for specialty colors, such as clear, white, gold, silver, neon colors, etc. Since ink/toner for specialty colors is purchased separately and not part of the base CMYK click charge, users can customize Fiery Smart Estimator by selecting the local currency and entering the cost per bottle, cartridge, or liter. Once the calculation is performed, the estimated cost can be displayed on a job list column, job summary pane, and cost estimation details window.

The Fiery Smart Estimator is available on a product-specific basis. Refer to your Fiery server documentation for more information.



Fiery Smart Estimator accessible from Command WorkStation

Smart white

The smart white feature works on Fiery servers driving print engines that carry white toner or ink.

White ink is usually necessary when printing on colored media. Applying white ink underneath translucent CMYK colorants blocks the colored surface to lighten the resulting color.

With the smart white feature, white toner/ink is used selectively, rather than as a flood fill. The feature calculates the lightness of the color being printed and, if necessary, it adds white ink to achieve the targeted lightness. White is added in any amount from 0 to 100% as determined by reading the white point L* value in the output profile.

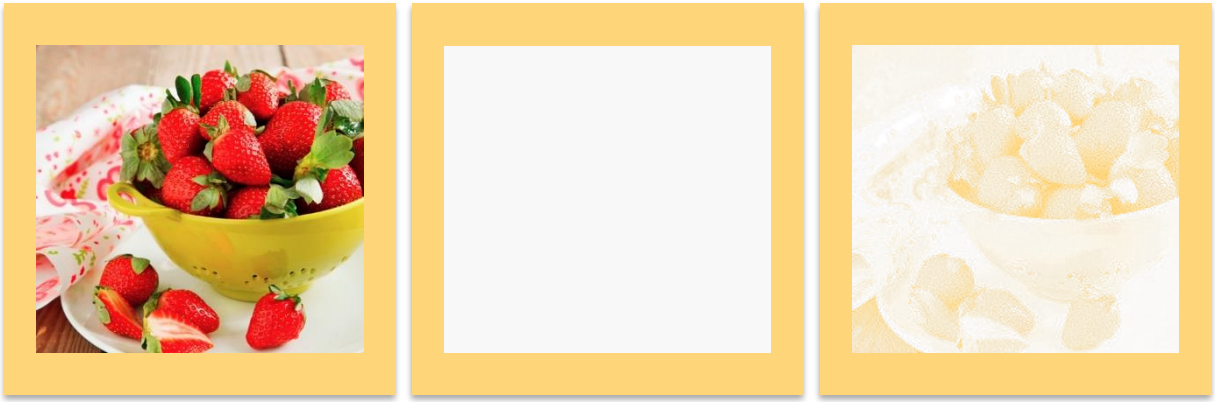


Image on colored stock, white fill, and smart white fill

Overall, smart white saves white ink/toner from being used where it is not needed.

The feature can be found in Command WorkStation Job Properties under the Specialty Color tab.

White ink/toner consumption can be previewed and verified by looking at the white ink/toner values in Fiery Smart Estimator (if supported) and Fiery ImageViewer.

The implementation of this feature may vary on different Fiery server models. For additional information, refer to your Fiery server documentation.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Certifications

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

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 colorimetric 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 colorimetric 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 there is no G7 certification for digital print systems, since systems that achieve Digital Press Certification are already matching G7 Colorspace requirements.

For digital press systems to match industry references such a GRACoL, user must create a custom output profile with a tool like Fiery Color Profiler Suite.

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 the Fogra Graphic Technology Research Association. ForgraCert is similar to Idealliance digital press certification, except that it requires a colorimetric match to the FOGRA39 colorspace. FograCert-approved digital print systems also require that the DFE can print 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Connection

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 server's feature set, refer to the datasheet for that model, or ask your Fiery vendor about support for a specific feature.***

Feature name	NX Premium	NX Pro	NX One	E400
Fiery JDF	✓	✓	✓	⊙*
Fiery API	✓	✓	✓	✓
Integration with EFI MIS and Web-to-Print solutions	✓	✓	✓	⊙*
Fiery option software licensing	✓	✓	✓	✓
Automatic system backups	✓	✓	✓	✓
Fiery Updates from Command WorkStation	✓	✓	✓	✓
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

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

* Included in the Fiery Productivity Package

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 workflows, specifying how jobs are managed and produced. JDF allows MIS, web-to-print, and prepress solutions to communicate with 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 on 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 bi-directional JDF device connectivity between JDF submission tools (submitting JDF intent or JDF process job tickets through Job Messaging Format) and the Fiery server.

The Fiery Integration Package provides the easiest way to install and configure the latest Fiery JDF v1.5. This version of Fiery JDF provides numerous enhancements for integrated workflows with EFI Productivity Software, third-party prepress workflows, as well as in-house custom integrations. The enhancements also include memory usage optimization and stability improvements, plus new JDF-enabled Fiery features:

- Define chapter — This feature provides an easy way to automate chapter creation for long documents, and to submit batch tasks with multiple documents included in one job with separators or chapters. It allows integrated upstream software to specify chapter starts by entering the document's page number using JDF. The function is equivalent to the Fiery Chapters feature from Job Properties.
- Rotate content layout — Provides the JDF interface to specify automatic 180-degree rotation for layout adjustments. This is equivalent to the Fiery server's Rotate 180 feature from Job Properties.

Fiery FS350 Pro, along with Fiery FS300 Pro, Fiery 200 Pro, Fiery FS150 Pro, Fiery FS100 Pro, Fiery System 9 Release 2 and 10; are the first 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

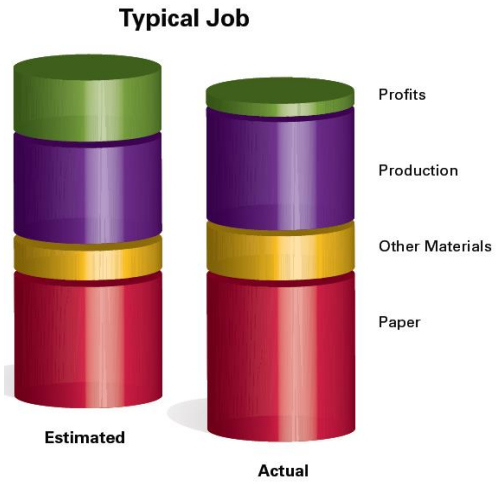
In addition, Fiery JDF is now available for Fiery embedded systems through the Fiery Productivity Package for selected Fiery products. This lets more users integrate print workflows and business management systems. Visit the Fiery JDF supported printers webpage to see the list of Fiery embedded servers 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 users to enter job and production data, dramatically decreasing waste and error. The technology enables unattended job processing and frees up users 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



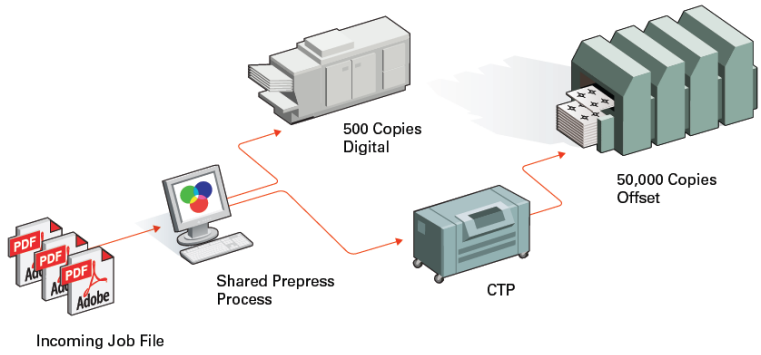
Job production component breakdown

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 and managers 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 analog 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.

