Fiery FS150 Pro and Fiery FS150 Print Servers

Product Guide

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Introduction

Introduction

The Changing Market for Digital Front Ends

In a 2011 U.S. survey, *Digital Front Ends*: *Understanding Market Dynamics and Customer Requirements*, InfoTrends identified the key features that respondents look for in a digital front end 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 make-ready 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 (DFEs) to perform a wide variety of prepress, make-ready and job management tasks as well as to release jobs into print. InfoTrends also projects from the survey information that digital front ends will quickly become a key part of end-to-end, automated workflows and will integrate into cloud workflows. The survey report also notes, "As DFEs are becoming more tightly integrated, there is a need for wider job ticketing support, better integration with workflow or accounting solutions, and higher compatibility with traditional/offset workflows."

Fiery Servers Meet Current and Future Needs

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

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

Productivity

Fiery Systems Maximize Productivity and Automate Workflows

Architectural improvements and the latest hardware configurations continue to ensure that Fiery servers are the fastest and most productive digital front ends (DFEs) in the market. Powerful features such as Fiery HyperRIP enable customers not only to take advantage of the already improved performance of the FS150 Pro servers but also to obtain an additional performance improvement in speed of up to 55% — adding to the already robust world-class tools in Fiery FS150 Pro.

Color

Fiery Systems Deliver Amazing, Accurate and Consistent Color across Applications and Platforms

Fiery technology continues to improve the out-of-the box color experience with up to date PANTONE color libraries, perfect PDF/X-4 results for both color and black and white output and other advanced color settings to ensure full compliance with the latest industry standards.

Usability

Fiery Systems Deliver Ease of Use

Additional features for Fiery Command WorkStation and Fiery Ticker, further upstream in the print workflow, allow operators to access their commonly used items without having to navigate multiple menus.

Customers can offer a new type of value-added application with the ability to easily define Bleed Edge Tabs.

To increase operator productivity even further, Fiery Go allows control of the Fiery Driven™ printer on an iPad or iPhone. Fiery Go allows operators to monitor the status of multiple Fiery Driven printers to manage print jobs from anywhere in the print shop.

Integration

Fiery Systems Deliver Seamless Integration

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

FS150 Pro's inclusion of the latest JDF standards enables the 20,000+ print provider sites that use EFI MIS and Web-to-Print products to seamlessly integrate EFI and other third-party products with Fiery digital front ends, making Fiery servers the preferred choice for commercial printers. Fiery FS150 Pro, along with Fiery FS100 Pro, Fiery System 9 Release 2 and 10, is the first to achieve the JDF1.3 Integrated Digital Printing Interoperability Conformance Specifications (ICS) certification by CIP4.

For more information, please visit the CIP4 website: http://www.cip4.org/global/v3/index.php?content=/jdfexperts/intro.php

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

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

Fiery QX¹⁰⁰

Standard
- Fiery Impose-Compose
  - Fiery Impose
  - Fiery Compose
- Fiery Graphic Arts Package, Premium Edition
- Fiery GUI Kit (mouse, keyboard, LCD Monitor)
- Fiery Stand

Options
- Fiery Color Profiler Suite
- ES-2000 Spectrophotometer
- Removable Hard Disk
- Fiery JobMaster

Fiery PRO⁹⁰

Standard
- Fiery Stand
- Fiery GUI Kit (mouse, keyboard, LCD monitor)
- Fiery Graphic Arts Package
- Fiery Impose

Options
- Fiery Color Profiler Suite
- ES-2000 Spectrophotometer
- Removable Hard Disk
- Upgrade to Graphic Arts Package, Premium Edition
- Fiery Compose
- Fiery JobMaster

Fiery PRO⁸⁰

Standard
- Fiery Graphic Arts Package

Options
- Fiery Impose-Compose
  - Fiery Impose
  - Fiery Compose
  - Fiery JobMaster
- Fiery Color Profiler Suite
- Removable Hard Disk
- Upgrade to Graphic Arts Package, Premium Edition
- ES-2000 Spectrophotometer
- Fiery GUI Kit (mouse, keyboard, LCD Monitor)
- Fiery Stand

Fiery PRO⁸⁰ BW

Standard
- Fiery Impose-Compose
  - Fiery Impose
  - Fiery Compose
- Fiery ImageViewer for Black and White
- Fiery GUI Kit (mouse, keyboard, LCD monitor)
- Fiery Stand

Options
- Removable Hard Disk
- Fiery JobMaster

Fiery E²⁰⁰ BW

Options
- Fiery Impose-Compose
  - Fiery Impose
  - Fiery Compose
- Removable Hard Disk
- Fiery GUI Kit (mouse, keyboard, monitor)
- Fiery Stand

Fiery E²⁰⁰

Options
- Fiery Impose-Compose
  - Fiery Impose
  - Fiery Compose
- Fiery Color Profiler Suite
- Fiery Productivity Package
- ES-2000 Spectrophotometer
- Fiery Spot-On
- Auto Trapping
- Fiery Hot Folders/Virtual Printers

Commercial Print	Print For Pay	Central Reprographics	Graphic Arts	Departmental	Workgroup
Commercial			Office		

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

Introduction to Fiery FS150/FS150 Pro

The Fiery® FS150/FS150 Pro system is the most innovative, scalable and integrated server solution for print engines, ensuring that customers obtain the highest return on their investment. The new features provide substantial gains in productivity, deliver accurate and amazing color, include impressive improvements in ease of use and enhance integration, helping commercial and digital printers reduce costs and improve service. Some important new features include the following:

Fiery FS150 is available for embedded Fiery servers and Fiery FS150 Pro for external Fiery servers. Some important new features include the following:

Target Markets

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

Target Applications

- **Marketing materials**: brochures, catalogs, stationery, direct mail and cards.

- **Photo publishing**: photo books, postcards and calendars.
- **Corporate**: newsletters, presentations and proposals.
- **Book publishing**: books and manuals.
- **Packaging**: boxes, envelopes and proofs.
- **Variable data printing (VDP)**: direct mail, catalogs and transactional promotional material.

FS150 Pro and FS150 New Features Table

The Fiery® FS150/FS150 Pro system is the most innovative, scalable and integrated digital front end for digital print engines, ensuring that customers receive the highest return on their investment. The new features provide substantial gains in productivity, deliver accurate and amazing color, include impressive improvements in ease of use, and enhance integration that will help commercial and digital printers reduce costs and improve service.

Fiery FS150 is available for embedded Fiery servers and Fiery FS150 Pro for external Fiery servers.

New Features

Productivity	Color/Image Quality	Usability	Integration
Fiery HyperRIP Enhancements***	Grayscale Composite Overprint	Fiery Ticker Enhancements**	Fiery JDF Enhancements*
APPE 3.0**	CMYK Black Point Compensation*	Fiery Command WorkStation® 5.5	Fiery Dashboard Integration*
CPSI 3020	PANTONE 336 New Colors	Fiery Software Manager	Cost-Accounting Integration
Fiery Server Automated Workflows	Custom Curve Presets*	Bleed Edge Tabs	
• Drop zones	Specialty Colors Support	Fiery Remote Scan Improvements	
• In-line selection of Server Presets and Virtual Printers		Fiery Command WorkStation 5.6*	
VDP Multi-Up Booklet		Fiery Go	
Product-Specific Presets		Fiery Configuration Tool	
		Fiery Clone Tool for Embedded Servers	

* Requires Fiery Command WorkStation 5.6 / Fiery Extended Applications 4.2, available by June 2014 through online download. For more information on the full list of Fiery Command WorkStation 5.6 new features, refer to the Fiery Command WorkStation 5.6 New Features Guide or visit www.efi.com/cws5.

** Features are not available on embedded Fiery servers running Fiery FS150.

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

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

Productivity

Fiery servers deliver superior documents faster. Today, this means more than how fast the print engine runs. High-performance solutions need to streamline all aspects of document production with efficient use of available resources as well as include productivity tools that simplify tasks and create adaptable workflows for users.

Architectural improvements and the latest hardware configurations continue to ensure that Fiery servers are the fastest and most productive digital front ends (DFEs) on the market. New features such as Fiery HyperRIP enable customers to not only take advantage of the already improved performance of the FS150 Pro servers but also obtain an additional performance improvement of up to 40% faster — adding to the already robust, world-class tools in Fiery FS150 Pro.

Combined with its intuitive operation, the high-performance Fiery servers automate workflows to deliver completely finished jobs faster. Customers can meet their tight turnaround times and do more work by automating time-consuming manual tasks and by removing bottlenecks that slow down production.

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

Productivity	QX^{100}	PRO^{90}	PRO^{80}	$PRO^{80}BW$	$E^{200}BW$	E^{200}
HyperRIP	✓	-	-	-	-	-
APPE 3.0	✓	✓	✓	✓	-	-
CPSI 3020	✓	✓	✓	✓	✓	✓
VDP Raster Preview	✓	✓	✓	✓	✓	-
PPML 3.0	✓	✓	✓	✓	✓	-
PDF/VT-2 Support	✓	✓	✓	✓	✓	-
Spool-RIP-Print Simultaneously	✓	✓	✓	✓	✓	✓
Force Print	SFM	SFM	SFM	SFM	SFM	SFM
Suspend on Mismatch	✓	✓	✓	✓	✓	✓
Print/Process Next	✓	✓	✓	✓	✓	⊙
Rush Print	✓	✓	✓	✓	✓	⊙
Quick Doc Merge	✓	✓	✓	✓	✓	-
Sample Print	SFM	SFM	SFM	SFM	SFM	SFM
Proof Print	✓	✓	✓	✓	✓	✓
Schedule Print	✓	✓	✓	✓	✓	⊙
Job Presets / Server Job Presets	✓	✓	✓	✓	✓	✓
Fiery FreeForm	✓	✓	✓	✓	✓	✓
PPML/PDF-VT/VPS Compatibility	✓	✓	✓	✓	✓	-
Optimize PDF and PS	✓	✓	✓	✓	✓	✓
VDP Resource Manager	✓	✓	✓	✓	✓	✓
Record and Set Level Finishing Support	✓	✓	✓	✓	✓	✓
VDP Record Range Printing	✓	✓	✓	✓	✓	✓
VDP Multi-Up Booklet						
Set Page Device	✓	✓	✓	✓	✓	-
Sequential Printing	✓	✓	✓	✓	✓	-
Hot Folders and Virtual Printers	✓	✓	✓	✓	✓	⊙
Fiery Server Automated Workflows						
Fiery Productivity Package	-	-	-	-	-	⊙

✓ Standard   ⊙ Option   - Not Available   SFM = See Feature Matrix

Performance Technology

Spool — RIP — Print Simultaneously

Over the years, Fiery servers have incorporated various innovative technology features to improve throughput, such as RIP-While-Print®, RIP-1-While-Receive-2, ECT Compression, RIPChips® and Continuous Print.

Designed to enhance the Fiery system's overall performance, these features are now unified as the Spool-RIP-Print Simultaneously feature. Users can now spool, RIP and print a single multiple-page job or multiple jobs simultaneously using these Fiery technologies:

- **ECT Compression:** Provides definite compression ratios and virtually lossless image quality. Compression software decreases the amount of memory necessary to store documents during processing and enables faster printing of documents.

- **RIP-While-Print:** Allows one page to be printed while subsequent pages are simultaneously processed.

- **Continuous Print:** Enables processed pages to be stored in memory before printing, eliminating the need for the copier or printer to cycle down between unique pages.

- **RIP-1-While-Print-2:** Allows the Fiery server to work simultaneously on two jobs for the RIPping and printing processes. Starts to RIP a new file while the previous file is printing.

- **RIP-While-Receive:** Allows a job to be RIPped while it is still being spooling into the Fiery server for a much faster first and last page out. Now 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 printer device.*
- *Increases productivity by having the Fiery server more available for processing jobs.*
- *Reduces bottlenecks at the RIPping stage.*

Fiery SmartRIP

Fiery SmartRIP is a software architecture that uses intelligent processing to accelerate the RIPping process and provide the fastest speeds possible for all hardware configurations.

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

- The combination of an Adobe Configurable PostScript Interpreter (CPSI) RIP with Fiery SmartRIP technology yields dramatically faster page processing by recognizing file characteristics and using adaptive techniques to accelerate color, compression and rendering processes.

- The improvements in overall throughput optimize the print time of the merging of VDP jobs.

- The efficient use of memory and disk space improves efficiency and predictability to support VDP.

- The enhanced image processing allows operators to print composite overprints of CMYK and Fiery Spot-On™ colors. This key feature enables Fiery servers to pass the Altona Test Suite.

- The Fiery system achieves higher performance and more efficient use of multiple processors while accelerating color compression and rendering.
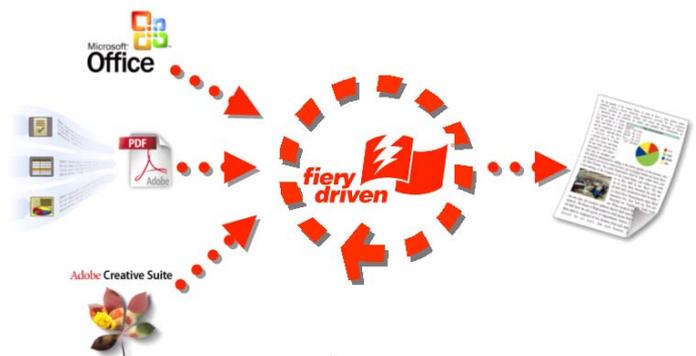
- Applying the Text and Graphic Quality feature enables the Fiery system to process images at the resolution required to produce the best quality and performance.

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.*

Fiery HyperRIP

Fiery HyperRIP is a proprietary EFI-rendering technology that dramatically improves performance by splitting a job into two or four logical parts for parallel RIPping. This splitting of a single job for faster processing is critical to production efficiency as file sizes continue to grow. HyperRIP prevents any single file from becoming a bottleneck for printing.

As CPU processors continue to have more cores, the RIP needs to be able to take advantage of those additional cores to maximize performance. HyperRIP maximizes the use of high-end, multicore hardware for faster performance. It processes multipage jobs more efficiently and increases performance by up to 40%.

Minimum Fiery hardware requirements to apply HyperRIP by splitting the job into two parts:

- 8 CPU cores

- 8 GB of RAM memory

- FS100 Pro and FS150 Pro system software

Minimum requirements to apply HyperRIP by splitting the job into four parts:

- 8 CPU cores

- 16 GB of RAM memory

- FS150 Pro system software

Fiery systems automatically detect hardware resources to apply HyperRIP to jobs by using two or four RIPs. It uses four RIPs when the Fiery server has at least 16 GB of RAM or more, and two RIPs when the Fiery server has more than 8 GB.

In terms of average RIPping performance, the Fiery server processes a job 15% faster than with earlier versions of HyperRIP, and an average of 55% faster than a Fiery server without the HyperRIP feature.

Fiery HyperRIP is available only for Fiery QX^{100} servers.

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

After a HyperRIP job has finished printing, the job log and printed queue have the following optional attribute columns:
- **Number of RIPs present**: indicates the total number of RIPs available to the job during processing.

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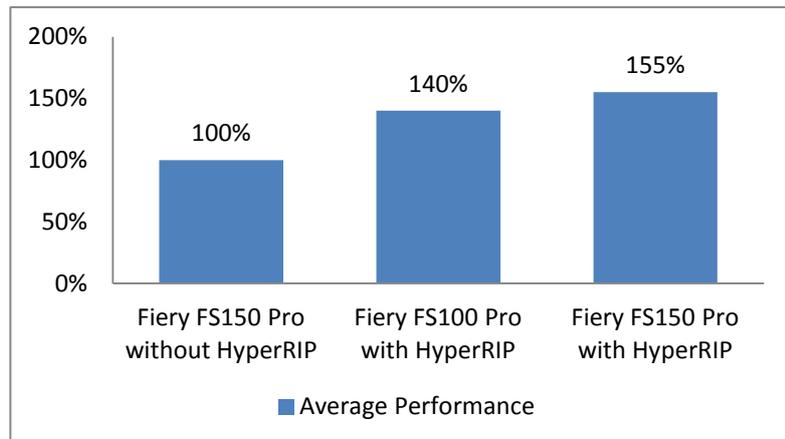
Benefits:

- *Dramatic performance improvements by processing multiple segments of the job simultaneously.*
- *Progress bars show multiple processors in action.*
- *Faster throughput means less waiting for operators and faster throughput.*
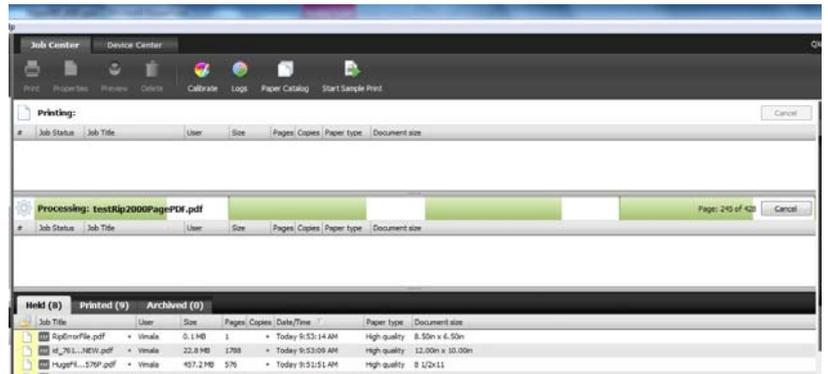
Optimized PDF

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 throughput time.

PDF XObjects in a Per-Job Basis

Now operators 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 PS objects under the VDP tab, or use 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.*

APPE 3.0

Fiery FS150 Pro servers provide support for the latest PDF-native rendering platform from Adobe®.

The v3.0 enhancements announced by Adobe can be found at http://www.adobe.com/products/pdfprintengine.html.

Benefit

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

CPSI 3020

Fiery FS150 Pro servers provide support for the latest PostScript® interpreter from Adobe.

Benefit

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

Advanced Job Management

A successful production printing operation depends on a very structured workflow, much like a factory assembly line; each step is dependent on the successful completion of the last. The Fiery system has many tools that manage jobs faster and 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

- Print/Process Next

- Rush Print

- Quick Doc Merge

- Sample Print

- Schedule Print

- Job Presets

- Server Job Presets

- Import and Export Job Presets

- Modify Default Queues

- Proof Print

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

Benefits:

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

Rush Print

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

Benefits:

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

Print/Process Next

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

Benefit:

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

Quick Doc Merge

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

Benefits:

- ◆ *Saves operator time by eliminating the need to create flattened PDF files.*
- ◆ *Gives operators the flexibility to combine multiple jobs without needing to open the file and manually merge pages.*

Sample Print

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

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

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

Configure Sample Print to meet workflow needs

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

- On demand by selecting the Sample Print button from Command WorkStation.