Maximizes ROI through integration and scalability

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 communities at communities.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, Prinergy and Heidelberg Prinect.

Benefit:

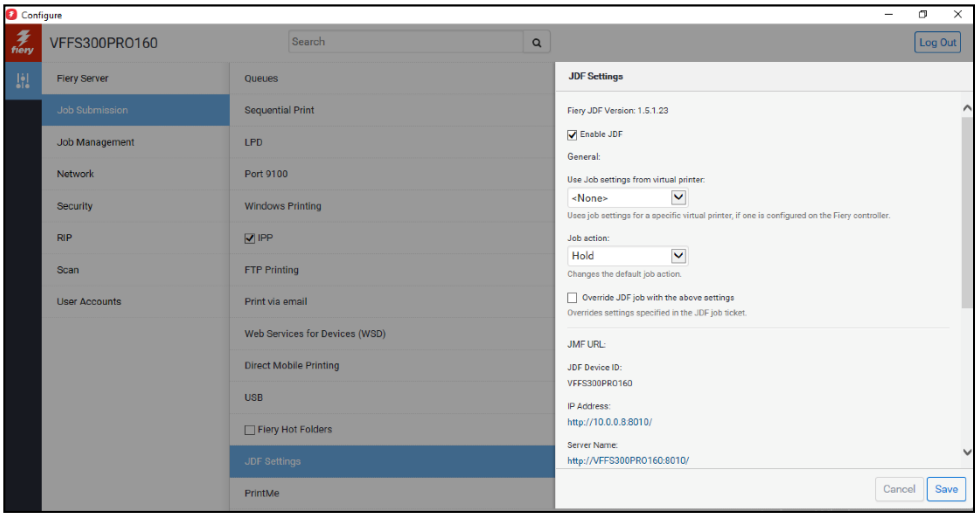
- Enhances the status updates shown in the client user interface

Common global paths

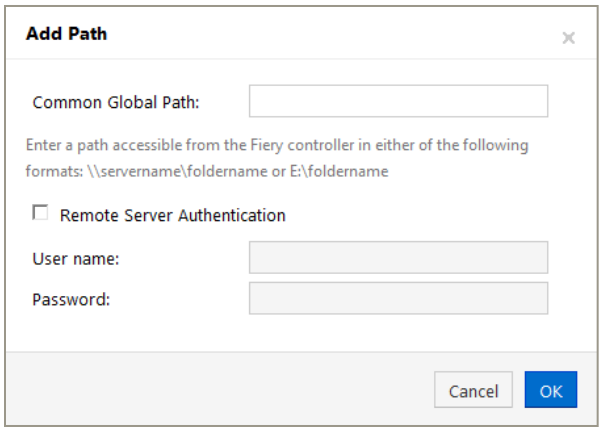
Fiery JDF can use the network credentials stored in the Fiery Command WorkStation Server\JDF\Common Global Paths dialog box to access remote JDF files and RunList content files. Many solutions that customers have developed in-house, and even a few commercially available solutions, insert only the file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

Benefit:

- Improves existing JDF file path reference
- Simplifies JDF integration



© Copyright 2019 | ELECTRONICS FOR IMAGING INC



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:

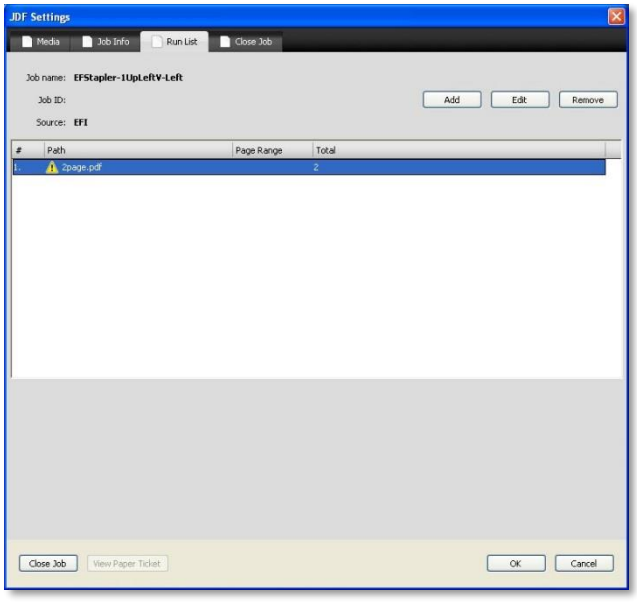
- Enables applications such as Agfa Apogee to populate their UI with available finishing controls, and applications such as EFI MarketDirect StoreFront to automatically map their job attributes to Fiery job attributes
- Designs a job option dialog that matches the installed Fiery configuration with JDF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

RunList editing

JDF jobs that don't include a valid link to a content file will be flagged in Command WorkStation, and a dialog will allow the user to resolve the missing content file link, eliminating errors.

Benefits:

- Simplifies JDF integration
- Eliminates errors



RunList editing dialog

Improved media mapping

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

Benefits:

- Saves user time
- Simplifies JDF integration

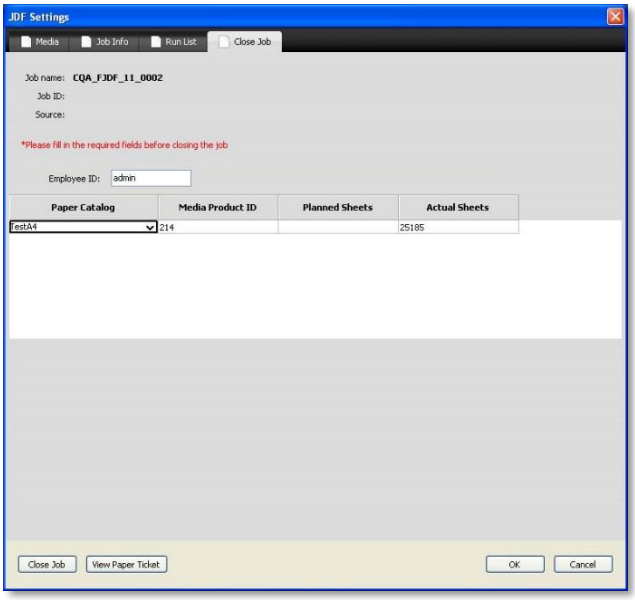
MIS manual job close

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Benefits:

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



Manual close dialog

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 systems, 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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

View "paper" job ticket

A PDF file representing the originating customer ticket (from EFI MarketDirect 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 users to validate job settings in Command WorkStation before printing
- Permits users 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 CIP4 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. This allows an MIS system 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 data on toner levels, and display it on the Fiery server.

Benefit:

- Real-time toner level status displayed at the JDF-sending application

Sample and reprint tracking

When a shop reprints a job or a sample, this accumulates accounting information and sends it to the MIS system.

Benefit:

- Accurate tracking of media usage for cost accounting

Preset and Virtual Printer support

Users can now access Job Presets through the familiar gestures mechanism used with Virtual Printers, by using JDF.

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 through JDF.

Benefit:

- Enables dynamic access to Fiery imposition settings

Subset finishing

This provides support for subset finishing actions of staple, punch, and fold.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Benefit:

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

Slip sheet support

Inserts 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 calibration 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 color.

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
- Choose to print both sides, only outside or only inside
- Separately pick color or black and white for cover and body pages

Benefit:

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery API

Print workflows are unique to every print business. Fiery application programming interface (API) allows 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 optimized scheduling, and to submit jobs with basic settings from existing applications. Fiery API can:

- Request job-log data on Fiery servers 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 standard Fiery API functions for 90 days. This helps developers 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 FS350 and Fiery FS350 Pro servers come with Fiery API, so they're ready to communicate with mobile devices out of the box.

Developers can download latest Fiery API using the Fiery Integration Package or Fiery Updates. Version 4.0 adds new APIs and usability improvements to easily integrate in-house tools and applications with Fiery servers for unique business needs such as:

- Job submission with Paper Catalog ID — Submitting jobs from custom applications is now much simpler, allowing developers to specify media with a unique Paper Catalog ID.
- Partial search for jobs — This allows in-house applications to filter and search jobs on the Fiery server by the exact value or partial value, and based on desired job attributes such as job titles and job status. For example, applications can search "efijob" to see "efijob01" and "efijob02," instead of calling the exact two names.
- WebSockets API support — WebSockets API enables live-event-based connectivity with custom applications. Developers can open an interactive live communication session between a custom application and the Fiery server. With this API, they can send messages to a server and receive event-driven responses (such as job status: spooling, printing, printed, error; or press status: printing, paper jam, toner low, etc.) without having to constantly poll the server for a reply. So the events are 100% live without delay and give a fast response with efficient data traffic (uses less computational power and data than polling).

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Fiery API feature highlights

Sever login, administration, and status

Feature	API calls	Description
Login	POST login	A POST request that establishes secure, authorized 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 authorized session initialized 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Integration with EFI MIS and Web-to-Print solutions

Fiery servers integrate with EFI Management Information Systems (MIS) and web-to-print workflows in order to:

- Deliver job specifications entered at a MarketDirect StoreFront or PrintSmith site client, or at the EFI MIS. The information is validated and transferred to the Fiery server without touchpoints, 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Tools for technical support

Fiery Setup Wizard

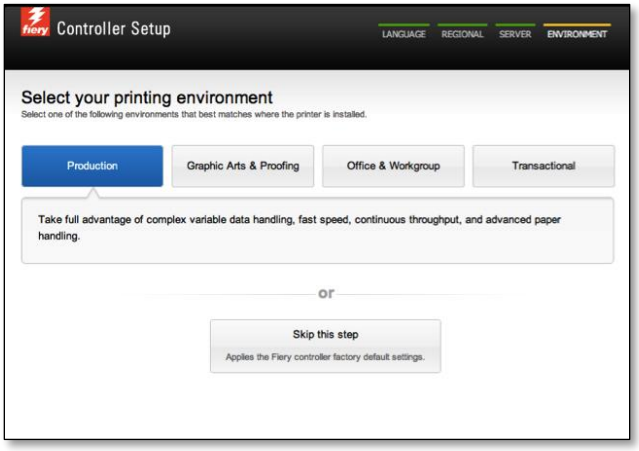
Fiery Setup Wizard optimizes settings for a particular print environment during the install process. It allows the administrator to quickly and easily specify basic Fiery server settings such as language, region, server, and environment (a group of standard settings). The available environments are:

- 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 works on Fiery servers running FS100/FS100 Pro or later and based on Linux or Windows operaring systems.

The Fiery Setup Wizard is available from the following locations:

- Command WorkStation
- WebTools
- Fiery QuickTouch for NX extenal servers



Settings are customized for each print environment.

If users do not initially configure the Fiery Setup Wizard from Fiery QuickTouch, it is still available from WebTools > Home, or from Command Workstation > Configure.

Benefits:

- Correctly sets up the Fiery server for the user's environment and language
- Provides the best out-of-box experience for users and administrators
- Speeds installation for technicians

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 PostScript objects	√			√
Enable Set Page Device	√			√
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			√	

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

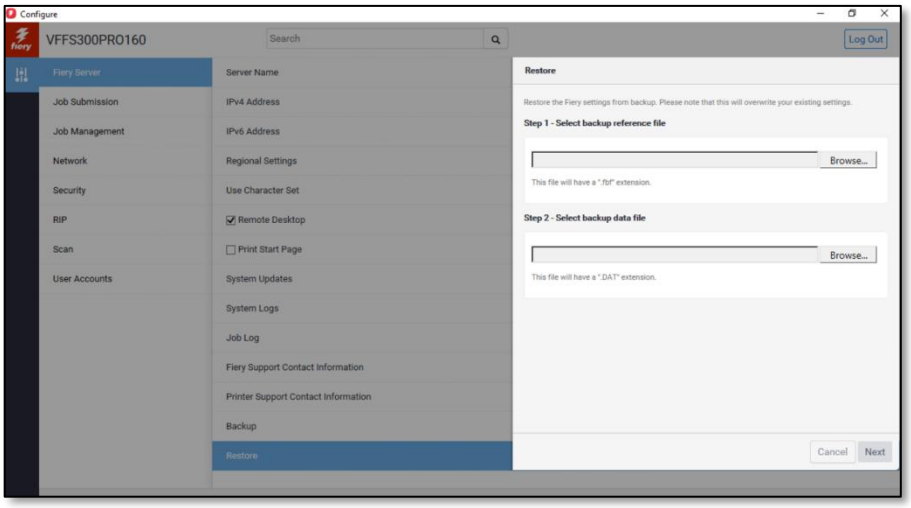
Fiery System Restore

Fiery System Restore is available on Windows-based external Fiery servers running FS100 Pro, FS150 Pro, FS200 Pro, and FS350 Pro. 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

See the EFI Fiery user documentation for your Fiery server for instructions on how to use Fiery System Restore.