- Every *n* sheets; the operator can instruct the Fiery server to stop printing sample pages once the current job is done or to continue printing sample pages for all jobs until the operator manually stops the sample print function.

Benefits:

◆ *Performs quality control of the output while the engine is printing, avoiding production halts, ensuring quality of the output and increasing overall productivity.*

◆ *Makes it easy for users to take corrective actions before the job finishes printing, 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 process 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 operators can schedule the jobs to print when the media is loaded at the printer.*

Job Presets
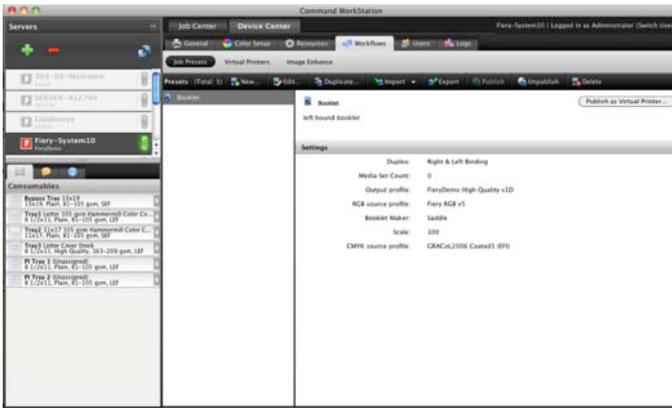
The Fiery server Job Preset enhancements include the following:

- Server Job Presets

- Import and export Job Presets
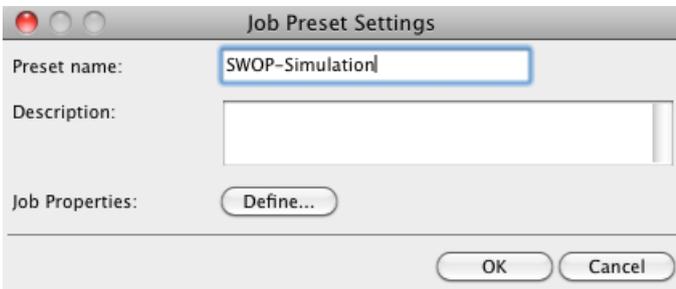
Server Job Presets

Previously, users could create local Job Presets, which were available for use only on the user's workstation. Now administrators can create and share Server Job Presets to automate the selection of Job Properties for commonly used tasks, saving time and maximizing productivity.
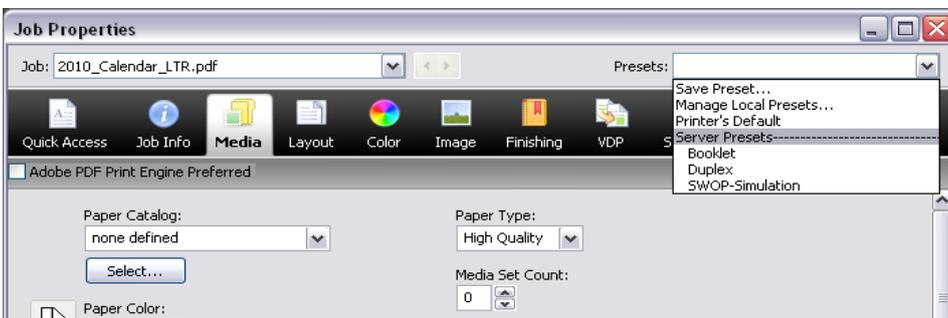
Administrators can save, edit, publish and delete Server Presets from the Command WorkStation Device Center. They can also create Server Presets from within Job Properties in the Command WorkStation right after selecting the applicable job settings — simply provide a name and description. Other users can access the centrally stored presets through workflows such as Virtual Printers, Hot Folders, Job Properties and Print Drivers.


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

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


Select Job Presets from Job Properties.

Benefits:

◆ *Allows all users to access commonly used settings in all workflows.*

◆ *Permits administrators to save and manage the most commonly used settings and then easily publish them as Virtual Printers and Hot Folders.*

Import and Export Job Presets

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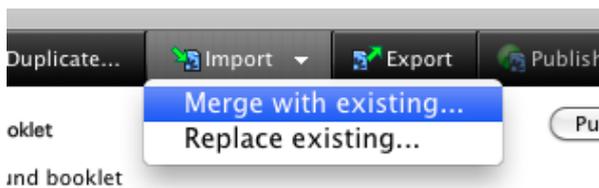
Users can export and import Server Job Presets.

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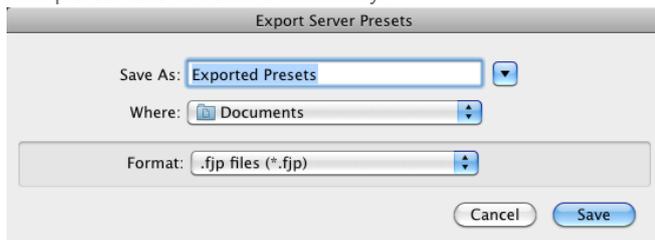
Export Server Job Presets.

Merge or overwrite existing presets.

Benefits:

◆ *Share and back up local Job Presets for safekeeping.*

◆ *Easily and quickly make Server Job Presets available to multiple Fiery users.*

◆ *Create automated workflows for any repetitive task, reducing the number of times a job needs to be touched during printing.*

Product-Specific Presets

Fiery servers include five server presets to help users quickly set up jobs with some frequently used print settings, and also to promote the use of server presets and workflows.

The server presets include the following:

U.S. Presets

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

Metric Presets

1. A5 booklet
2. A4 booklet
3. A4 duplex grayscale
4. A4 duplex staple
5. A4 2-up A3
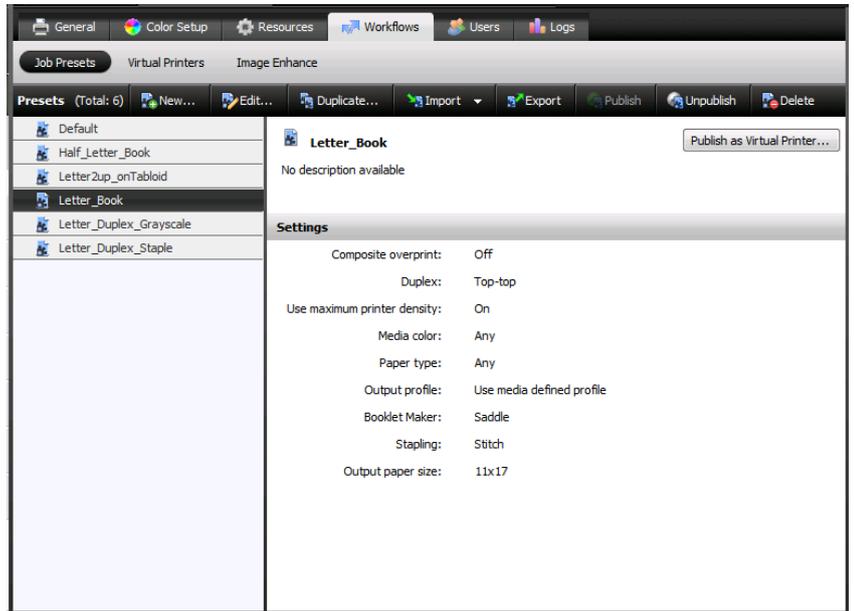
Product-specific presets available to all Fiery users
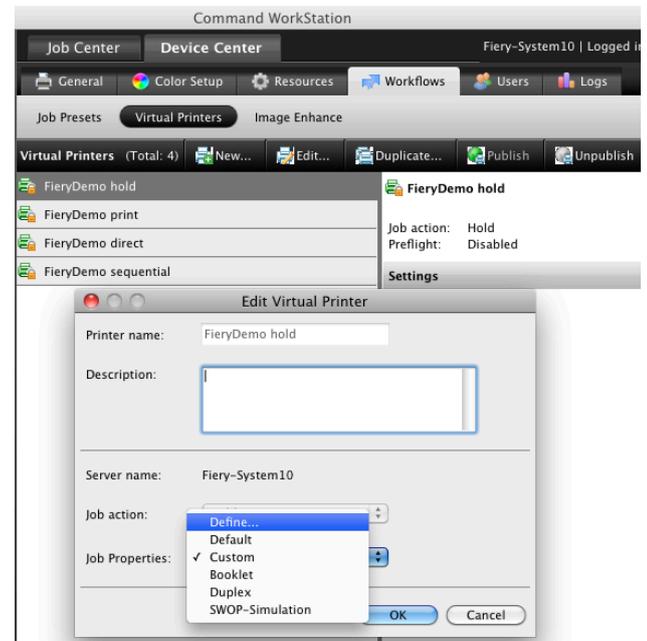
Modify Default Queues

Operators frequently ask for a way to customize the default Job Properties of the Fiery server so they can set options such as Duplex to be always on. Fiery servers provide the ability to change the default Job Properties of the Print and Hold queues.

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

Benefit:

◆ *Allows administrators to define the default Job Properties of the Fiery server to adapt to their particular printing needs, increasing workflow efficiencies and productivity.*

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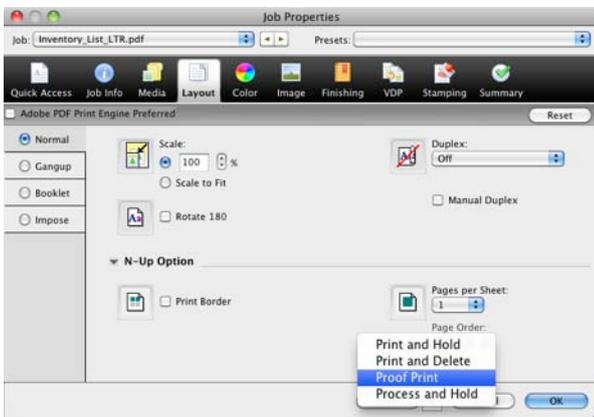
Proof Print

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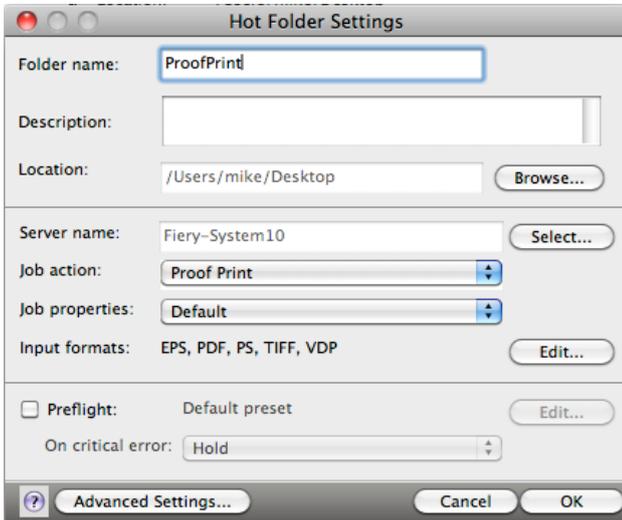
Request Proof Print from Hot Folders.

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


Request Proof Print from Job Properties

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

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

Benefit:

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

Fiery Productivity Package

The Fiery Productivity Package option for Fiery embedded servers helps users meet tight turnaround times and produce top notch color documents the first time, while automating your processes to make you more productive than ever before. Features included in the package are the following:

- **Fiery Spot-On:** Manage CMYK, RGB and named colors including all PANTONE, HKS, Toyo and DIC names. In addition, operators can create custom colors with a user-specified name and CMYK value.

- **Composite Overprint for Spot Colors:** Recognizes spot color overprinting elements automatically from composite files and properly renders them, eliminating the submission of separated files from the native application.

- **Fiery ImageViewer:** Fast local and remote soft proofing tools for amazing preview and color editing capabilities in Fiery Command WorkStation.

- **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 spot colors.

- **Control Bar:** Delivers effective color quality control, consistent results and job identification on every printed page through the application of customized dynamic job information and images, including logos, company names or color bars.

- **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.

- **Hot Folders:** Automates the job submission process, reducing errors and automating repetitive tasks with a simple drag-and-drop operation. Input formats: PS, PDF, EPS, DOCX, XLS, XLSX, PPT, PPS, PPTX, PPSX and PUB.

- **Virtual Printers:** Streamlines job setup times and eliminates print errors on repetitive print jobs by using predefined job settings in the print driver.

- **Graphic Arts Filters for Hot Folders:** Automates job submission for more file formats, including JPEG, EPS, TIFF/IT, CT/LW, PDF2Go, Export PS and DCS2. Includes PDF/X Preflight Filter to verify the compliance of all PDF files with PDF/X-1 and PDF/X-3 specifications.

- **Rush Print:** Marks a print job as urgent so it can be processed and printed immediately, even interrupting a job that is printing.

- **Print/Process Next:** Queues a job to print immediately after the currently running print job completes.

Benefits:
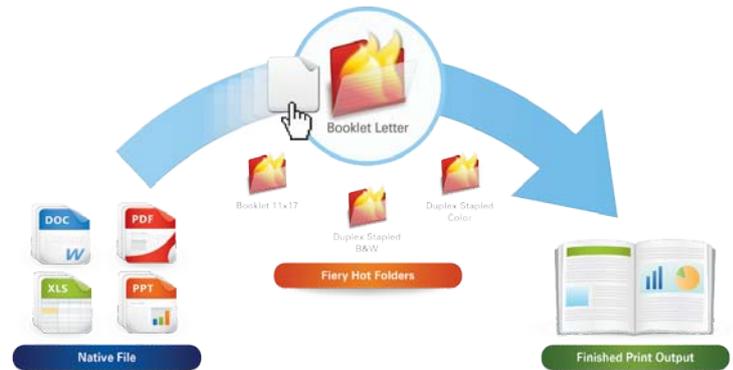
- *Troubleshoots color issues effectively to get jobs printed correctly and quickly.*
- *Simulates other printers' output to produce cost-effective proofs.*
- *Eliminates bottlenecks and optimizes production while maximizing throughput.*
- *Automates job submission to shorten setup times and decrease print errors.*
- *Guarantees a high level of document confidentiality.*

Job Submission Automation

Fiery Hot Folders

Fiery Hot Folders provide the user with a simple and automated method of sending documents to a Fiery server. Users can copy or simply drop documents into Hot Folders and then route them to a Fiery server with a job ticket attached, or merge files from same folder. Job ticket settings include PostScript Printer Description (PPD) options and Imposition attributes. From the user standpoint, a Hot Folder acts as a script that forces printing settings and automates the printing process.

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

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

Benefits:

◆ *Automates workflow for all users, increasing productivity.*

◆ *Reduces repetitive workflows for faster, error-free printing.*

Fiery Virtual Printers

It is critical to automate complex tasks and leverage all available resources in a production environment that regularly receives jobs from external sources. In-plant and CRD operations, as well as commercial organizations, look to digital workflow to capture as much formatting and direction from nontechnical users as possible. Fiery Virtual Printers enable production print administrators to create a specific configuration for an output device and present it to users as a printer with a specific name. For example, a user who prints training manuals on a regular basis could simply print to a printer named "Training Manual," greatly reducing interaction between user and production while capturing pertinent data.

In comparison with Hot Folders, Virtual Printers is 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.

The administrator has rights to the following functions:

• Create new virtual printers.

• View the available virtual printers (and published queues).

- Publish, delete or edit virtual printers.

Key Functions and Features:
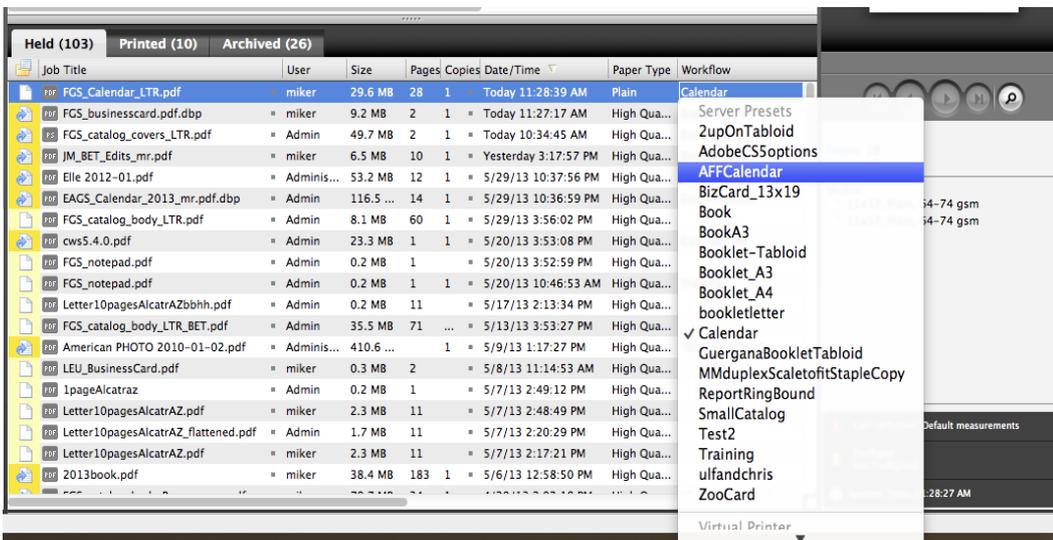
- Defines a combination of up to 252 virtual printers on a Fiery server.

- Is easily accessible from any print driver — ideal for "driver-based" workflows.

- Provides Fiery system actions such as Hold, Process and Hold, Print, and Print and Hold.

- Comes with imposition and override settings.

Benefits:

- *Automates workflow for all users, increasing productivity.*

- *Reduces repetitive workflows for faster, error-free printing.*

- *Ensures that print processes and company standards are maintained; relevant settings can be preserved as Admin-lockable.*

Fiery Server Automated Workflows

The Fiery Command WorkStation interface has a way to quickly select Server Presets by simply selecting one after right clicking on a job. Fiery administrators can create and publish the workflows as easily as they can create a new Virtual Printer, and can publish the workflows to make them available to all operators accessing that Fiery server. The automated workflows require a Fiery server with Virtual Printers or Server Presets. Virtual Printers come standard with external servers and are an optional feature for embedded servers. Server Presets are standard for both external and embedded servers, starting with Fiery System 10 and 10e.