RECOMMENDATION: EFI strongly recommends a full backup of the system image on a regular basis. This backup 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 backup application
- Allows analysts and customers to easily and conveniently restore a customer system

Fiery Hardware Diagnostic Tools

These tools offer diagnostic tests that may identify problems with Fiery server hardware. The tools are designed for specific Windows-based Fiery hardware platforms, and are for analysts and technical support representatives of Fiery partners. Check the documentation of your Fiery server to identify the hardware platform name and version number.

- Fiery NX Premium
- Fiery NX Pro
- Fiery NX One
- Fiery QX^{100}
- Fiery PRO^{80} or PRO^{90}
- Fiery SP^{30}

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

If you don't have these Fiery diagnostic tools, please ask your technical support team for a downloadable version. Instructions are included with the download.

Fiery Clone Tool

Fiery Clone Tool for embedded servers

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.

Users boot and launch this tool 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.

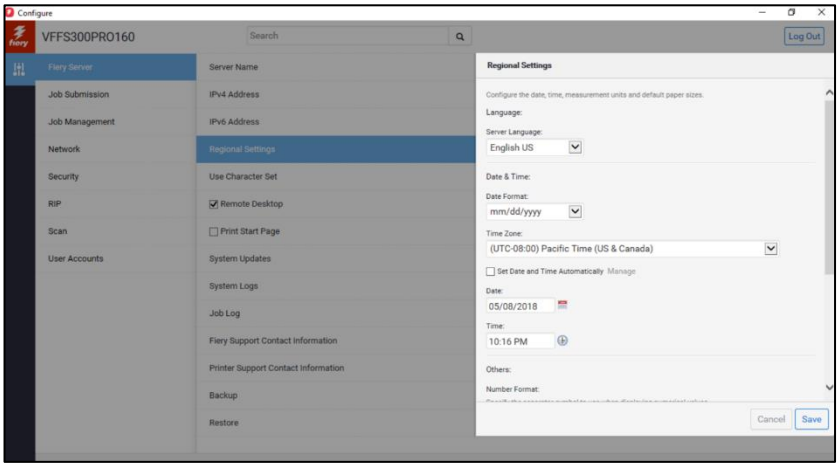
Benefits:

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

Fiery Configure

The Fiery Configure feature allows a 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



Fiery Configure tool

Fiery Configure provides:

- Support for all current web browsers, without the need for special plug-ins
- Three menu levels to allow users to easily move between settings
- Inline guidance to minimize mistakes
- Search function to find relevant settings more quickly
- Support for constraints to guide users when selecting conflicting settings
- Usability improvements that allow settings used in multiple places, such as email or proxy, to be linked for easy access

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

- If new settings need a restart or reboot, the tool notifies the user at the top of the screen and immediately saves settings that can be applied instantly
- 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
- Minimizes service calls

Improved serviceability

Fiery servers offer a comprehensive set of tools to ensure your server is up and running 24/7 and ready to face the challenges of a high-production environment. To achieve that, the servers come with:

- Fiery Updates from Command WorkStation
- Automatic system backups
- Fiery Installer Builder
- Improved server configuration sheet
- Job Error report
- Clear Server enhancements

Taken together, these features facilitate easy installation and setup; provide quick software updates that don't affect production time, but make sure you always have the latest software installed; and configure your server for the needs of your specific print environment. They also help resolve technical issues faster by facilitating communication with technical-support teams, and help you recover quickly from an unexpected system failure.

Fiery Updates from Command WorkStation

Serviceability improvements in Fiery FS350 Pro offer administrators, analysts, and technicians better ways to ensure that Fiery servers are always up to date, minimize downtime, and provide fast recovery of Fiery servers.

Fiery Updates is a new feature introduced with Command WorkStation 6. Because timely software updates are critical for optimal operation of Fiery servers, Command WorkStation offers administrators an easy way to get notifications, downloads, and installation of approved and released Fiery system updates.

Administrators can get to Fiery Updates through the Device Center and can then perform updates, even from remote client computers. From those client computers, they can also update Fiery servers that may not be connected to the internet. On the Fiery Updates screen, administrators can also see all the patches and service packs available and waiting to be installed for external or embedded servers.

Fiery Updates ensures the right sequence of patch updates to guarantee effective installation and avoid incompatibilities.

Benefits:

- Minimizes production interruptions
- Easily keeps Fiery servers up to date

Automatic system backups

Fiery administrators now have an easy way to schedule automatic Fiery system backups to guarantee fast recovery — without the need to restore from a DVD media kit.

They can manage backups using Fiery WebTools or the Fiery QuickTouch interface. With these tools, it can take less than an hour to restore from a backup — 1/8th the time it takes to restore from a DVD kit.

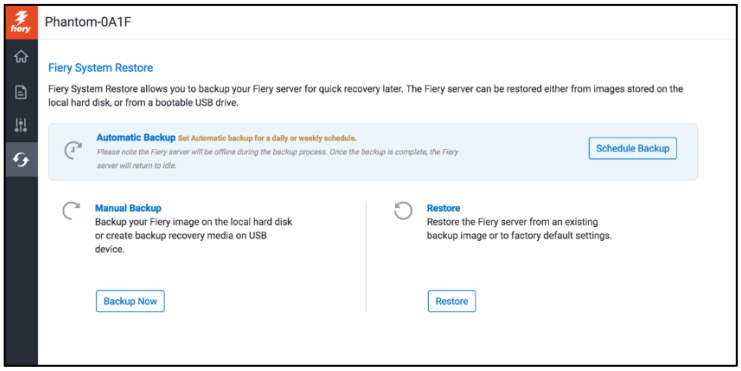
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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

- Fiery system settings
- Color 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

Benefits:

- Sets up an automatic backup schedule from Fiery QuickTouch and WebTools
- Restores the Fiery server in less than an hour
- Doesn't require a DVD kit



Fiery Installer Builder

The Fiery Installer Builder manages the download of a complete Fiery software and operating system image to reinstall the Fiery server using the USB port. This tool is currently for servers without a DVD drive..

The Fiery Installer Builder downloads from a cloud location, and allows users to prepare a bootable USB flash drive to install the software on a Fiery server. Users can also install the image from their computer to a replacement Fiery hard disk drive using a USB-to-SATA adapter cable for external servers.

The image will include all the software that was previously on DVD kits:

- Operating system
- Fiery software
- User software
- Any other Fiery software that is pre-installed for that particular Fiery configuration

The Fiery Installer Builder is designed as a tool for analysts and technical support representatives of Fiery partners, who will find it on the EFI Sales Portal. Login requires valid EFI Sales Portal credentials.

For full instructions, see the Fiery Installer Builder User Guide and check the Frequently Asked Questions for more information.

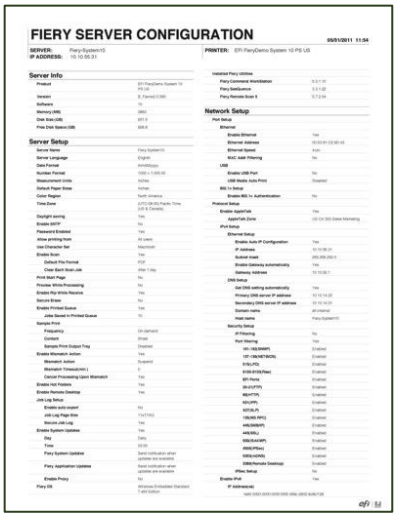
© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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-based 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. Having easy access to this information 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.



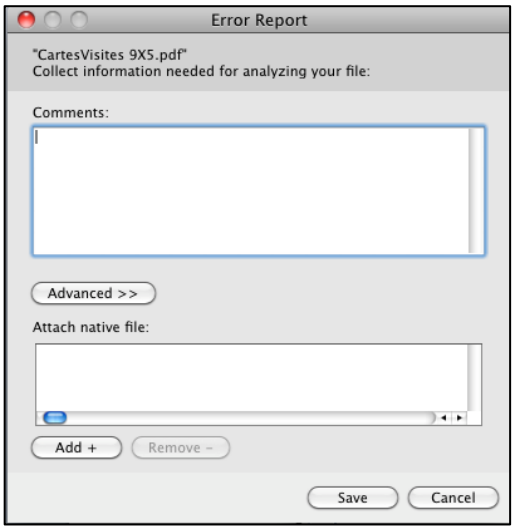
Improved server configuration sheet

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, color 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

GDPR compliance

This section describes the compliance of Fiery products with the General Data Protection Regulation (GDPR).

EFI does not automatically collect any personal data from Fiery DFEs without the consent of the owner/operator of the printing system.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

EFI, or EFI's partner manufacturer of the print engine, may request a Fiery DFE server configuration sheet. This sheet contains one or more IP addresses that may identify the business, but likely not an individual. It may also be necessary to send EFI an encrypted Fiery Job Error Report and possibly other reports to further identify and solve technical issues. Server IP address, job name, and a user or job submitter name, which may or may not constitute personal data, are collected along with Fiery operational data. EFI partners will sometimes provide EFI with the name of an individual and his or her contact information to allow EFI to contact the owner/operator to gather more information or to provide direct technical support to resolve a problem.

Benefits:

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

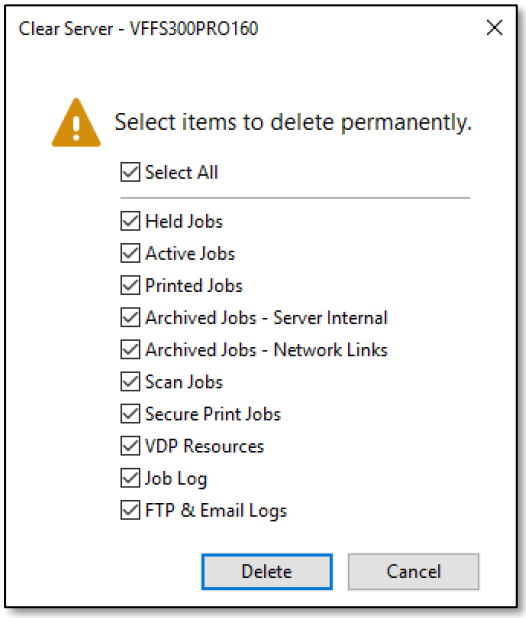
Clear Server

The Clear Server feature provides expanded cleanup choices to securely erase unwanted jobs or user data. It offers a dialog 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 secure print jobs, VDP resources, FTP and email logs, and other types of information. This also helps to improve the security of the Fiery server. The latest 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:

- Lets administrators control 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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 for 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. With adherence to industry-standard certification policies, MIS/IT organizations also prefer the open architecture of Fiery servers.

Automatic proxy configuration

This feature provides an option to automatically configure a web proxy.

Many network environments have a proxy server configured in the network to serve web requests. When Fiery servers are present in such networks, proxy server details need to be manually configured for any outgoing web requests (like System Update or PrintMe). If this feature is enabled and set to use Auto Proxy, the Fiery server can get the proxy details automatically from the DHCP server.

Windows 10 operating system for external Fiery servers

Fiery external servers running Fiery FS350 Pro system software are now based on Microsoft Windows 10 IoT Enterprise 2016 LTSB edition operating system.

Fiery external servers running on Windows 10 now contain the latest security protections:

- Enable the **Windows Defender SmartScreen** feature to prevent malicious applications from being downloaded. This additional security feature may affect the Fiery server's performance and is not turned on by default.
- Windows 10 comes with **SMB hardening** for SYSVOL and NETLOGON shares, which helps mitigate man-in-the-middle attacks for Fiery servers joined to a domain.
- **Windows Defender Antivirus** helps keep devices free of viruses and other malware. The Fiery server is configured with this feature turned on to scan c:\, but not e:\ to minimize performance impact. Administrators can configure Windows Defender to scan e:\ if needed.
- **Windows Data Execution Prevention** (DEP) can be enabled for Windows programs and services to help prevent malware from using the memory manipulation technique.
- Windows 10 has better **memory protection** for heap and kernel pools to help prevent memory exploitation.
- **Enterprise certificate pinning** helps prevent man-in-the-middle attacks. A Fiery server has to join a domain to enable the feature.

For more information about security features in Fiery servers running FS350 and FS350 Pro system software, see the Fiery security white paper.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Software licensing

In the past, users needed a physical dongle to install and use some Fiery software and features. But dongles can be lost, broken, or even stolen. Software licensing allows users to use optional Fiery software products and activate features built in to Fiery software without a physical dongle. Software licenses are easier than ever to install on a Fiery server through a common interface to manage the software license activation.