Server Preset selection after a right click on a job

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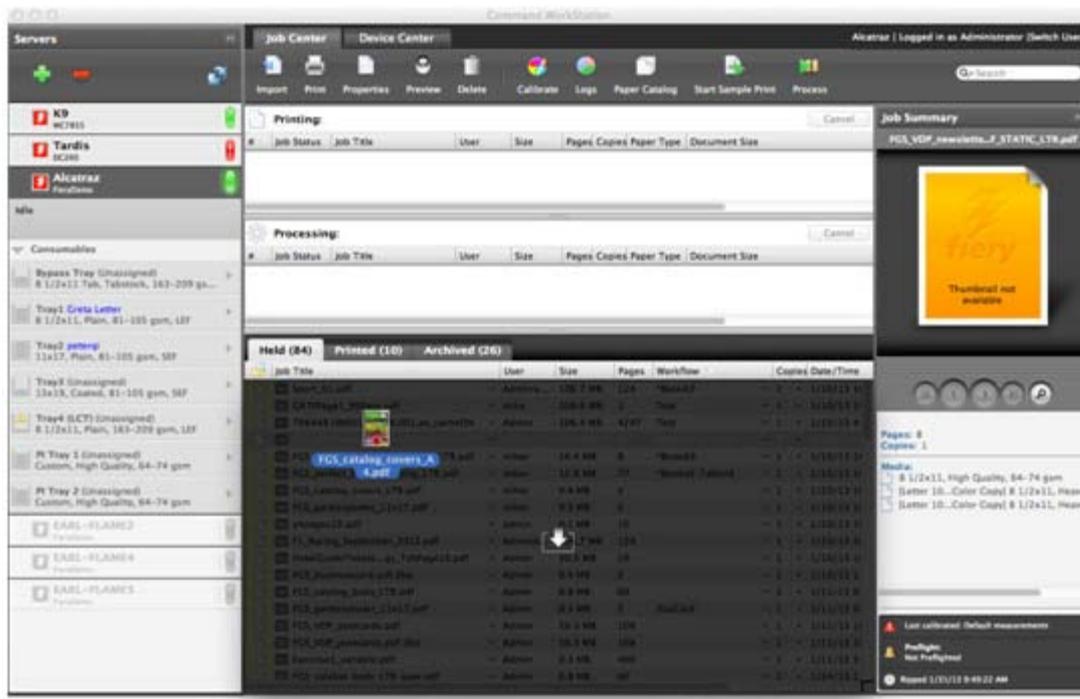
Drop zone indicated on the Held queue

Benefits:

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

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 over 31% greater than those from general marketing. Personalized communications also garner measurable improvements 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 VDP solutions are designed to fit into existing workflows so users can easily develop customized marketing campaigns, regardless of their complexity, and add to their systems as they grow.

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

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

By drawing from its own and its partners' 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.

The finished catalogs are made from elements in the content database, driven by elements in the profile database

Content Database

The customer database information can be tied to images in the content database. For Example, Shawn O'Neil likes the beach so a picture of a caribean beach is pulled from the content database

Profile Database

| 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 may use the scroll bars to see the whole image. With the Fiery VDP Raster Preview, users can now verify whether the record boundaries for imposed and nonimposed jobs are correct before printing the job. The feature is available when connecting to System 10/10e with Command WorkStation 5.4 or later, or to FS100 Pro /FS100, FS150 Pro /FS150 products.

Benefits:

◆ *Enables users to verify record boundaries for imposed and nonimposed jobs within the raster preview without the need to print the job, reducing potential errors and waste.*

◆ *Displays records for nonimposed 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.*
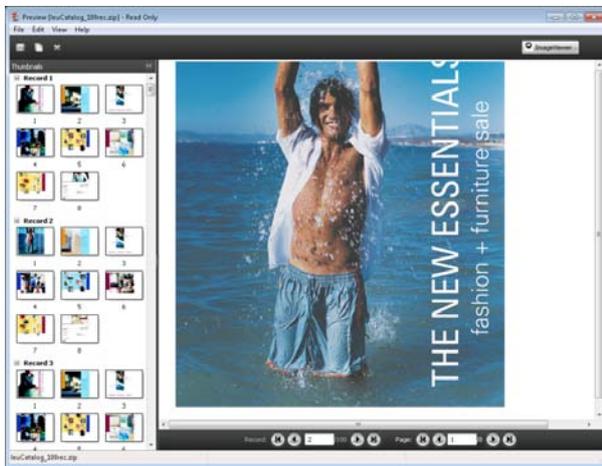
Nonimposed job   Imposed VDP job

Variable Data File Format Support

- **PPML**
  PPML was designed to support efficient job resource reuse. By allowing the printer to know early on which fonts, logos, diagrams, images or other resources are needed at a particular point in the job, the system can rasterize that resource a single time and use it as many times as needed without redundant processing. Fiery servers are compliant with PPML as set forth by the Print-on-Demand industry initiative. PPML compliance in Fiery servers enables the user to RIP and print jobs using the PPML language format for variable data printing.

- **Creo VPS 1.5**
  A fundamental principle of the Creo variable print specification (VPS) is its ability to specify which elements of a variable-data print job will be used multiple times. Once specified, the application will eliminate multiple downloads of repeating data elements to the printer or digital press. This prevents redundant data handling and helps variable-data print jobs to print at or near rated engine speed. The Fiery server's compatibility with the Creo VPS format enables users to RIP and print jobs in Creo VPS format for variable data printing.

- **VI Compose** *(VIPP/VPC — available on Fiery servers driving Xerox print engines only)*
  This is an open language from Xerox that enables highest-performance output of variable data PostScript documents.

- **PDF/VT v1.0**
  PDF/VT is a new standard developed by the International Organization for Standardization (IOS) for VDP data exchange. Fiery System 10/10e 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. Rasterized master background pages are created with specified variable content zones, and database information is merged into these zones. Granularity for the job is at the page level and limited to a single job master.

- **FreeForm 2**

  Fiery FreeForm 2 technology expands on FreeForm 1 by allowing a variable data document to individually access and reuse any page within 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 3rd 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 is the latest VDP standard, and it 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 transparency between layers. It enables users to print variable layers as designed and supports the printing of drop-shadow PostScript masks and soft-edge TIFF masks; in addition, it lets users overlay a reusable JPEG image.

Benefits:

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

Examples of a print job with transparencies

Fiery FreeForm

Fiery FreeForm is an exclusive, built-in and simple-to-use VDP file format that supports a wide variety of source applications without the need for a third-party VDP composition tool. With FreeForm, print providers can enter the market for personalized marketing campaigns and support a multitude of customer requirements with ease. Fiery FreeForm is an ideal entry-level step that requires minimal skill, so there is no learning curve for users. It is available on virtually all Fiery servers and can create static data masters with any application. Fiery FreeForm doesn't require an additional investment, so it is low risk.
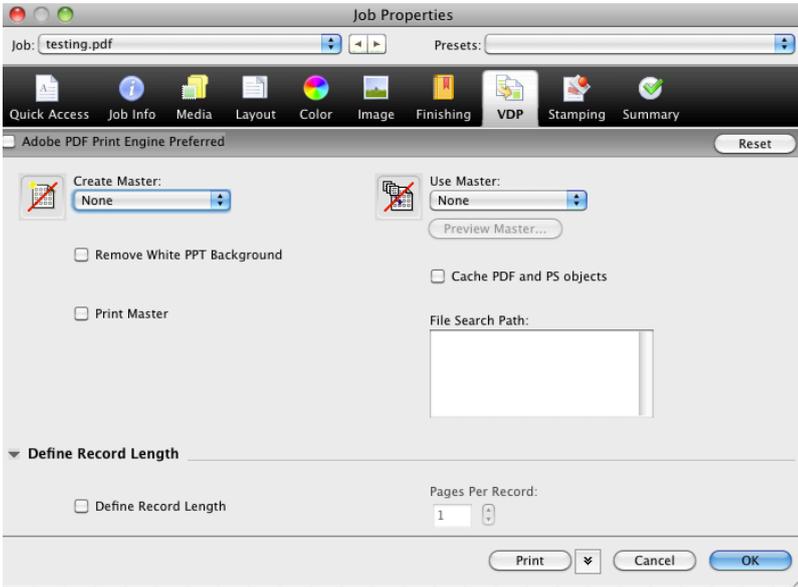
The page length of the FreeForm master document defines each record in a FreeForm job. FreeForm maps the pages from the variable document to the record length defined by the FreeForm master until all the variable document pages are used.

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

Enhanced FreeForm

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

As an example, imagine a company needs to distribute a 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.

Master Pages

Variable Pages

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

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

Enhanced FreeForm is supported in Command WorkStation 5.3 Job Properties, Virtual Printers and Presets and Hot Folders as well as in Windows and Mac drivers.

Users can choose Enhanced FreeForm from the Job Properties VDP tab by selecting a master document from the Use Master drop-down menu.
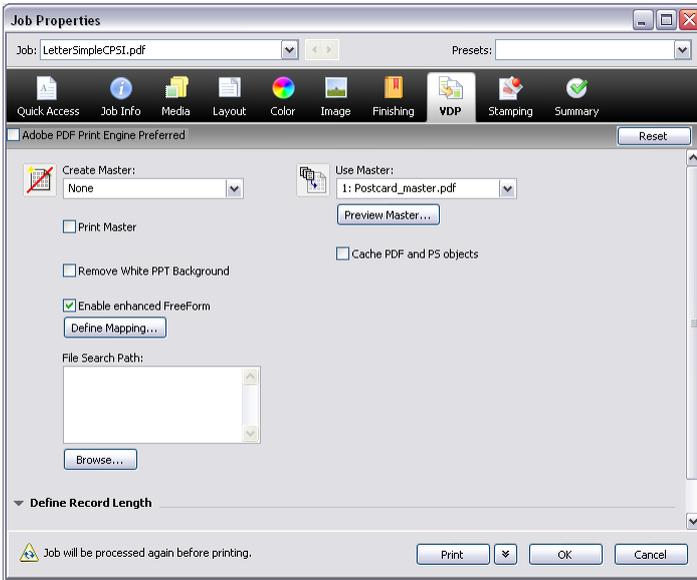
Users can choose Enhanced FreeForm from the Job Properties VDP tab
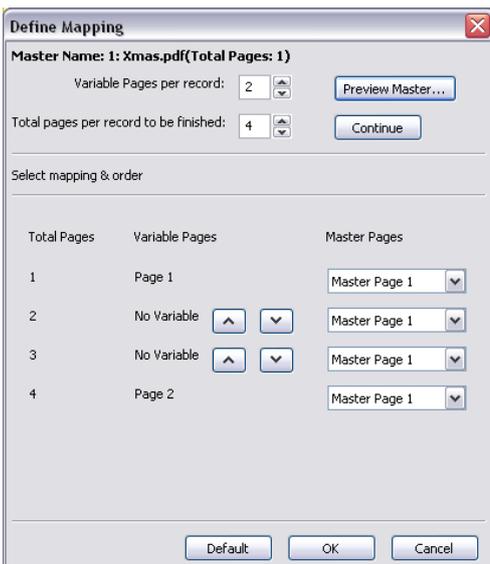
Using the Define Mapping table, users can associate the variable pages with the corresponding page of the master document.

Benefits:
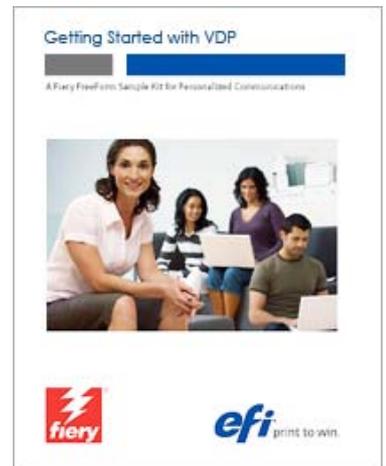
- ◆ *Simplifies creating and using VDP documents by allowing users to map variable documents to master documents without modifying the source documents.*

- ◆ *Offers the flexibility to pick only a subset of pages from a master document for use with the variable record in any order.*

- ◆ *Allows print shops to print jobs without returning the variable document for revisions.*

Fiery FreeForm Kit

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

The Fiery FreeForm Kit demonstrates how to use this technology and start increasing the application's portfolio with effective, personalized marketing pieces. The FreeForm Kit comes with templates of typical 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 and certificates and awards.

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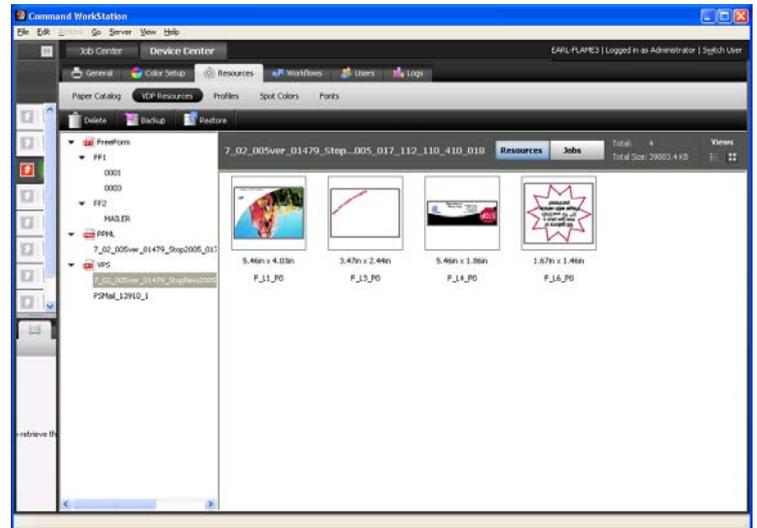
VDP Resource Manager

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

Key Functions and Features:

- Easy to navigate with its intuitive user interface

- View name, size, creation date of object and origination environment

- Thumbnail or list view of global objects and FreeForm masters located at connected Fiery servers

- Archive or delete dated or redundant files

- Troubleshoot problematic files and reduce production bottlenecks with a single view of all VDP resources on all of the Fiery servers in the production environment

- A choice of a list or thumbnail view (thumbnail view provides a visual illustration of resources)

- The option to view a list of jobs in the Hold Queue that are associated with a selected resource

- An option to delete all the resources in that environment

- An option to back up resources

- Automatic refresh of stored VDP resources when a new VDP file is processed

VDP Resource Manager listing a thumbnail view of VDP resources

Benefits:

- *Reduces the chance of operator errors, leading to increased throughput and higher-quality work.*

- *Optimizes RIPping with efficient cache and resource management.*

PDF/VT Support

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

The system processes PDF/VT files the same way it handles other VDP files — by detecting records defined in the PDF/VT job and caching reusable XObjects — and displays a format icon for PDF/VT jobs on the Fiery Command WorkStation.
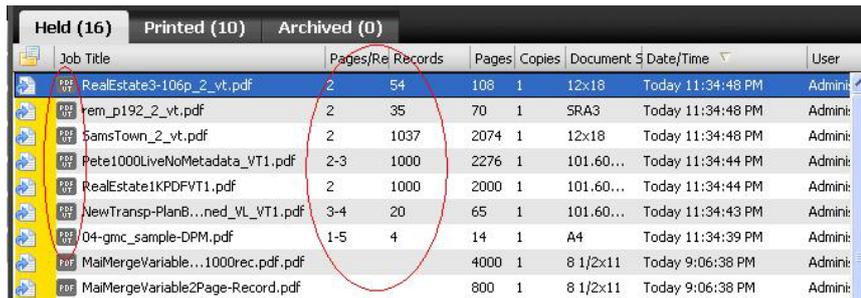
	Job Title	Pages/Re	Records	Pages	Copies	Document S	Date/Time ▽	User
	RealEstate3-106p_2_vt.pdf	2	54	108	1	12x18	Today 11:34:48 PM	Adminis
	rem_p192_2_vt.pdf	2	35	70	1	SRA3	Today 11:34:48 PM	Adminis
	SamsTown_2_vt.pdf	2	1037	2074	1	12x18	Today 11:34:48 PM	Adminis
	Pete1000LiveNoMetadata_VT1.pdf	2-3	1000	2276	1	101.60...	Today 11:34:44 PM	Adminis
	RealEstate1KPDFVT1.pdf	2	1000	2000	1	101.60...	Today 11:34:44 PM	Adminis
	NewTransp-PlanB...ned_VL_VT1.pdf	3-4	20	65	1	101.60...	Today 11:34:43 PM	Adminis
	04-gmc_sample-DPM.pdf	1-5	4	14	1	A4	Today 11:34:39 PM	Adminis
	MaiMergeVariable...1000rec.pdf.pdf			4000	1	8 1/2x11	Today 9:06:38 PM	Adminis
	MaiMergeVariable2Page-Record.pdf			800	1	8 1/2x11	Today 9:06:38 PM	Adminis

Held (16)   Printed (10)   Archived (0)

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

PDF/VT enables high-performance rendering of graphically rich content for printing on high-speed digital presses by caching repeated text and graphics. A significant number of products that will create or consume PDF/VT are currently in active development and will likely be introduced in the near future.

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 of 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 now supported on Fiery servers running FS100 Pro and FS150 Pro. 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. PDF/VT is supported for both CPSI and APPE interpreters. PDF/VT-2 gives users a performance improvement because PDF/VT files can refer to resources through a file search path so that they can be processed inline, but the overall PDF/VT file size being transferred is reduced.
With PDF/VT-1, all of the resources had to be contained inside the file.