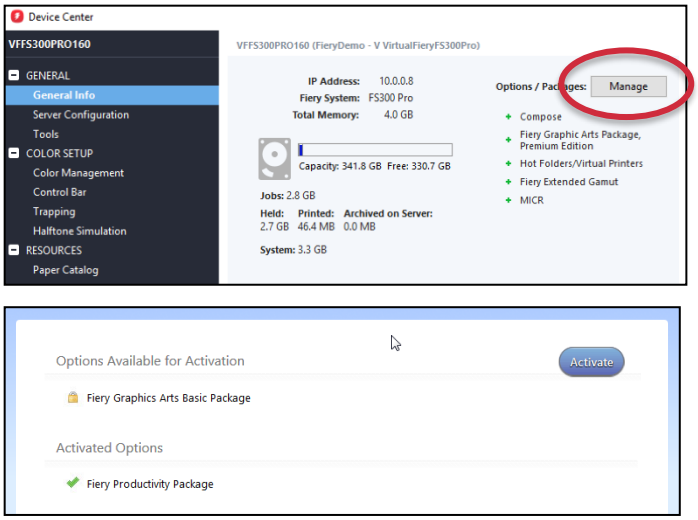
- Activate Fiery software products (such as Graphic Arts Package, Premium Edition, Fiery Hot Folders and Virtual Printers, and Fiery Productivity Package) from the Device Center in Command WorkStation, or by using the manage button in WebTools.
- Users can activate and deactivate Fiery JobMaster, Impose, and Compose from the Help and the manage license menus in Command WorkStation.

Note: Newer Command WorkStation versions still support legacy Fiery SeeQuence dongles.

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.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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.

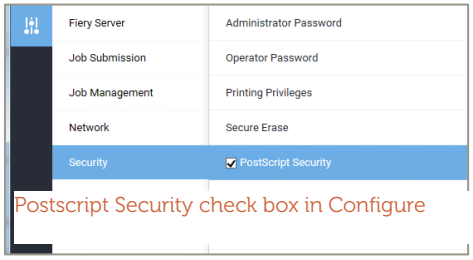
Security updates

PostScript Security

This feature prevents the Fiery server software from being modified through a malicious PostScript file.

PostScript Security is activated by default in Configure and can be disabled by administrators to allow downloading fonts with third-party font download applications.

PostScript Security doesn't affect processing and printing of PostScript files.



Postscript Security check box in Configure

Disable SMBv1

The SMBv1 protocol is disabled on Fiery servers. This protocol has been declared obsolete by most popular software vendors, and its removal makes Fiery servers less vulnerable to malicious security attacks.

SMB signing

Server Message Block (SMB) is the file protocol most commonly used by Windows. SMB signing is a feature through which communications using SMB can be digitally signed at the packet level. Digitally signing packets enables the packet recipient to confirm their point of origin and their authenticity. This security mechanism in the SMB protocol helps avoid issues like tampering of packets and "man-in-the-middle" attacks.

Fiery servers support SMB signing to enable all SMB communications to the Fiery server, and to protect Fiery SMB features such as PnP and SMB printing.

Find a copy of the Fiery FS350/350 Pro Security whitepaper on efi.com.

Encryption

Fiery configuration settings on the hard disk drive are encrypted with 128-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. Users will only be able to operate the device and access stored data when the removable hard disk drive is securely seated and locked. 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,

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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 feature overwrites the space occupied by each job data file three times, using an algorithm based on U.S. Department of Defense specification DoD5220.22M. This eliminates the possibility of restoring the data to an intelligible form.

The user enables/disables the feature with the ON/OFF option in Fiery Setup (through setup UI/LCD or Web Setup/WT). When the user decides they no longer need the job and selects delete from the Command WorkStation right-click or actions menu, that will act as a "secure erase" if the feature is turned on, and it will overwrite the job.

There are some limitations and restrictions.

- It 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 using Fiery API
- It does not delete any entries from the job log.
- If the system is manually powered off before Secure Erase has finished, the job may not 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, so 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; so 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; so the system cannot securely erase the job.
- It does not delete any job data that may have been written to disk through 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 automatically removes all traces of deleted print files stored on the Fiery hard drive
- It provides ISO-15048 Common Criteria Security Assurance (Pending certification from NIST)

Debian 8

Fiery embedded servers with Fiery FS350 system software run on Debian 8, one of the latest Linux-based operating systems. The update from Debian 7 to 8 offers the following enhancements:

- More secure system
- Better performance
- Upgrade to the latest tool chains
- Updated Linux kernel
- Latest OS-supported functionality such as file system

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

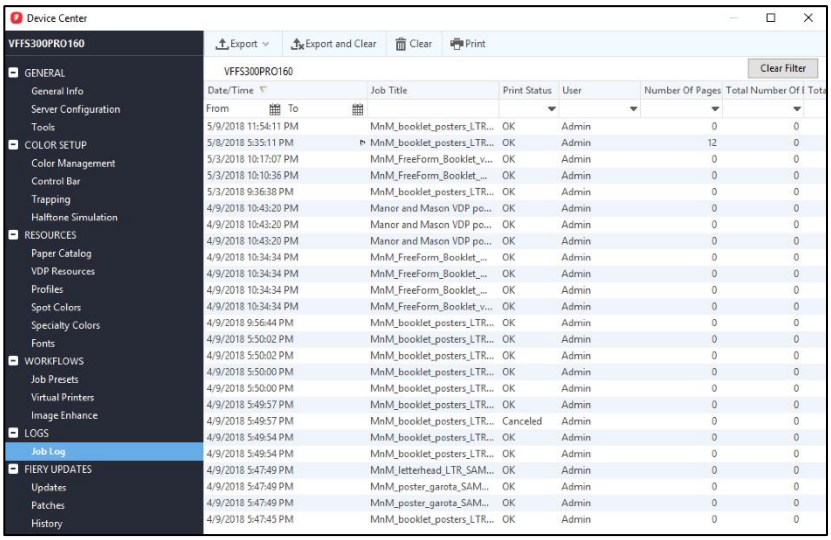
For detailed information on Debian 8 visit this web page.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Cost accounting and billing integration