See this Adobe whitepaper for more details: http://www.pdf-tools.com/public/downloads/whitepapers/Whitepaper-PDFVT-Standard-ISO-16612-2-EN.pdf

Benefits:

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

PDF/VT is displayed as a file type in Command Workstation; the number of records and pages per record are also displayed.
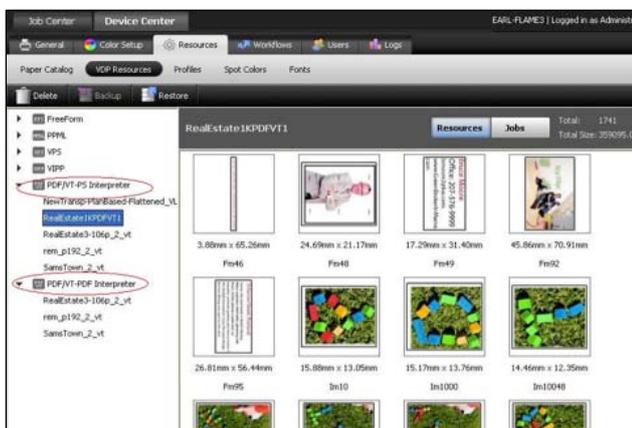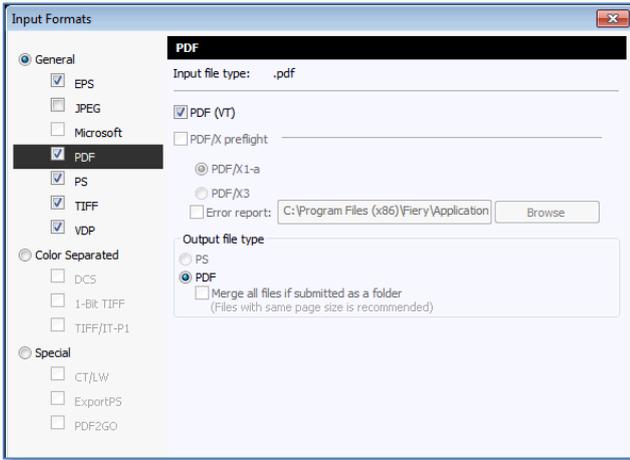
PDF/VT file format under VDP Resource Manager

Hot Folders Filter for PDF/VT Support

Fiery Hot Folders now support the latest VDP format on the market — PDF/VT. Selecting the PDF/VT checkbox grays out all other PDF options, ensuring that Hot Folders passes through the PDF 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.*

Users can select PDF/VT as input file type in Hot Folders settings.
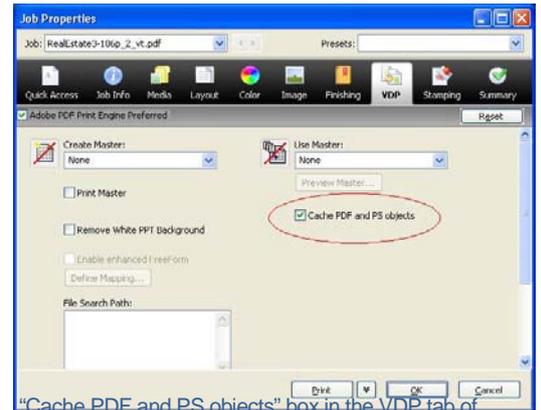
Processing Optimization for PDF and PostScript VDP Files

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 caching them.

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

Benefit:

◆ *Increases speed and performance while processing PDF and PostScript format files in VDP applications.*


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

Definition of Record Length

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

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

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

- **Number of Records:** Displays the number of records contained in the file.

- **Pages per Record:** Displays record length information. Variable record lengths are displayed as a range, from smallest to largest.

Benefits:

◆ *Allows VDP jobs imported as PostScript and PDF formats to be correctly processed with the desired finishing requirements.*

◆ *Reduces waste by allowing users to print a selected set of records.*

◆ *Provides additional VDP job information, allowing operators to prepare and troubleshoot VDP jobs more effectively.*

Record and Set Level Finishing Support

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

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

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

- FreeForm v1 and v2

- PDF/VT

- PPML

- VI Compose (VIPP/VPC — Xerox only)

- Creo VPS

Benefit:

◆ *Increases automation of the output process and reduces the number of manual offline steps in production.*

VDP Record Range Printing

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

Benefits:

◆ *Simplifies record reprinting. For example, if you need 4 of 100 records, you don't have to process the whole job to just print those records (producing waste).*

◆ *Reduces waste by allowing the user to print a selected set of records.*

VDP Multi-Up Booklet

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

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

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

Benefits:

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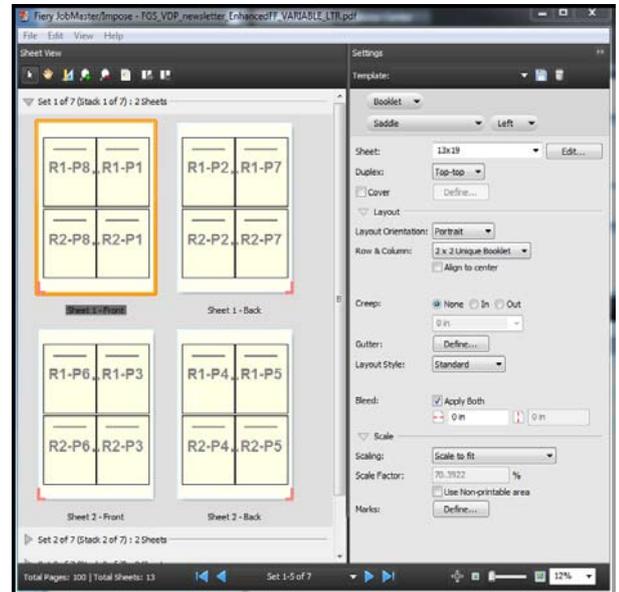
Transactional Printing

Set Page Device Support

Set page device (SPD) refers to a group of PostScript commands that describe the printing characteristics of a file. This includes aspects such as paper attributes, finishing options and number of copies. SPDs 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.

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

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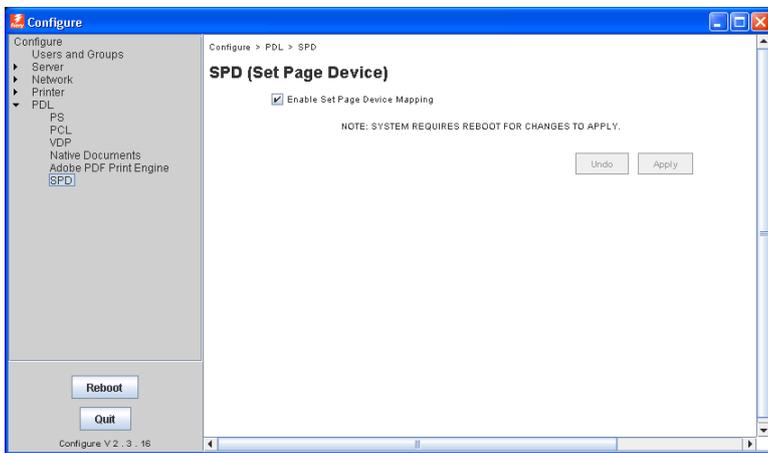
Enabling SPD in Configure

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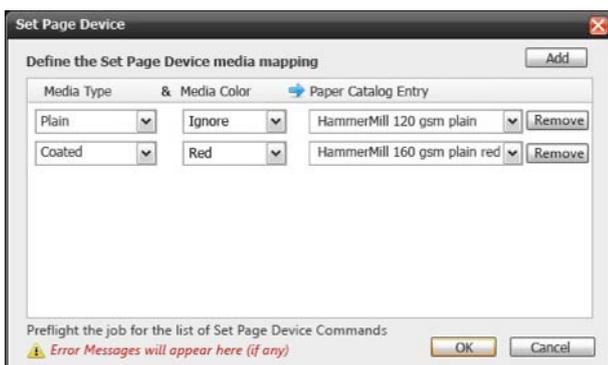
Defining media mapping and finishing mapping in Job Properties

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

Benefits:

◆ *Increases productivity with support of the user's existing workflow.*

◆ *Automatically prints SPD embedded files without operator intervention to save time and increase productivity.*

Sequential Printing

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

Users enable a Sequential Print queue in the Configure Tool under Printer, General settings, as shown in the screenshot below. The configuration of a Sequential Print queue also requires the administrator to define a "time-out." The time-out defines how long the Fiery server should wait for the next job in the sequential run before timing out and considering the run complete.
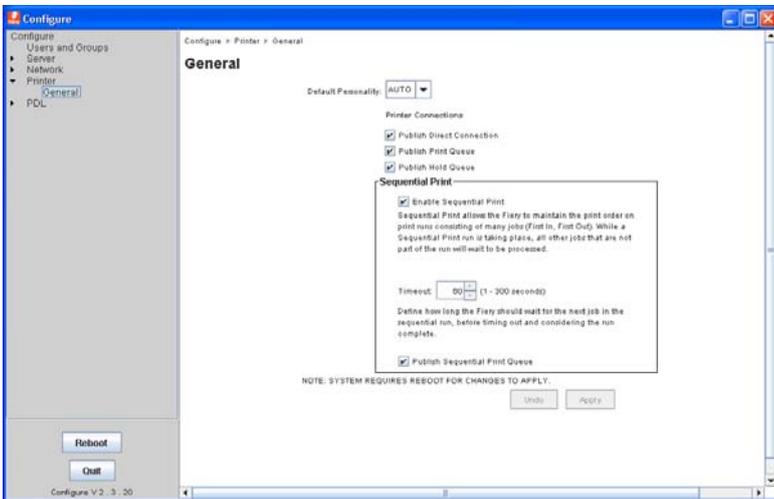
Enable the Sequential Print Queue in the Configure Tool
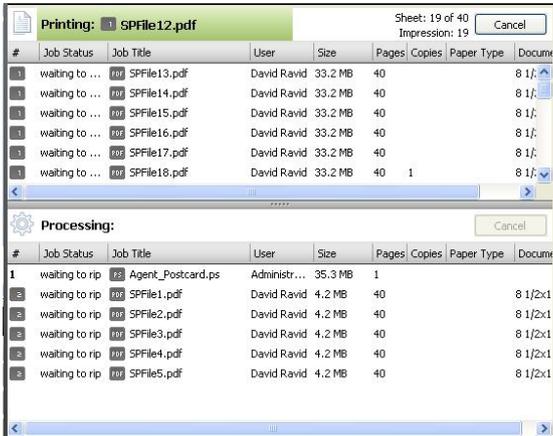
Once enabled, the system publishes a new default Print queue called Sequential Print. Users can add new Virtual Printers and Hot Folders using the Sequential Print queue, as shown in the screen shot below.
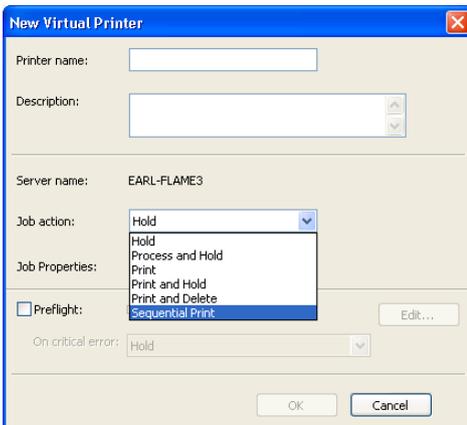
A new default print queue called Sequential Print is published.

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

40

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

Identification of Sequential Print jobs in Command WorkStation

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

Benefit:

◆ *Guarantees production of jobs that need to be printed in a specific sequence, such as variable printing application for postal sort.*

Usability

Fiery Systems Deliver Ease of Use

The Fiery servers adapt to all skill levels. Job management and preparation become faster and more efficient, regardless of the jobs' complexity, using award-winning Fiery Command WorkStation and Fiery Impose-Compose.
For example, Mixed Finishing Sets automate document production with multiple finishing requirements in a set. Fiery Impose supports user-defined trim and bleed definitions, so the operator has more control over imposition settings

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

Usability	QX^{100}	PRO^{90}	PRO^{80}	PRO^{80}BW	E^{200}BW	E^{200}
Fiery Command WorkStation 5	✓	✓	✓	✓	✓	✓
Fiery VUE	SFM	SFM	SFM	SFM	SFM	✓
Fiery WebTools	✓	✓	✓	✓	✓	✓
Fiery Ticker	✓	✓	⊙	✓	⊙	-
Fiery Go	✓	✓	✓	✓	-	-
Fiery Impose	⊙	✓	⊙	⊙	⊙	⊙
Fiery Compose	⊙	✓	⊙	⊙	⊙	⊙
Fiery JobMaster	⊙	⊙	⊙	⊙	⊙	SFM
User Defined Finish Size Preference	⊙	⊙	⊙	⊙	⊙	SFM
Mixed Media Viewer for Perfect Binder	SFM	SFM	SFM	SFM	SFM	SFM
Fiery Driver	✓	✓	✓	✓	✓	✓
Fiery Job Properties	✓	✓	✓	✓	✓	✓
Fiery Remote Scan	✓	✓	✓	✓	✓	✓
Mixed Media Attributes Settings	✓	✓	✓	✓	✓	✓
Tab Shift	✓	✓	✓	✓	✓	✓
Insert Tab	✓	✓	✓	✓	✓	SFM
Media Defined Profiles	✓	✓	✓	-	-	✓
Define Covers	✓	✓	✓	✓	✓	✓
Booklet Maker	✓	✓	✓	✓	✓	✓
Paper Catalog	✓	✓	✓	✓	✓	✓
Pad Printing	✓	✓	✓	✓	✓	-
Fiery Setup Wizard	✓	✓	✓	✓	✓	✓
Clear Server	✓	✓	✓	✓	✓	✓
Fiery Configuration Tool	✓	✓	✓	✓	✓	✓
Fiery Clone Tool for Embedded	-	-	-	-	✓	✓
Backup and Restore	✓	✓	✓	✓	✓	✓
USB Media Server	✓	✓	✓	✓	✓	✓
Fiery Integrated Workstation	✓	✓	⊙	✓	⊙	-

✓ Standard   ⊙ Option   - Not Available   SFM = See Feature Matrix

Job and Device Management Tools

Fiery Command WorkStation

Fiery Command WorkStation, the print job management interface for Fiery servers, makes printing more productive, powerful and intuitive. It centralizes job management, connects to all Fiery servers on the network and improves results for increased productivity. The intuitive interface makes complex jobs simple, regardless of the operators' experience, and the full cross-platform Mac and Windows support allows users to keep the exact same functionality, look and feel.

The intuitive interface offers a fully functional remote connection so that users get the same quality of results as when they use a local connection to a Fiery server. The backward compatible Fiery Command WorkStation also allows print providers to update and provide usability enhancements for current Fiery servers at no additional cost.

To download the latest version of Command WorkStation, visit www.efi.com/CWS5.

Job Center

An uncluttered workspace is one key to working productively. CWS5 helps accomplish this task through the Job Center area, a centralized location to view and manage jobs sent to the Fiery server. It is the operator's main user interface for all job management and setup controls. Command WorkStation 5 workspace has drag-and-drop capabilities for fewer clicks, and a customizable toolbar provides instant status of all Fiery servers. The workspace also has job grouping for efficiency and provides instant information on the engines, consumables, media and job requirements. It also has an integrated job preview and job search capabilities across all Fiery servers.

Fiery Command WorkStation 5 offers a fully visual interface that makes the user experience more productive:

- Integrated job previews let users navigate through pages while obtaining other critical information in the Job Center view.

- Preview shows how content will be laid out on pages and helps the user navigate through the entire document with ease.

- Preview of processed jobs allows the user to drag and drop pages from other projects to easily add, delete, reorder and merge.

- Job summaries in the preview pane show paper type and weight in addition to the paper catalog name and size.

Device Center

The Device Center integrates server setup functions in a single workspace, including fonts, virtual printers and more:
- The Server configuration pane enables users to view, print or save the server configuration details as a PDF or text file.
- Color setup offers an intuitive process that makes it much easier to see how color processing works.
- Can filter job login formation by date, export to preview and manipulate the data in other applications such as Microsoft$^®$Excel$^®$. Includes customizing the date range and columns to export.
- Variable data printing resources integrate and manage all elements by job, including Fiery FreeForm master jobs.

Flexible Integration and Upgrade Path

- Full cross-platform Mac and Windows support maintains the exact same functionality, look and feel on both operating systems.

- Backward compatible Fiery System 8 Release 2 allows users to update Command WorkStation and provides operating usability enhancements for the current Fiery server at no additional cost.

- Command WorkStation offers a fully functional remote connection (with the same functionality as a local connection) to a Fiery server.

The latest version of Fiery Command WorkStation v5.5 includes all new features to improve usability, image quality and imposition workflows.

Fiery Command WorkStation 5.5

Fiery Command WorkStation v5.5 includes the following new features: *(click on the features below to know more about the feature)*

- Fiery Server Automated Workflows
  - Drop zones
  - In-line selection of Server Presets and Virtual Printers

- Bleed Edge Tabs in Fiery JobMaster
- VDP Multi-Up Booklet
- Fiery Software Manager
- Fiery Remote Scan Improvements

Version 5.6 of Command WorkStation will be available via download at www.efi.com/cws5 after June 2014. For more information on the Fiery Command WorkStation 5.6 new features, refer to the Fiery Command WorkStation 5.6 New Features Guide or visit www.efi.com/cws5.

Fiery Software Manager

The Fiery Software Manager is a cross-platform manager for the applications included in the Fiery Extended Applications Package. It identifies and downloads the correct package to install and manages installation and uninstall processes for the applications. Users can pause or resume software downloads and can set the Fiery Software Manager to automatically download future updates in the background.

Fiery Software Manages notifies users when new versions are available in the Fiery Extended Applications Package.
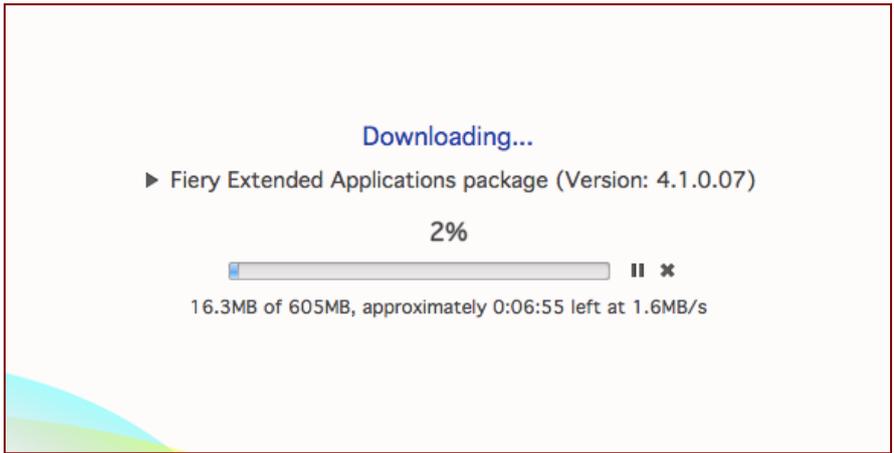
Users can pause or stop the download at any time during the downloading process.

Benefits

◆ *Notifies when new software versions are available to download.*

◆ *Offers the ability to pause and resume the software download to avoid losing data and starting the process all over again.*

Fiery Command WorkStation 5.6

Fiery Command WorkStation v5.6 will be available in June of 2014 by online download at www.efi.com/cws5 and will include the following new features:

◆ *Job List Filtered Views*

◆ *Fiery JDF v1.3 with Fiery Integration Manager*

◆ *Online Help*

◆ *Access to Fiery Online Resources Web page*

◆ *Fiery Dashboard integration*

◆ *Fiery ImageViewer 2.0*

  ▪ New user interface

  ▪ Custom Curve presets

  ▪ Specialty Color support

  ▪ Improved PDF softproof export

◆ *Fiery JobMaster improvements*

  ▪ Multi-bank tabs

  ▪ Page numbering enhancements

◆ *Create new job*

◆ *Expanded localization (Russian, Turkish, Polish, Czech)*

For more information on the Fiery Command WorkStation 5.6 new features, refer to the Fiery Command WorkStation 5.6 New Features Guide or visit www.efi.com/cws5.

Fiery Ticker

Fiery Ticker is a visual screensaver-type application for Command WorkStation. Fiery Ticker shows processing and printing speeds, pages remaining for the current job, error messages and tray information. Fiery Ticker is installed as part of the Fiery Extended

Applications Package 4.0 (with Command WorkStation 5.4) on Fiery servers running System 9 and later. The Fiery Ticker will run automatically, providing an at-a-glance view of the activity status of Fiery systems when an operator is not directly using the Fiery server. The operator can also initiate the Fiery Ticker view directly from inside the Command WorkStation.

Benefits:

◆ *Allows production monitoring from a distance, giving the operator greater flexibility.*

◆ *Gives the operator a quick visual look at what the Fiery server is doing, allowing him to perform other tasks at the same time and boosting productivity.*

Fiery Ticker progress

Fiery Ticker shows that printing was suspended.

Fiery Ticker Enhancements

Fiery Ticker is a visual screensaver-type application that runs locally on the Fiery external server.

The Fiery Ticker 2.0 integrates with the traditional Fiery blue bar on the top of the screen, adding the following new features to the bar:

• Access to shortcuts to Fiery applications such as Command WorkStation, Hot Folders, Fiery Remote Scan, Fiery Color Profiler Suite and Fiery Notes.

• Ability to change the color theme.

• Capability to apply job and server management actions such as to cancel processing or printing, or server actions such as restarting the server.

The Fiery Ticker v2.0 provides not only an at-a-glance view of the activity status of Fiery systems but also quick access to the main Fiery applications and operator actions.

New Fiery Ticker bar showing Fiery server status at a glance
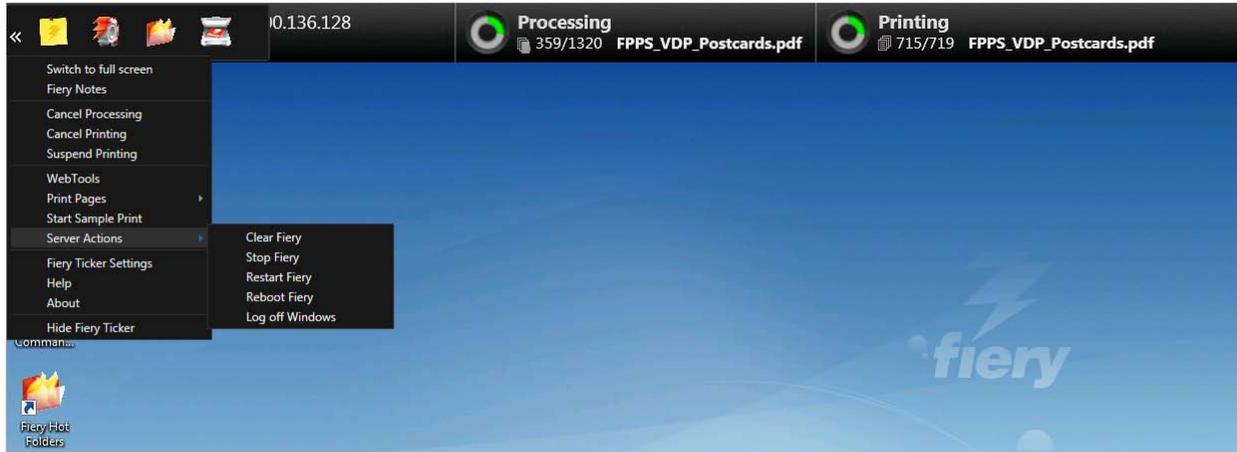
Fiery Ticker displays shortcuts to key Fiery applications and quick access to job management and server actions.

Benefit:

◆ *Increases operator's productivity, offering quick access to the most frequently used Fiery applications.*

Fiery Go

Fiery Go allows operators to manage Fiery Driven printers from their iPads and iPhone devices. It allows monitoring of the status of multiple Fiery Driven printers to manage print jobs from anywhere in the print shop. Using Fiery Go, operators can perform multiple job actions such as printing, deleting, previewing and defining job attributes. The app sends alerts about consumable status, errors in the print job, paper jams and more so that operators can take immediate action.

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

To download Fiery Go and get additional information, visit Apple iTunes store at
https://itunes.apple.com/us/app/fiery-go/id672206364?ls=1&mt=8

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

Benefits:
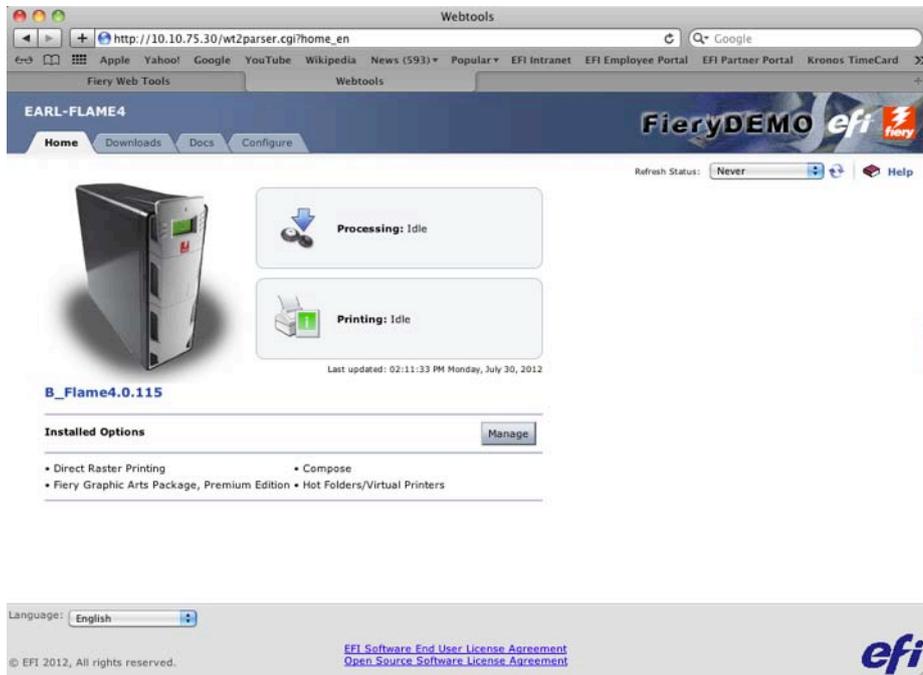
◆ *Allows operators to manage the jobs on Fiery servers from anywhere in the print shop.*

◆ *Offers the flexibility to multitask for a more efficient workplace.*

Fiery WebTools

With today's fully connected systems, administrators in corporate and commercial print environments need unrestricted access to job-critical information at all times to ensure that jobs and equipment run smoothly. Additionally, both skilled print operators and occasional

print users sometimes need to quickly check print jobs and output device status without launching a dedicated application or going to a centrally located management system.

Fiery WebTools™ delivers basic Fiery functionality for users who don't need Command WorkStation sophistication. WebTools, browser-based and hosted on the Fiery server, delivers pertinent information on print and printer status at any Web-capable workstation. It also allows users to do the following:

- Download — install client print drivers and applications.

- Access Docs — user-authenticated access to jobs in mailboxes, ability to download print jobs to the Fiery server and basic job management.

- Configure — allows the administrator to configure the Fiery server.

Benefits:

- *Empowers administrators and operators with complete and flexible control, from complex production runs to individual print jobs.*

- *Offers an intuitive GUI that leverages industry-standard navigation schemes to automate and streamline operations.*

- *Gives access to any client without requiring additional software installations.*

International Support

Dynamic Language Change

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

In addition, the behavior of the Fiery Configure application and other related applications is improved in a mixed-language environment. This could include scenarios such as using English Fiery software with systems of non-English clients. The handling of double-byte file names is also improved, enabled by the addition of UTF-8 support. In Command WorkStation, users can specify language preferences after the installation.
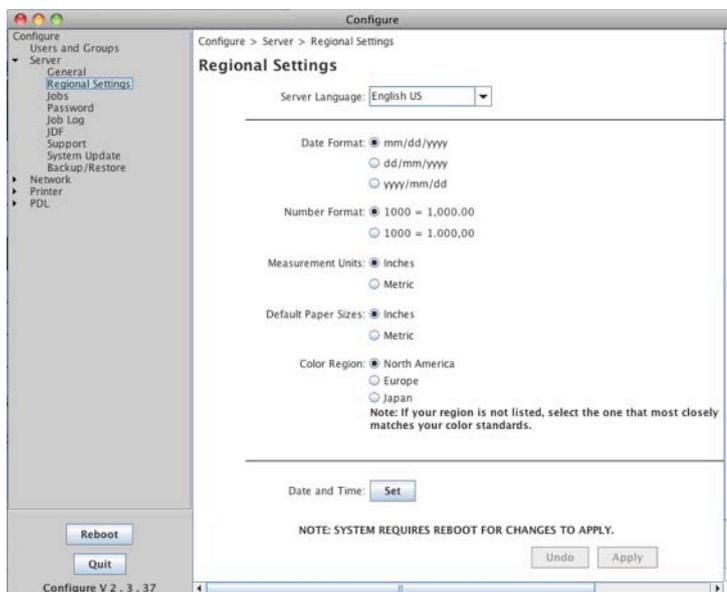
Benefits:

- *Improves productivity at installation and in the initial setup.*

- *Improves the display of mixed-language environments and double-byte characters, such as those of the Chinese, Japanese and Hebrew languages.*

Improved International Support

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

The Command WorkStation print job interface can also display the appropriate format for date, numbers, units of measurement, default paper sizes and 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 the Job Log..

Double-byte file names on Command WorkStation

Benefits:

- *Displays regional paper sizes and dates for a more user-friendly experience.*
- *Improves productivity during first-time language setup of server and Command WorkStation client.*
- *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 his preferred units of measure as millimeters, inches or points.

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

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

The areas affected by the Standardized Fiery Base Units preference include the following:
- Job Properties — all items that allow a measurement unit to be specified
- Image shift
- Custom page sizes
- Margins
- Trim
- Booklet Maker
- Impose
- Compose
- Paper Catalog
- Tray alignment

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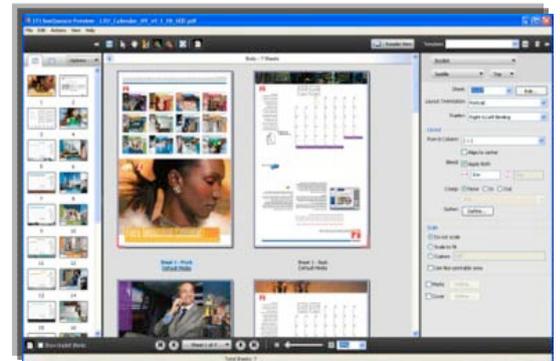
- *Allows users to set their measurement preference in one place and have it reflected across the whole user experience.*

Make-Ready Solutions

Fiery Impose

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

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

Use a unique working space for all document layout tasks by adding Fiery Compose. With it, customers incorporate visual and intuitive document assembly and page-level ticketing. Fiery Impose and Fiery Compose work together to simplify labor-intensive document preparation activities to shorten job setup times of even the most complex jobs.

Features of Fiery Impose:

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

- **Unlimited Imposition Templates:** Creates and saves custom templates for reuse, eliminating redundant tasks and reducing errors.

- **User Defined Finish Size:** Honors the designer's intent by automatically detecting the trim box and bleed box defined in the source document.

- **Document Assembly and Edit:** Allows viewing of thumbnails and full-screen previews. Adds and deletes pages. Offers last-minute text and image editing.

- **VDP Workflows:** Includes raster preview, sample proof printing and Control Strip for quick identification of spoiled sheets.

- **Unique Cut and Stack:** Enables users to start cutting, sorting and packing before jobs finish printing.

- **PDF Archive:** Archives imposed jobs as PDF files for easier reprinting.

- **Gangup Styles:** Has traditional Unique and Repeat and other gangup styles available for VDP and non-VDP jobs.

- **Nonprintable Area Indicator:** Detects overlap of image and nonprintable area and adjusts layout before RIPping.

- **Define Scaling Factor:** Provides increased control over scaling options.

- **Delivery Options:** Changes the output sequence to optimize the finishing process.

- **Cover Setup:** Changes pagination dynamically by inserting the required blank pages for cover and back cover inside pages.

- **Mixed Media:** Specifies media assignment from interface with visual reference to final content, reducing errors.

- **Paper Catalog Definition:** Defines custom substrates 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 the Booklet Maker.

- **Measurement Tool:** Determines the distance between two reference points on a sheet.

- **Creep Adjustment:** Adjusts for creep to deliver straight, aligned text throughout a multipage document.

- **Customizable Trim and Fold Marks:** Defines the color, length, width, trim type and fold marks independently.

- **Add, Delete and Duplicate Sheets:** Inserts custom text for blank pages and adds, deletes or duplicates imposed images without going back to the source document.

- **Multi-Up Support:** Offers imposition styles of up to 10 rows and 10 columns to optimize paper use for small items. Saves on click charges with page double-up feature.

- **Customizable Trim-and-Fold Marks:** Define the color, length, width, trim type and fold marks independently.

For additional information on Fiery Impose, visit http://www.efi.com/sqi.

Benefits:

- *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 display for a more accurate soft proof, ensuring the job is printed correctly the first time.*

- *Handles last-minute text and image editing with powerful PDF editing capabilities.*

- *Simplifies page merging with drag-and-drop ease.*

User Defined Finish Size

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

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

With Command WorkStation 5.3, Fiery Impose takes advantage of the designer-defined trim box and bleed box information incorporated in the file. The operator can select "User Defined" as the Finish Size setting. This maps the trim box value in the file to the Impose Finish Size setting. The system also reads and applies the bleed value defined in the document.

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

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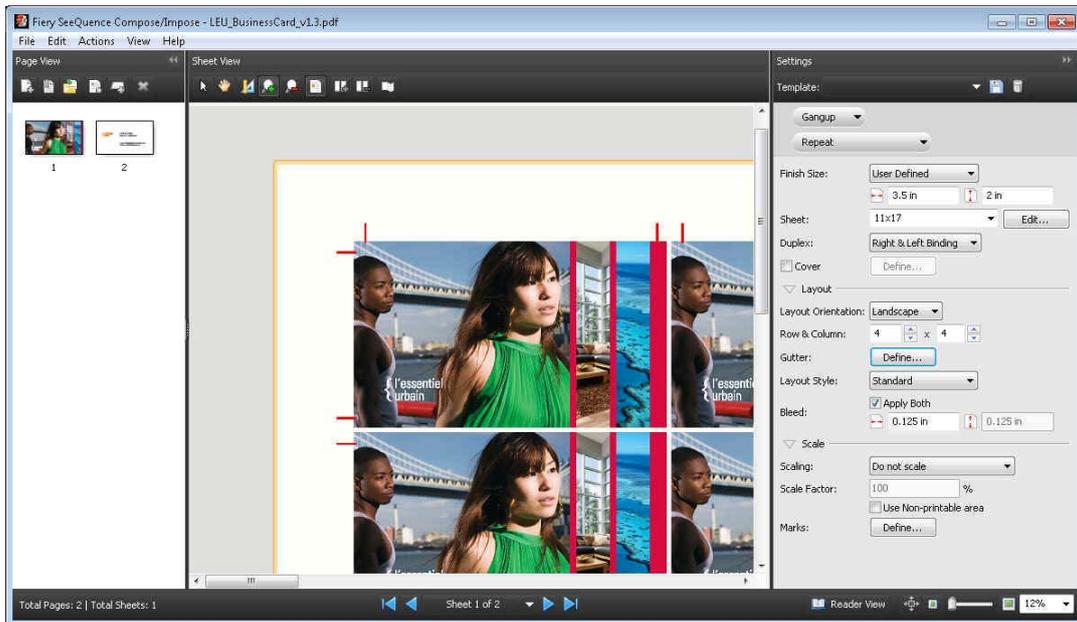
User Defined Finish Size controls

PDF definitions for bleeds and trim marks

Visit the Demos section at the Fiery Command WorkStation website at www.efi.com/CWS5 to watch the video demonstration.

Benefits:

◆ *Improves usability as the designer defines the desired trim-and-bleed sizes in the document. Plus, imposition jobs can be done from files containing different trim-and-bleed sizes.*

◆ *Eliminates the need to modify original documents for faster imposition job setup and a tighter focus on production.*

◆ *Saves time and money by reducing miscommunication and print errors.*

User Defined Finish Size Preference

With the User Defined Finish Size preference in Fiery Impose, operators who always want to impose jobs based on the user-defined finish

size (trim box), rather than on the default crop box, now have a way to specify either crop box or user-defined finish size for all jobs opened in Impose. This gives users two options for imposing jobs: the crop box and the trim box. The new preference allows operators to choose a default imposition method.

User Defined Finish Size is compatible with Fiery System 9 Release 2 and higher.
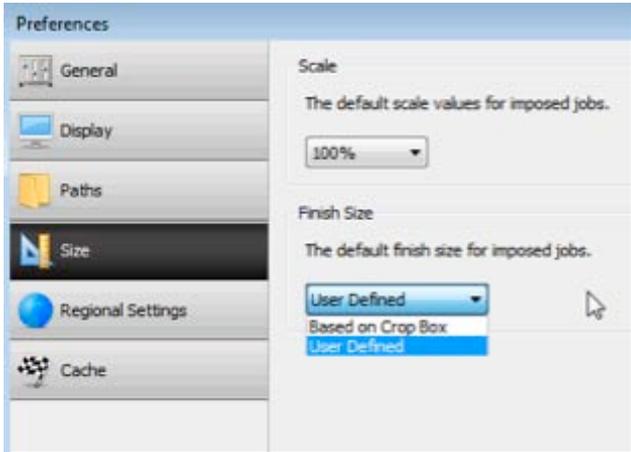
Choose the defaults for Fiery Impose.