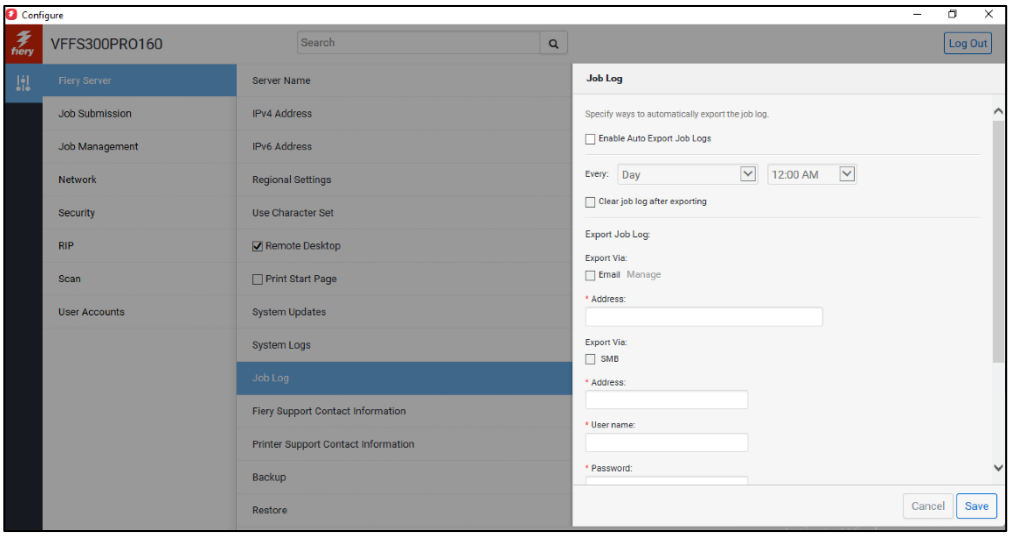
Fiery Job Log

A robust job log tool is available through the Device Center of the Fiery Command WorkStation to users 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. Users can customize the Job Log by selecting the columns of information to be displayed. They can sort the data by several criteria. A job log can be used for accounting, billing, and tracking equipment usage. Customizing job logs makes it easier and faster to search for specific data in the Job Log.



Print job logs

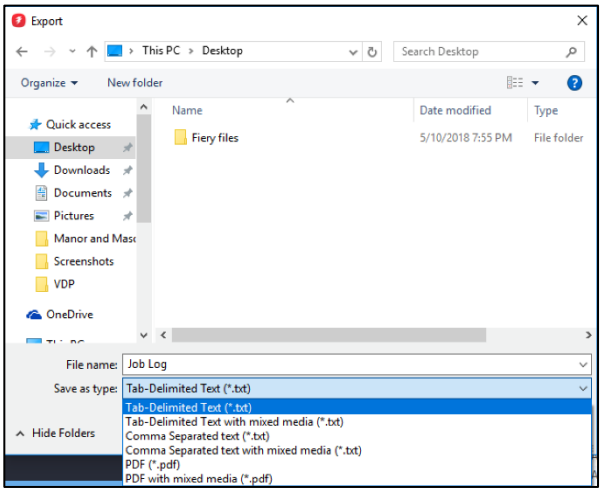
Users can print the Job Log at any time. To assign Job Log printing privileges and select the paper size to print it on, go to Configure / Server / Job Log.



© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Export Job Log

Users can export the data in the Job Log as a txt or pdf file. They can export the complete log (all the data that is collected) or the current view (only the data they 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. They can choose to submit the job log by email, or save it to an SMB or FTP location.

This feature is configured through Command WorkStation or the Configure tool. It 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.

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 costs with Fiery tracking and reporting. Administrators can now limit unnecessary printing and encourage positive user behavior to enable Fiery cost recovery.

Fiery Driven devices have the ability to hold and reprint jobs, and to manage the print job settings after PaperCut has analyzed the job on the print server. For this reason, users need a custom program to integrate PaperCut to track print jobs released from Fiery servers. PaperCut has developed a program that checks

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

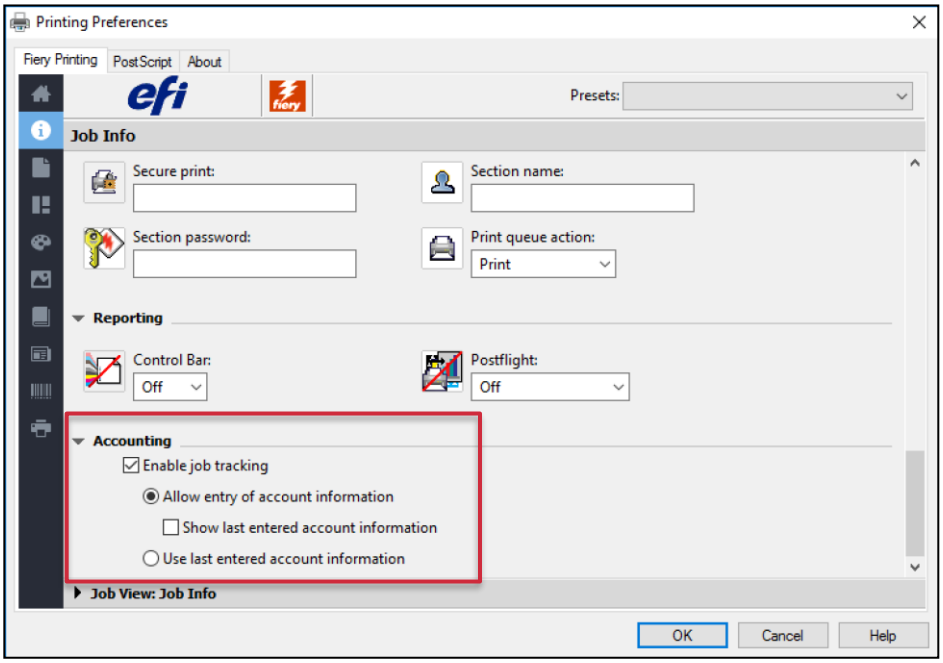
Fiery print logs and updates PaperCut with the jobs that are reprinted. For more information visit the PaperCut website.

Job cost tracking

The Fiery driver includes the Job Cost Tracking feature, which configures the print driver to record the accounting information included in the print job. This means that print providers 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.

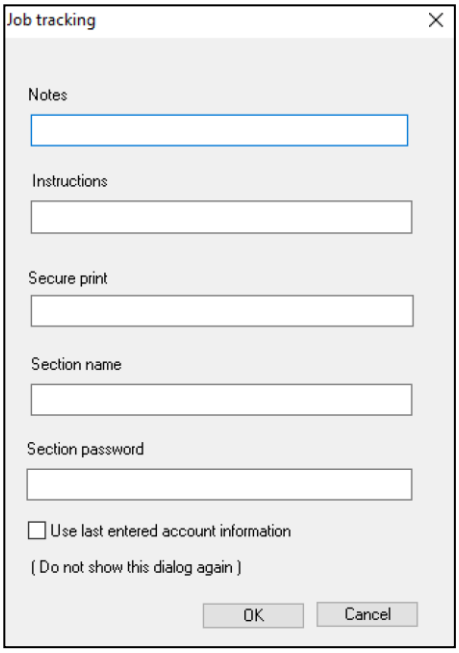
A pop-up dialog box comes up immediately after users click print, to remind them to enter the account information which is collected in the Fiery Job Log so that it can be retrieved and exported to other accounting systems.