Benefits:

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

Duplo Support for Barcode and Registration Marks

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

Duplo DC-645 Slitter/Cutter/Creaser

Barcode reader automatically sets up preprogrammed jobs.
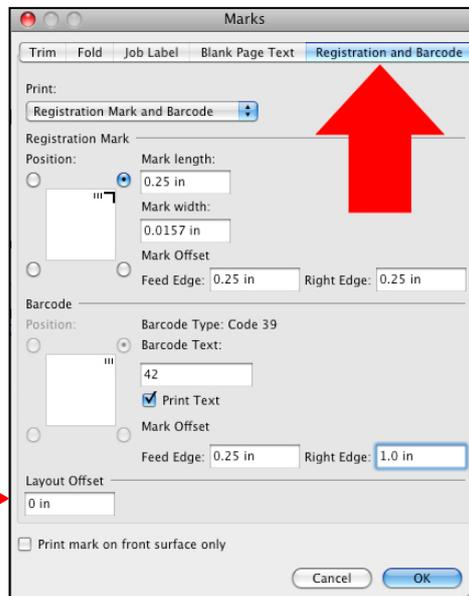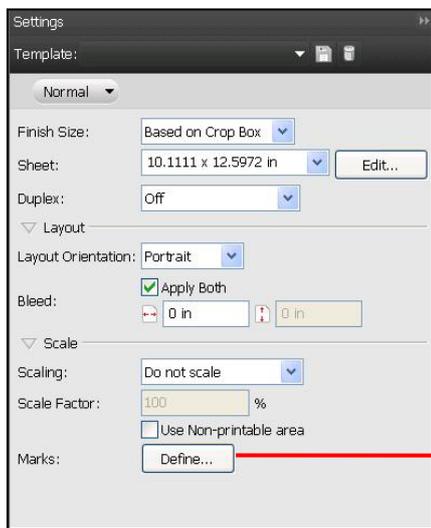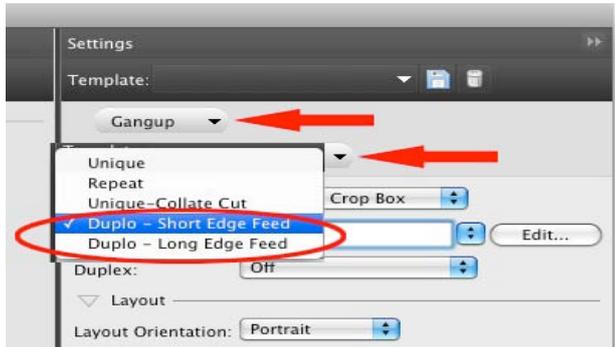
Impose settings include definition of registration mark and barcode.

Benefits:

◆ *Increases productivity by working with industry-standard finishers.*

◆ *Saves times and minimizes waste with automatic positioning of finishers.*
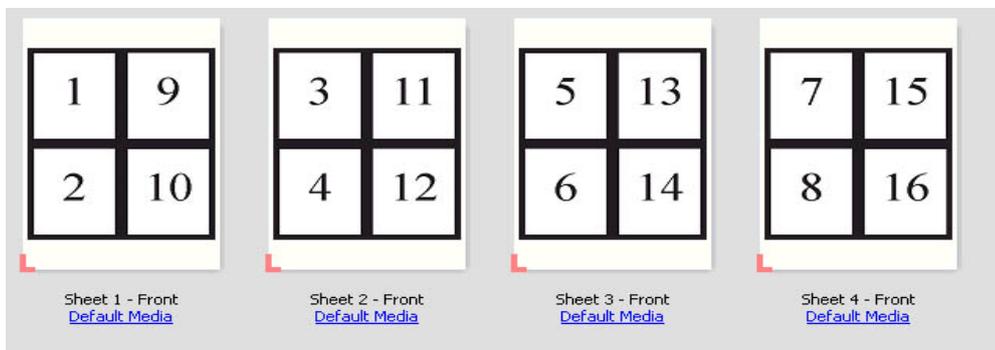
Duplo Imposition Layout Options

The new Duplo imposition layouts are layout schemes intended for post-processing with a Duplo offline finisher. The imposition layouts available before System 10 were limited to VDP file formats. The new layout formats have been available since research showed that PDF is the format most commonly finished with a Duplo offline finisher.
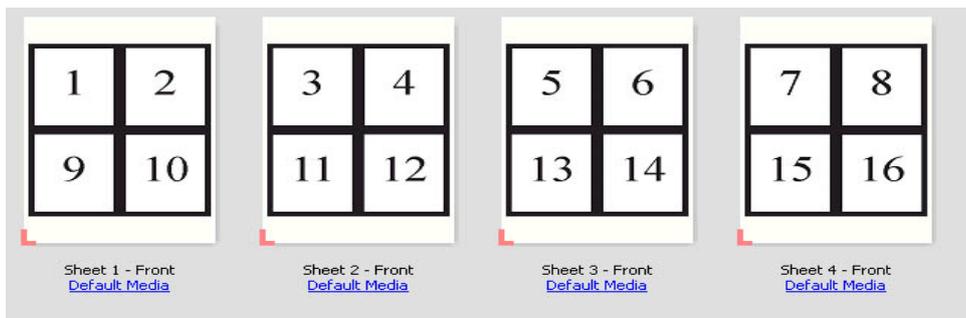
The new selections are Duplo Long Edge and Duplo Short Edge impositions
for non-VDP PDF and PS files

The Duplo — Short Edge Feed Imposition Layout orders pages sheet wise in line with columns or rows perpendicular to the shortest sheet edge, optimizing page layout to fill the rows and columns on a sheet.

The Duplo — Long Edge Feed Imposition Layout orders pages sheet wise in line with columns or rows perpendicular to the longest sheet edge, optimizing page layout to fill the rows and columns on a sheet.

Benefit:

- *Extends Duplo offline finisher support to non-VDP jobs.*

25x25 Gangup

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

Benefit:

◆ *Saves paper and click count with higher gangup repeats on one larger sheet of paper.*

Print Marks on Front Surface Only

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

Benefit:

◆ *Prevents unwanted marks in the event that the marks don't line up exactly on both sides of a duplex page.*
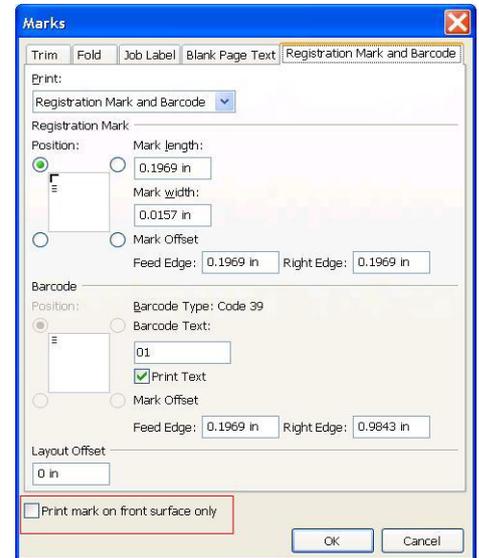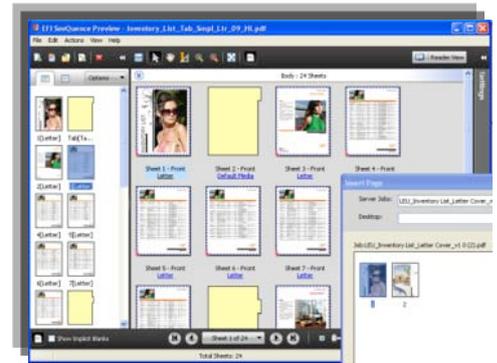
Setting up print marks for surface only

Fiery Compose

Fiery Compose provides centralized document assembly, WYSIWYG page-level ticketing, easy preview and powerful editing features, including tab creation interface. The Compose software application option is designed to be the core toolset that operators use to prepare documents for printing. Because Compose launches from Command WorkStation 5, it is flexible enough to run on the user's desktop 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 WYSIWYG user interface improve document verification, speed up composition and enable less experienced operators to perform complex document functions. In addition, sophisticated tools with familiar Fiery-inspired user interfaces reduce training requirements and increase the operator's resource base.

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

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

Professional Tools for Advanced Document Preparation Functions

Compose provides centralized document assembly, WYSIWYG PDF preview and editing. Functionality includes the following:

- **Page View:** Simplifies document setup and navigation in large jobs. Enables users to view entire document, including inserts, tabs and chapter starts and visually confirms media color information.

- **Page-level Ticketing:** Processes complex documents with a WYSIWYG job display, decreasing potential for error.

- **Chapter Definition:** Offers quick and easy setup of page ranges within documents and application of media attributes for page ranges.

- **Document Navigation:** Simplifies document setup and navigation in large jobs. Enables users to view entire document, including inserts, tabs and chapter starts and visually confirms media color information.

- **Preview Modes:** Reviews different page layout output modes and verifies complex document pages quickly, easily and accurately.

- **Tab Printing:** Provides intuitive tab printing functionality, allowing tabs to be inserted, added or removed. Offers WYSIWYG editing of tab text. 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.

- **Compose supports the following Fiery job formats:**
  - *PDF*
  - *PS*
  - *VDP*

For additional information on Fiery Compose, visit http://w3.efi.com/Fiery/Products/Workflow-Suite/Fiery-Compose.

Benefits:
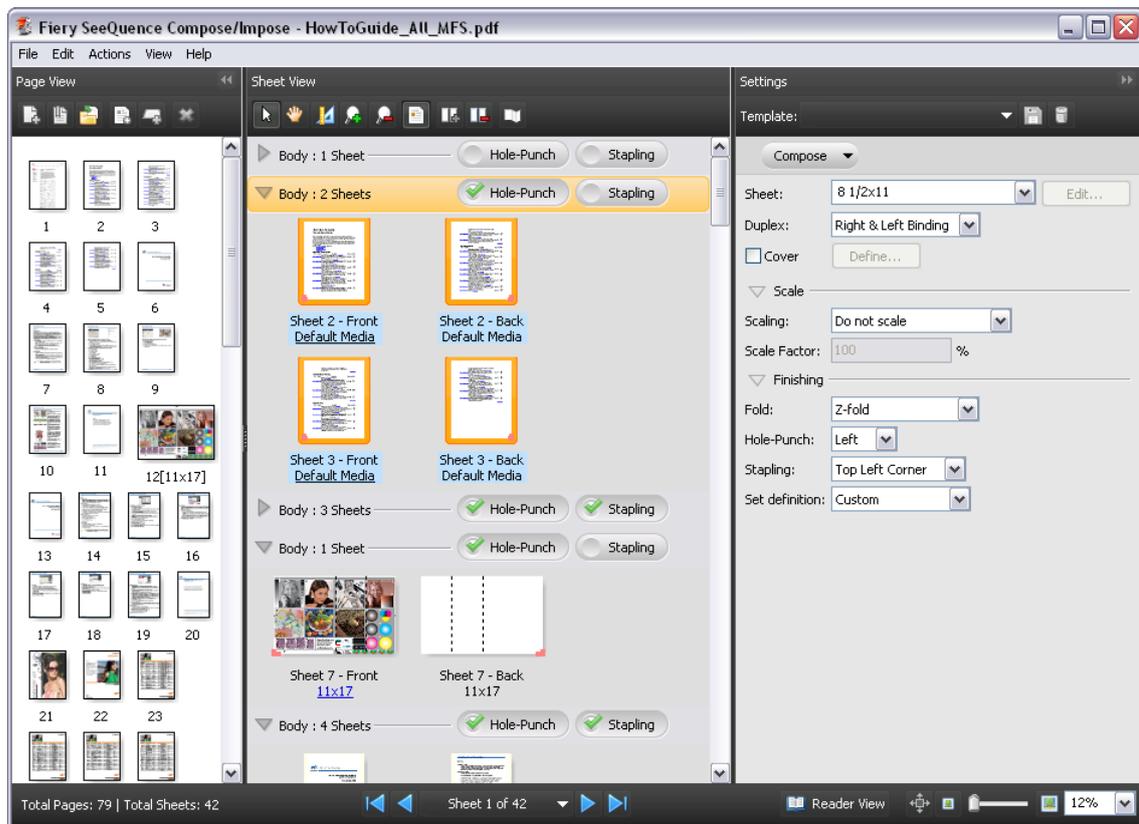
- *Provides an intuitive and visual application that enables less experienced operators to perform complex document functions.*

- *Processes complex documents with a visual job display, decreasing the potential for error.*

- *Reduces training requirements with sophisticated tools using a familiar, Fiery-inspired 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.*

Subset Finishing

For multipage jobs that include multiple chapters or sections, such as training manuals, business reports or business proposals, print providers used to need special manual assembly in some subsections. For example, some sections required special processing such as a z-fold for a tabloid/A3 insert, a hole-punch in addition to a staple, or other requirements.

Previously, to produce jobs such as these, high-volume production shops would print the chapters separately and manually assemble the output, making these jobs very labor intensive.

Compose provides Subset Finishing options to streamline and automate the assembly process to produce a fully finished job. With an inline finisher attached to the print engine, operators can select multiple options and subsets in a single job. Subset Finishing also allows users to specify mixed finishing options among different subsets. These subset finishing options and associated terminology will vary based on the inline finisher and print engine.

Subset Finishing in Compose

Benefits:

- *Produces finished documents with minimal operator intervention.*
- *Increases productivity through the use of inline finishers with Compose.*

Fiery JobMaster

Fiery JobMaster provides advanced PDF-based make-ready functions. In addition to all features included in Fiery Compose, Fiery JobMaster offers fully visual tab insertion and design, page numbering, scanning and powerful late-stage editing features. Fiery JobMaster launches by selecting a job from the Fiery Command WorkStation user interface. It can run on a PC or Mac client or locally at the Fiery server. Users can add Fiery Impose to integrate all make-ready tasks in a single application. Built with the familiar Fiery user interface, operators can be up and running quickly, producing high-value jobs. Fiery JobMaster allows users to easily prepare complex jobs inside a single application and comes with Adobe Acrobat Pro and Enfocus PitStop Edit.

Additional features in Fiery JobMaster:

- **Advanced tab creation with a WYSIWYG preview:** The preview changes dynamically as users specify tab ear settings and content that can include images, color background, logos and formatted text.

- **Integration of hard-copy pages:** Users can de-skew and de-speckle scanned documents; edit images for brightness, contrast and sharpness; make pages fit to the desired media size for a uniform appearance on every page; mask out staples, hole-punch marks or page content.

- **Page editing:** Operators can redefine crop and trim box sizes and mask unwanted content such as preexisting page numbers. Edits are non-destructive and can be removed or modified at any time before production.

- **Page numbering and stamping:** JobMaster adds page numbers anywhere on the page, can skip page numbers for inserts and tabs, and includes page-number templates for predefined numbering styles.

Benefits:

◆ *Provides a make-ready solution that is fully integrated with Fiery Impose into the existing Fiery workflow.*

◆ *Offers the ability to edit a job by adding scan pages and visual tabs and by removing and adding page numbers.*

◆ *Allows operators to cost-effectively produce complex jobs efficiently and inline.*

◆ *Supports both black-and-white and color workflows.*

For more information on Fiery JobMaster, please visit http://www.efi.com/FieryJobMaster.
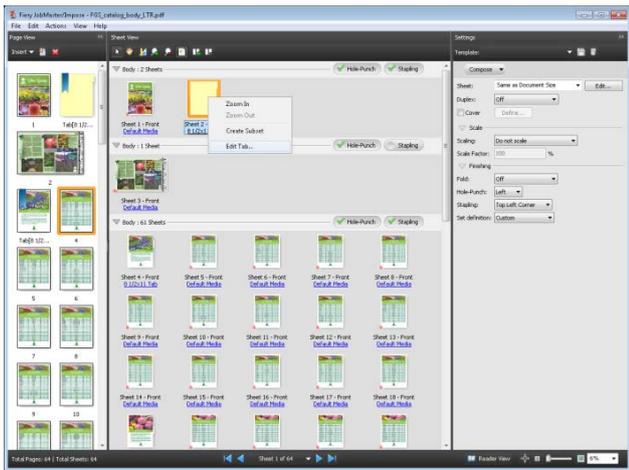
Fiery JobMaster visual interface
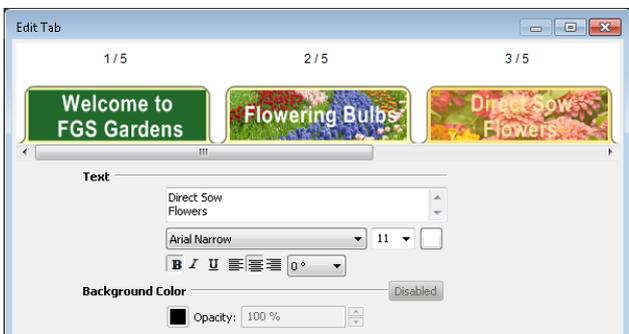
Fiery JobMaster tab editor interface

Bleed Edge Tabs

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

This feature automatically applies bleed-edge tab settings to all pages in the chapter, incrementing the tab position for each successive chapter. In order for the tab ears to show the 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-add application to provide their customers.*

Fiery Make-Ready Solutions: Feature Set Comparison

PDF-based Make-Ready Solutions	Fiery Impose	Fiery Compose	Fiery JobMaster
Fiery CWS plug-in (Mac/Win)	✓	✓	✓
Centralized WYSISYG view	✓	✓	✓
Acrobat & Enfocus Pitstop	✓	✓	✓
Media catalog	✓	✓	✓
Job export for printing on any device	✓	✓	✓
Gang-up, booklet imposition	✓		
Variable data printing	✓		
Tab insertion		✓	✓ Advanced
Mixed finishing sets		✓	✓
Chapter creation		✓	✓
Bleed edge tab creation			✓
Scan image import & cleanup			✓
Page numbering			✓
Page editing (masking, rotation, size)			✓

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 interface, highlighting the basic printing options most commonly required in an office environment. This interface also caters to more advanced users because printing options are categorized based on a user-centric model. With the Fiery Driver, features and functionality are consistent across different Windows operating systems as well as in the Job Properties user interface.

User Interface (UI)

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

Fiery Servers have a tabular approach, which allows easier navigation of all the available settings.

The tabs located in the Job Properties are where the most frequently used printing functions are contained. The customizable nature of the tabs enables customers to determine their preferred predefined PPD options.

- Clicking on any of **the iconic tabs (1)** displays the options for that PPD category in the **main active area (2).** Up to eight options can be displayed at any time. When a category has more than eight options, a scroll bar is displayed to show all the available print options.
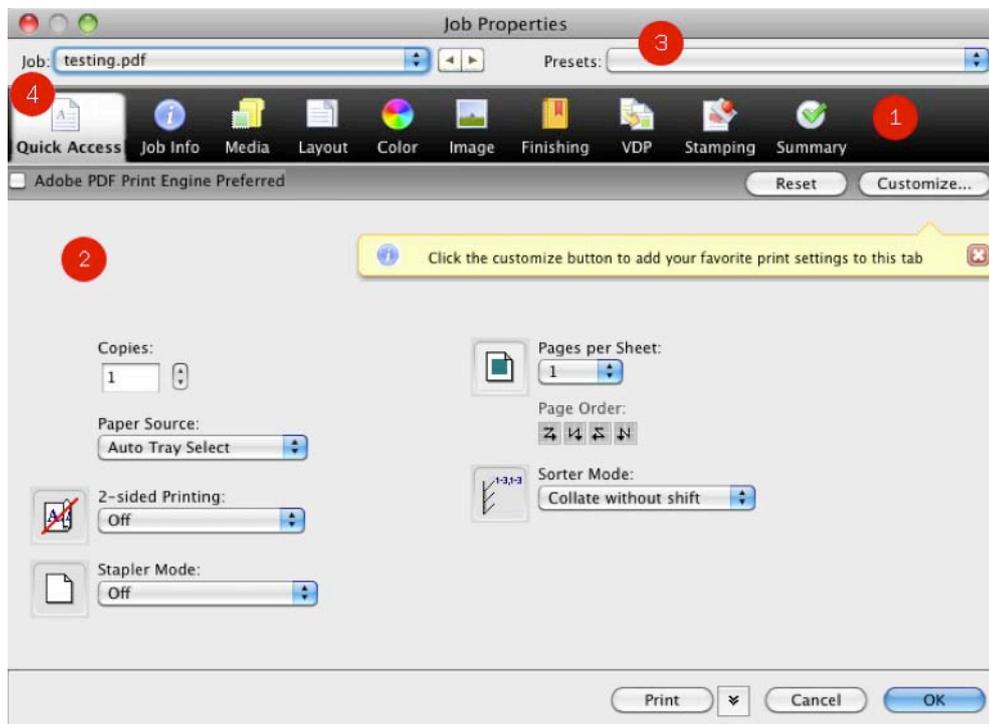
- **Presets (3)** allow the user to save predefined print settings as a retrievable template. The creation of several templates allows users to define settings based their own common printing scenarios.

- **Customizable Quick Access Tab (4)** — Gives the user the ability to customize this tab to allow the most commonly used PDD settings in their particular workflows to be accessed quickly and easily.

- **Available in Windows and Mac Platform** — Offers the new Fiery Driver for Mac and Windows platforms, providing consistency across all supported platforms.

Section 508 Usability

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

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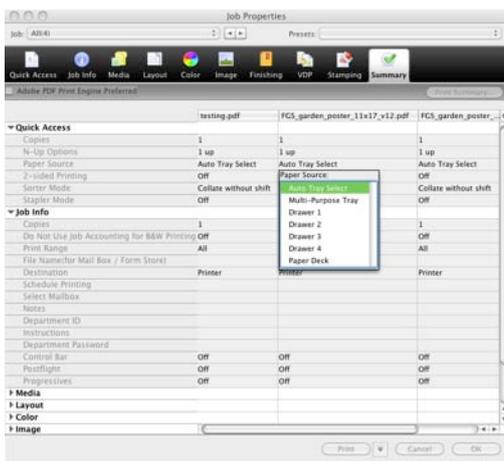
Benefits:

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

Fiery Job Properties

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

In the Fiery Servers, the Print Actions from Job Properties have been extended to include Print and Hold, Print and Delete, Process and Hold and Proof Print. This enables users to accomplish the required steps with fewer clicks.

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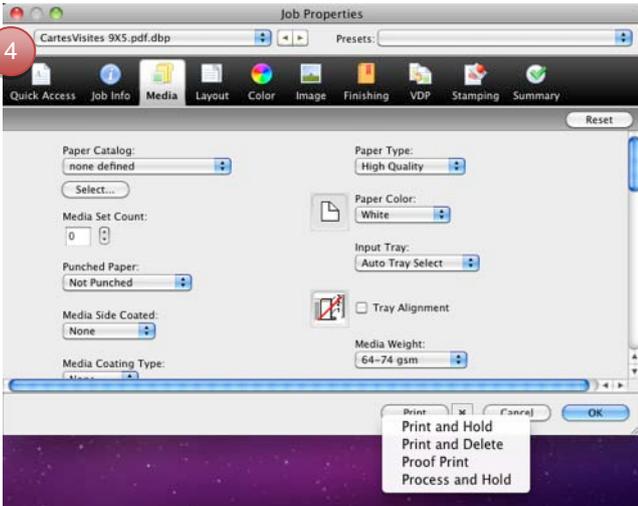
Print Actions extended

Benefits:

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

Mixed Media Attributes Settings

To completely automate document production, it is essential that production systems manage and implement all of the media functionality offered in the current and future generations of digital output devices. This enables print providers to streamline the process of mixing specific media in a single, collated document.

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

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

Benefits:

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

Tab Shift

Most applications allow only a single page size within a document (Word, Acrobat and InDesign are exceptions), so the Fiery system provides the ability to shift certain pages one-half inch horizontally, making 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

Digital production environments tend to be operator-centric, with each operator performing specific tasks in a digital document "assembly line." Typically, in this type of setting, the same operator at the same point in the workflow makes media and tab placement decisions.

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

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

This feature is standard for all Fiery external servers.

The user can define the following:

- Number of ears in a set: Defines the 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.

- Media selection: Operators can define the tab media by selecting the media type, paper size, paper source and paper catalog.

- Tab Sequence (Forward/Reverse): Specifies whether the first ear of the tab bank is the first ear printed on (first to last) or the last ear of the tab bank is the first ear to be printed on (last to first).

- First Tab Indent: Specifies the distance (up to 4.000 inches or 101.6 millimeters) between the edge of the media and the edge(s) of the first (and last) tab ear in the tab bank.

- Output tray to kick out unused tabs: Specifies 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.

Benefits:

◆ *Enables users of digital print engines to take advantage of fully automated digital printing processes, producing finished documents with minimal operator intervention and reducing the need for additional resources while increasing capabilities and overall productivity.*

◆ *Allows users the flexibility to add tabs (and text in tabs) at the last possible stage in the print submission process.*

◆ *Increases productivity by outputting documents ready to continue the finishing process. Shops don't need to manually discard unused tabs in each document set. (Device-dependent feature)*

Define Covers

Selecting the Define Cover button on the Mixed Media tab in Job Properties gives users the ability to quickly define the front and/or back cover of the document without knowing the total page count of the document. Users can specify whether to apply the same settings to both the front and back cover or to the covers separately, the settings for covers 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 Sizes: The cover is treated as a normal duplex sheet.

Benefits:

◆ *Provides a quick way to make additional customization at the last possible production stage.*

◆ *Increases productivity by shortening the job setup and applying automation to complex job definitions.*

◆ *Decreases waste by automating complex finishing settings.*

Media Defined Profiles

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

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

Benefits:

◆ *Provides the most accurate color output for mixed-media jobs with media-driven color profiling.*

◆ *Offers easy-to-relate color profiles for each media through the simplified interface, for best quality color output.*

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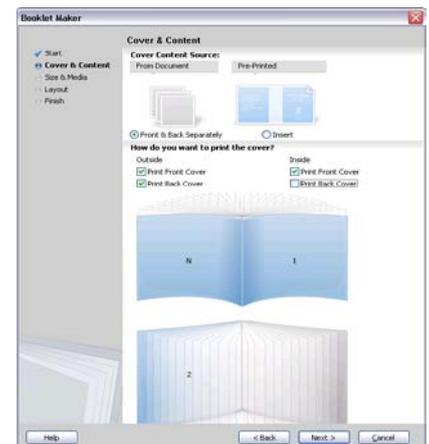
The Fiery Booklet Maker is the imposition tool in Job Properties that allows users to print multiple pages of a print job, from any application, in a booklet style — without the need for more advanced imposition programs.

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

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

Easy to Use Booklet Maker interface

Benefits:

◆ *Produces sophisticated results with a simple operation.*

◆ *Intuitive UI minimizes training requirements. A graphical and intuitive wizard-based interface guides the user in setting up professional-looking booklets more quickly and with fewer errors.*

◆ *Supplies most of the user's imposition requirements and provides an upgrade path to Fiery Impose for experts.*

Job Properties Print Actions

The Print Actions from Job Properties have been extended to include Print and Hold, Print and Delete, Process and Hold and Proof Print, allowing users do what they want with fewer clicks.
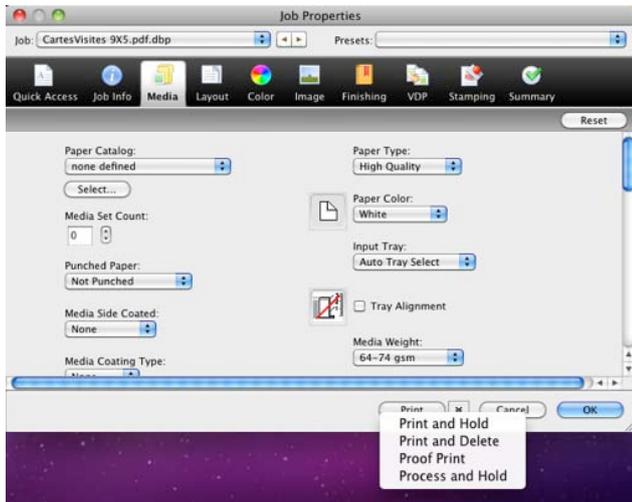
Print Actions extended

Benefits:

- ◆ *Increases productivity and simplifies job submission with fewer steps in Command WorkStation.*
- ◆ *Saves time and clicks for actions performed every day in Command WorkStation.*

Quick Access Tab Reminder

The Quick Access tab allows users to define their favorite settings.

A yellow Help balloon appears in the Quick Access tab to remind users to customize the tab. The yellow balloon disappears once users customize the tab (or they can choose to close the balloon box without customizing the tab). By using the Quick Access tab in Job Properties, operators can collect their most frequently used settings for fast and convenient printing with a single click on one tab.
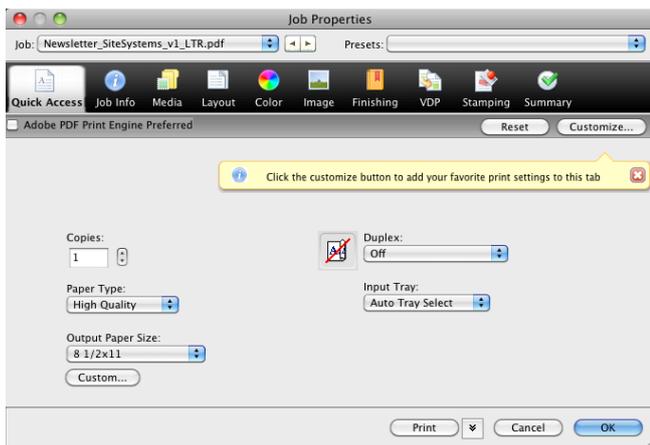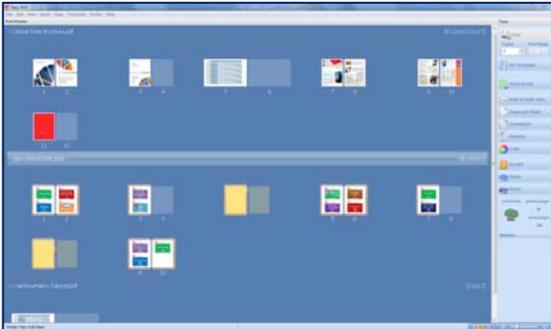
Quick Access tab reminder

Benefit:

- ◆ *Increases productivity and usability by enabling users to collect and access frequently used Job Properties in one location.*

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Fiery VUE

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

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

For more information, visit www.efi.com/fieryvue.

Benefits:

- *Offers the most intuitive and innovative way to create professional-looking documents right out of the box with the WYSIWIG user interface for office power users.*

- *Simplifies production tasks directly from Microsoft Office applications with one-button functionality.*

- *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, the Green Books auto-templates for booklets and the new Green Printing Statistics, the latter of which allows users to track paper savings by weeks and months.*

USB Media Server

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

KEY FEATURES:

- Connect USB mass storage devices, including the following:
    - *USB thumb drives*
    - *USB adapters for removable media (such as compact flash, smart media and memory stick)*
    - *USB hard drives*
    - *USB CD drives*

- LCD browsing capabilities such as the following:
    - *Selecting File (Any supported file on a USB mass storage device can be selected.)*
    - *Submitting File (Menu options below are available for submitting files once in the "Selected File" mode.)*
        - *Send to Hold Queue*
        - *Send to Print Queue*
        - *Send to Direct Queue*
        - *Send to <virtual printer queue name>*

- Native Document Conversion
    - *Automatic conversion and printing of*
        - *Microsoft Office native files (Word, PowerPoint, and Excel)*

Note: Native Document Conversion applies only to jobs submitted through print via email and USB Media Server.

Benefits:

- *Increases overall flexibility and enables walk-up users to easily print jobs at Fiery servers without a FACI kit.*

- *Allows "Guest" printing without network connectivity.*

- *Possesses additional, easy and flexible ways to print files from USB devices.*

Paper Catalog

Digital document production tools demand a robust approach to paper management across the entire production environment. The ability to have an all-encompassing view of paper stock with automated access is essential in a successful document-production facility.
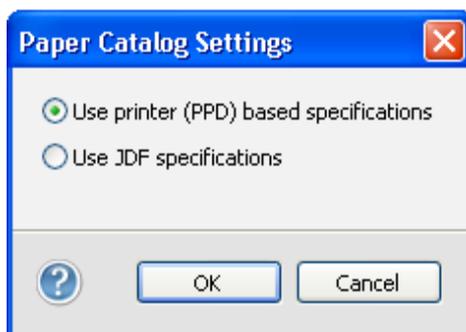
The Paper Catalog is a centralized paper warehouse database that stores attributes of the media stock at the production site. Operators can access the feature from applications such as the Command WorkStation, but the database resides on the Fiery server, where it is protected against server reboot or clear server actions.

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

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

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

- Defines a name for each media attribute combination.

- Facilitates media selection at job submission by doing the following:
    - *Associating trays with loaded media stock*
    - *Using color profiles easily and automatically 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*

Paper Catalog Settings use PPD-based settings.

New features include the following:

- Use printer (PPD)-based specifications mode.

- Publish/unpublish selected entries.

- Highlight what's loaded in the tray, and display tray number and paper levels (Windows only).

- Printer/copier catalog integrated into Paper Catalog.

- Export or delete selected entries.

- Color Profile Association for printer/copier catalog entries.

- Improved 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 at the time of 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 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.*

◆ *Creates an open architecture environment with an engine-agnostic approach to paper catalog management.*

◆ *Integrates use of Fiery JDF to reduce the number of times an operator needs to configure the same media for the same job in different workflow steps.*

Paper Catalog Based on PPD Specifications

Paper Catalog on the Fiery server is a saved collection of attributes associated with a 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 use faster and easier to use.
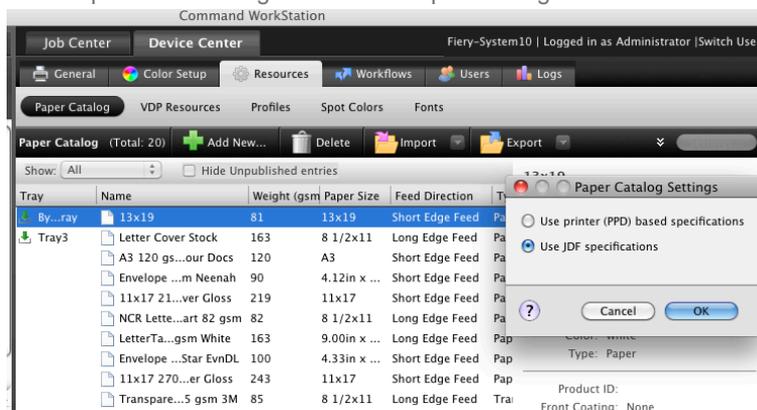
Operators have the option to choose a simplified mode to input new entries in Paper Catalog.
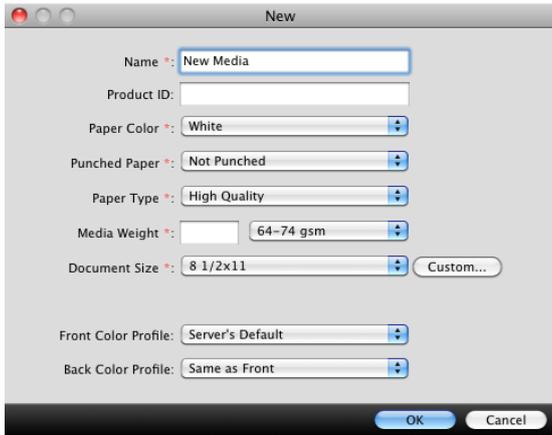
New Paper Catalog simple mode
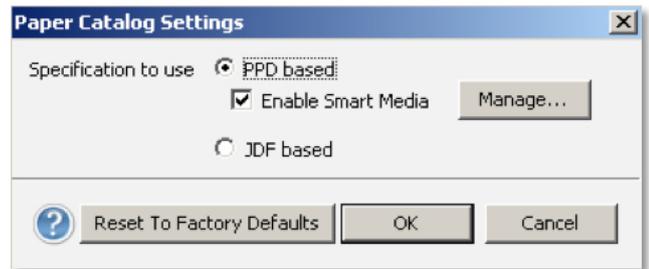
Paper Catalog functionality is now standard in embedded servers for corporate and light production markets. It also features a simple mode to input new entries.