The feature does not validate data entered in the pop-up dialog box. The print engine.does any required validation.



Job Tracking setting in Fiery driver

© Copyright 2019 | ELECTRONICS FOR IMAGING INC



Job Tracking account information required

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

Access to training and Fiery users worldwide

Use this list of sales, training, and technical resources to help you broaden your knowledge of Fiery print servers plus related products and applications.

Fiery servers main page	fiery.efi.com
Fiery online resources	resources.efi.com
Explore the Fiery digital front ends sold by Fiery partners	efi.com/fierydfe
Fiery production solutions	fiery.efi.com/production-solutions
Fiery Workflow Suite	fiery.efi.com/fws
Fiery driver downloads	efi.com/fierydrivers
Fiery Command WorkStation main webpage	efi.com/cws
Fiery Command WorkStation download	fiery.efi.com/cws
Fiery free trial request	fiery.efi.com/free-trials
Training resources at Learning@EFI	learning.efi.com
EFI Communities	communities.efi.com

Learning@EFI on-demand learning platform

At EFI, we are committed to fueling your success. Learning@EFI is the on-demand, 24/7 anytime, anywhere learning platform that helps you expand your staff's expertise on Fiery technology to take full advantage of your Fiery investment and make the most of your production capacity.

Whether you want to learn new skills or simply get credentialed for skills you already have, our learning options will enable you to learn the latest Fiery features and functionality to give you a competitive advantage.

Free training resources

Choose the EFI training resources that best fit your needs from a variety of self-paced web-based and simulation learning courses that make it easy to fit training into busy schedules.

- How-to guides: step-by-step instructions with sample files
- eLearning courses: interactive online learning sessions
- Express videos: short videos on key topics delivered by EFI subject-matter experts
- Simulation learning: learning solution that offers the opportunity to practice techniques and procedures in a realistic, immersive environment
- Podcasts: engaging audio shows on variety of topics
- Webinars: access to recordings of World of Fiery webinars, an on-going program of educational, and free webinars that feature valuable information for color professionals and for owners and managers of print businesses and in-plant/CRD operations

Fiery certification programs

In today's fast-changing world, you need a convenient and affordable way to gain new skills and credentials quickly—so you can do more, be more, and take your career to the next level. Be a step ahead of the others. Our certification programs will help you stand out in your workplace or your business.

- Fiery Professional Certification

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

The Fiery Professional Certification teaches print professionals the necessary skills to optimize the performance of EFI technology solutions. Developed by EFI subject-matter experts, it provides the latest information on Fiery technology to develop employee skills, enhance professional development and transform print businesses.

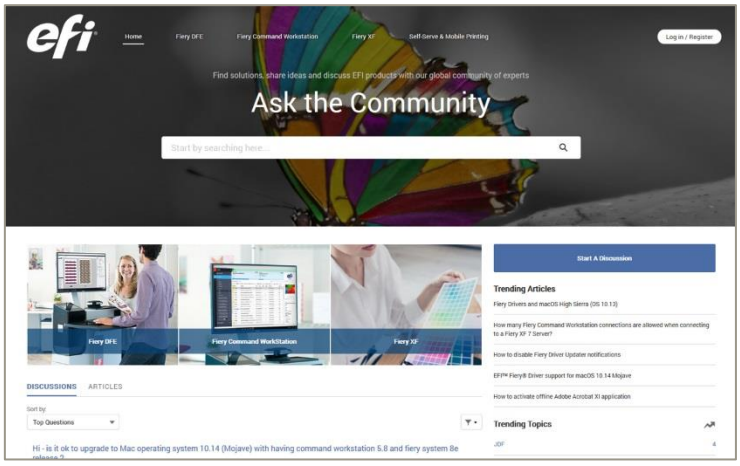
- **Fiery Expert Certification**

  The Fiery Expert Certification builds on the Fiery Professional Certification to develop more in-depth expertise. The expert courses help students master the advanced Fiery toolsets and learn to use the full range of features.

For more information on the Fiery certification programs and to enroll visit this web page on Learning@EFI.

EFI Communities

EFI launched a new customer engagement platform, EFI Communities at communities.efi.com were Fiery users have a place to find solutions, share ideas and discuss EFI products with our global community of experts.



EFI Communities landing page

EFI Communities also offers additional great features:

- A searchable knowledge base of technical articles created by the Fiery Technical Support team, for solutions to common or known issues
- The ability to "follow" topics that interest you, or specific areas of focus
- A personalized "feed" which is created dynamically based on your previous activities on the site
- The ability to select the "best" answer from multiple provided solutions
- New web design which is compatible with mobile devices

EFI Communities is currently available only in English.

© Copyright 2019 | ELECTRONICS FOR IMAGING INC

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.

Nothing herein should be construed as a warranty in addition to the express warranty statement provided with EFI products and services.

The APPS logo, AutoCal, Auto-Count, Balance, Best, the Best logo, BESTColor, BioVu, BioWare, ColorPASS, Colorproof, ColorWise, Command WorkStation, CopyNet, Cretachrom, Cretaprint, the Cretaprint logo, Cretaprinter, Cretaroller, DockNet, MarketDirect StoreFront, DirectSmile, DocBuilder, DocBuilder Pro, DocStream, DSFdesign Studio, Dynamic Wedge, EDOX, EFI, the EFI logo, Electronics For Imaging, Entrac, EPCount, EPPhoto, EPRegister, EPStatus, Estimate, ExpressPay, Fabrivu, Fast-4, Fiery, the Fiery logo, Fiery Driven, the Fiery Driven logo, Fiery JobFlow, Fiery JobMaster, Fiery Link, Fiery Prints, the Fiery Prints logo, Fiery Spark, FreeForm, Hagen, Inktensity, Inkware, Jetrion, the Jetrion logo, LapNet, Logic, MiniNet, Monarch, MicroPress, OneFlow, Pace, PhotoXposure, Printcafe, PressVu, PrinterSite, PrintFlow, PrintMe, the PrintMe logo, PrintSmith, PrintSmith Site, PrintStream, Print to Win, Prograph, PSI, PSI Flexo, Radius, Rastek, the Rastek logo, Remoteproof, RIPChips, RIP-While-Print, Screenproof, SendMe, Sincrolor, Splash, Spot-On, TrackNet, UltraPress, UltraTex, UltraVu, UV Series 50, VisualCal, VUTEk, the VUTEk logo, and WebTools are trademarks of Electronics For Imaging, Inc. and/or its wholly owned subsidiaries in the U.S. and/or certain other countries

© 2019 ELECTRONICS FOR IMAGING, INC. ALL RIGHTS RESERVED. | WWW.EFI.COM