Benefits:
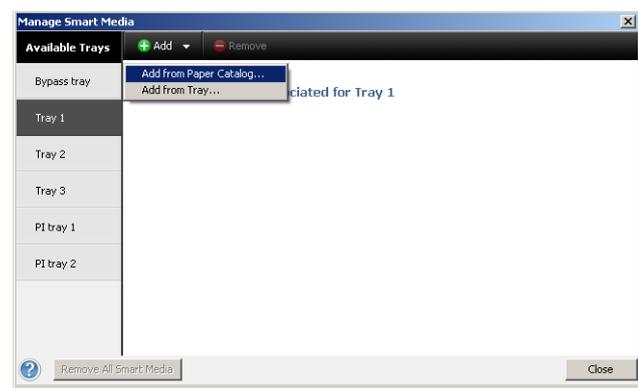
- *Engine-driven media offers faster, easier setup..*

- *Setup is easier for non-JDF workflows.*

- *Paper Catalog for embedded servers enhances productivity.*

- *Administrators can now define some options when adding entries in Paper catalog to enhance ease of use.*

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

Paper Catalog Smart Media

Smart Media is 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 whereby the printer is usually configured with the same paper in the trays most of the time. Often, users stick the paper labels onto the trays to remind the operators which paper to load. Smart media allows the Fiery server to remember these favorite media 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,

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

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.*

◆ *No additional steps are required to add a media when a favorite (smart) media is loaded in a tray.*

◆ *Increases reliability for media-driven workflows: minimizes errors when setting up media and operator intervention.*

Mixed Media Viewer for Perfect Binding

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

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

Mixed Media viewer for perfect binding is available as long as the engine has a perfect binder option installed. Mixed Media viewer is available from the Job Properties interface in Command WorkStation, giving the Fiery server the entire job to properly specify pagination.

Benefits:

◆ *Gives the operator precise controls over pagination.*

◆ *Provides quick and easy visual feedback about the following settings:*

- *Which page in the document is used for the spine*

- *The reading order of the rest of the pages of the document (when page-level duplex settings are used)*

- *The desired pages that are affected by a media definition*
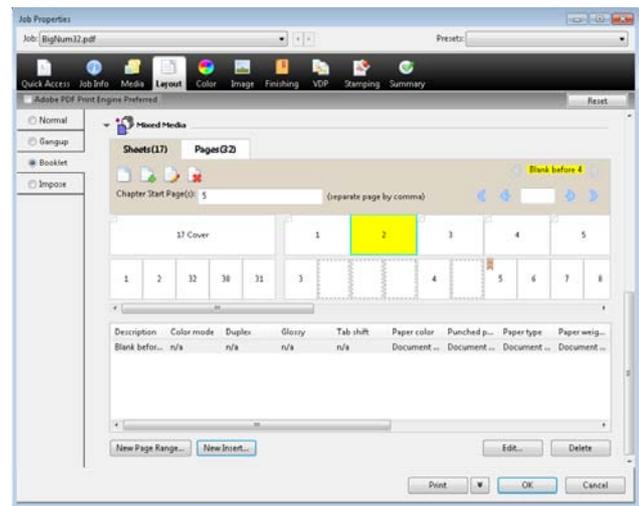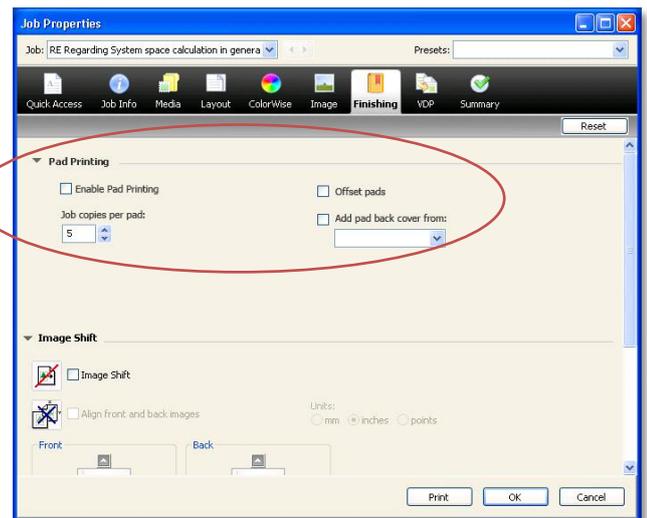
Mixed Media viewer user interface

Pad Printing

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

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

Users can select the number of copies per pad

Benefits:

- ◆ *Simplifies and streamlines pad printing in one print job.*
- ◆ *Enables the operator to create a pad easily from a single-page job.*
- ◆ *Minimizes manual collation of the printed output.*

Fiery Remote Scan

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

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

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

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

Benefits:

◆ *Turns any Fiery-connected device into a high-quality scanner.*

◆ *Leverages digital workflows, eliminating bottlenecks and reliance on outside services.*

◆ *Reduces the need to store and track hardcopy documents, decreasing overhead costs and improving efficiencies.*

◆ *Provides flexible scan initiation options, including locally, with the copier LCD scan, Fiery Remote Scan TWAIN plug-in and Fiery WebScan.*

Fiery Remote Scan auto discovery

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

Fiery Remote Scan Improvements

The Fiery Remote Scan application offers the following improvements:

• Folder Mapping

• Auto Login

Folder Mapping

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

Fiery mailbox contents are displayed on the Mac client

Benefits:

◆ *Faster retrieval of scanned jobs.*

◆ *Windows and Mac support without the need to install additional applications in the Fiery Extended Applications package.*

Auto Login

The Auto Login feature remembers the mailbox name and password of Fiery users so they have to enter mailbox login information only once.

User login is automatically recognized.

Benefit:

◆ *Helps speed up the overall scanning process.*

Tools for Technical Support

Fiery Setup Wizard

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

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

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

The Fiery Setup Wizard is available from the following locations:

- Command WorkStation
- WebTools
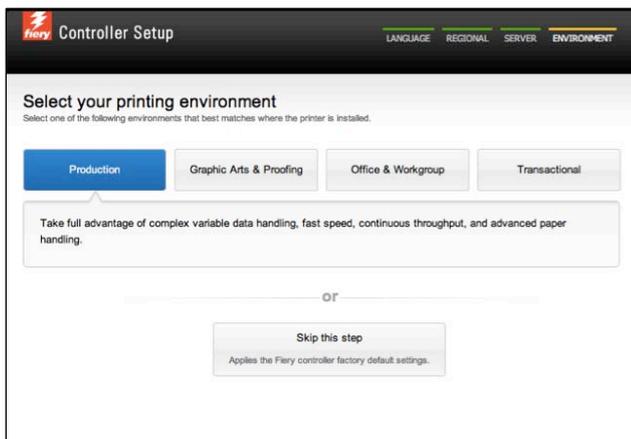
Settings are customized for each printing environment.

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

Benefits:

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

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Recommended settings per environment

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

Fiery System Restore

Fiery System Restore replaces the Fiery Clone Tool and it is available in external Fiery servers only. It supports the new Unified Extensible Firmware Interface (UEFI)–based Hardware platforms and offers new features that have the ability to do the following:

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

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 image.*
- *Eliminates the need for a separate application.*
- *Allows analysts and customers to easily and conveniently restore a customer system.*

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, which 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 options included on the clone.

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

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

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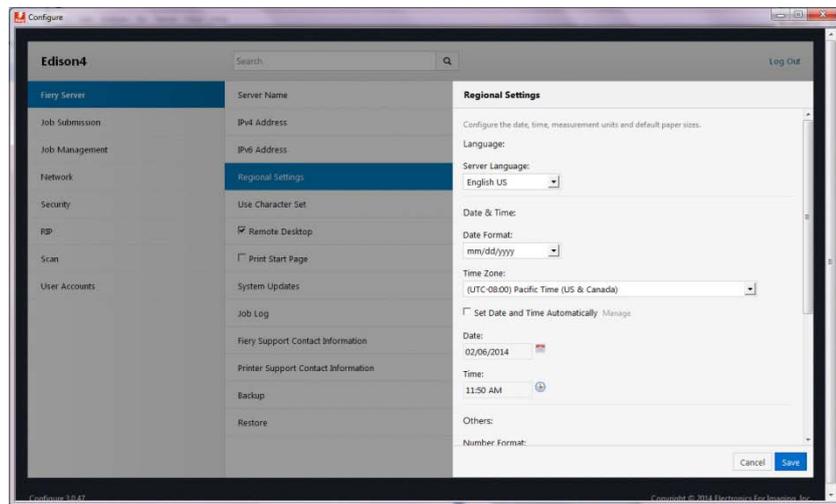
Benefits:

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

Fiery Configuration Tool

The Fiery Configuration Tool allows the Fiery administrator to configure the Fiery server for a specific print environment. It replaces the tool available after selecting the Configure button in the Fiery Command WorkStation Device Center under General/ Server Configuration. When the Configure button is selected, the Fiery Configuration Tool displays a browser-based user interface with the following:

- 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 (these updates are the same as those found using the old System Update page in Configure).

The Fiery Configuration Tool provides the following:

- Support of all current Web browsers without the need for special plug-ins.

- Three menu levels to allow users to glide between settings easily.

- Inline guidance to minimize mistakes.

- Search function to access 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.

- Restart handling: the tool is aware of which settings can be applied instantly and which require a restart or reboot. If the settings chosen require a restart/reboot, the tool notifies the user at the top of the screen. Settings that can be applied instantly are saved immediately.

- Data transfer over HTTPS for additional security.

- Updated config sheet to reflect the categories displayed in the current Fiery configuration view.

Benefits:

- *Helps administrators get the Fiery server ready for production in shorter time.*
- *Minimizes service calls.*
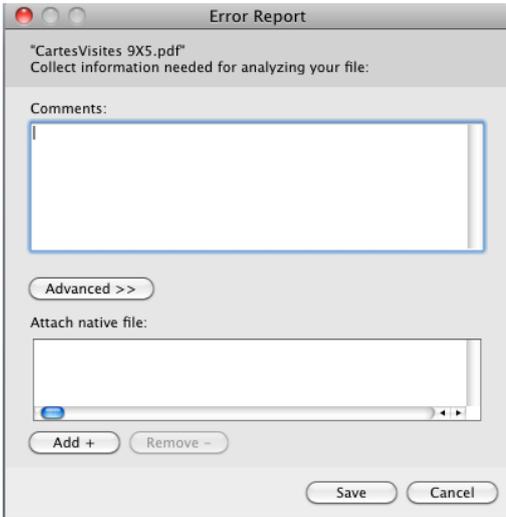
Simultaneous LCD/Keyboard Installation

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

Benefit:

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

Improved Serviceability

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

- Improved server configuration sheet

- Job Error report

- Backup and Restore enhancement

- Clear Server enhancements

Improved Server Configuration Sheet

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

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

Improved server configuration sheet

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, administrators can also choose Job Properties so they can print on whatever media is loaded in the trays.

Benefits:

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

Job Error Report

The Job Error Report captures important troubleshooting information that EFI Technical Support personnel use to resolve issues. This feature automates collection of the raster file, native file, 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

Benefits:

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

Backup and Restore Enhancements

EFI has updated the Backup and Restore user interface to allow users to capture more settings. These include the following:

- 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
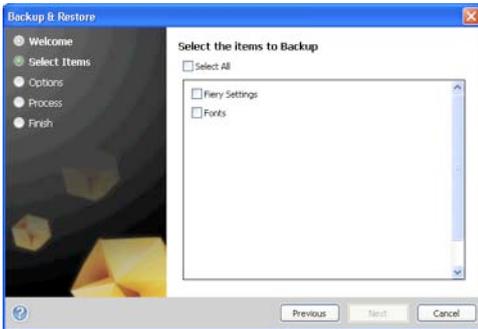
Previous Server Backup functions
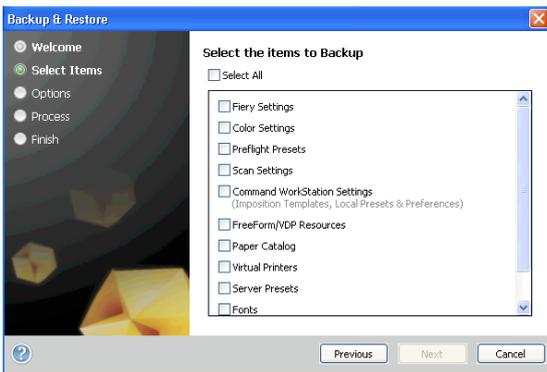

Increased server backup functionality

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

Benefits:

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

Clear Server Enhancement

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

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

Benefits:

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

Clear Server - Alcatraz

Please select files to delete

☑ Select All

- ✔ Held Jobs
- ✔ Active Jobs
- ✔ Printed Jobs
- ✔ Archived Jobs - Server Internal
- ✔ Archived Jobs - Network Links
- ✔ Scan Jobs
- ✔ Secure Print Jobs
- ✔ VDP Resources
- ✔ Job Log
- ✔ FTP & Email Logs

OK   Cancel
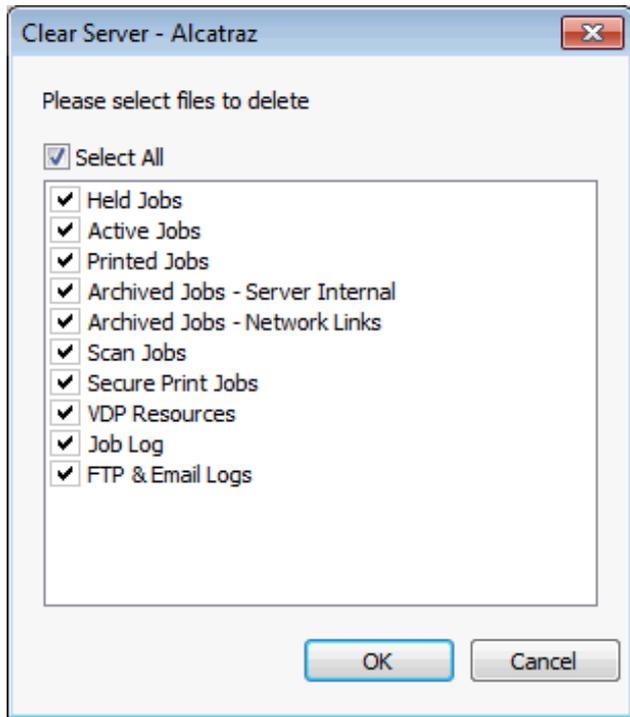
The expanded list provides the administrator with greater control.

Fiery Industrial Design

The Fiery external server family has a sophisticated and appealing industrial design for the server, the stand and the GUI kit (keyboard, mouse and flat-panel display).

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

Features of the advanced design include the following:

- The Fiery stand is built into the Fiery server.

- The new design requires a smaller footprint.

- It has easily accessible USB ports, LCD panel and power buttons.

- The neat and simple design includes storage space for the system's calibration and profiling measuring tools.

- The design has a working space for the end user's typical activities, such as calibration and profiling.

Benefits:

- *The smaller space requirement maximizes floor space at the print site.*

- *Greater accessibility facilitates operation and diagnosis of the Fiery system.*

- *Dedicated storage space helps keep the Fiery server area clear of tools and peripherals.*

Fiery Integrated Workstation

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

Enhancements impact the Fiery QX100, PRO90 and PRO80 platforms. Design changes to the Fiery chassis include the following:

- Reset button: The reset button has been recessed and now requires a pen or other small pointed device to activate the reset action, preventing operators from accidentally resetting the Fiery server.

- DVD eject bar: An eject bar has been added under the DVD drive as another option to eject DVDs or CDs (in addition to the eject command on the Fiery GUI).

- Tabletop size: The tabletop size and shape have been modified to make it easier to maneuver the Fiery stand through standard doorways.

- ES-2000 holder: A recess on the right side of the furniture top has been added to provide a secure place for the ES-2000.

- Keyboard tray: A metal keyboard tray has been added to the front underside of the top, giving operators a safe, protected place to store the keyboard when the top is being used for calibration, profile making or other prepress tasks.

DVD eject bar

Reset button

ES-2000 holder

Tabletop size

Keyboard tray

Benefits:

◆ *Prevents accidental commands that would potentially delay operations.*

◆ *Improves operator productivity by using the workspace more efficiently.*

◆ *Optimizes the usable workspace and saves operator time by adding the option to store the keyboard under the tabletop, helping operators avoid the necessity of leaving the immediate area to perform other prepress activities.*

Color

The Fiery server delivers outstanding color across applications and platforms.

The Fiery server is ideal for producing marketing materials and packaging or for photo-publishing applications. The high-value, color-intensive applications produce high-quality results because the Fiery server optimizes the printer to obtain superior color that amazes even the toughest customers.

Now operators can take real-time image editing to the next level with Image Enhance Visual Editor. Service providers can increase business and revenues by offering image correction services. The calibration process is dramatically simplified, and effectiveness is increased with job-based calibration and a calibration guard.

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

Color	QX^{100}	PRO^{90}	PRO^{80}	PRO^{80}BW	E^{200}BW	E^{200}
PANTONE Plus	✓	✓	✓	-	-	✓
Image Quality	✓	✓	✓	✓	✓	✓
VIGC Pass and PDF/X-4	✓	✓	✓	-	-	-
Calibrator	✓	✓	✓	-	-	✓
Grayscale Calibration	-	-	-	✓	✓	-
Job-Based Calibration	✓	✓	✓	-	-	✓
Profile Manager for ICC Profiles	✓	✓	✓	-	-	✓
Device Link Support	✓	✓	✓	-	-	✓
PANTONE Approved	✓	✓	✓	-	-	✓
HKS, DIC, Toyo Ink Named Color Profiles	✓	✓	✓	-	-	⊙
Fiery Spot-On	✓	✓	✓	-	-	⊙
Specialty Color Support	✓	✓	✓	✓	✓	✓
PDF/X Output Intent	✓	✓	✓	-	-	-
Composite Overprint for Spot Colors	✓	✓	✓	-	-	⊙
Composite Overprint for CMYK	✓	✓	✓	-	-	✓
Grayscale Composite Overprint	✓	✓	✓	✓	✓	✓
Optimize RGB Transparency	✓	✓	✓	-	-	✓
CMYK Black Point Compensation	✓	✓	✓	✓	✓	✓
Embedded Profile Override	✓	✓	✓	-	-	✓
Text and Graphics Quality	SFM	SFM	SFM	SFM	SFM	SFM
Fiery Image Enhance	✓	✓	✓	✓	✓	✓
Fiery Image Enhance Visual Editor	✓	✓	✓	✓	✓	⊙
Black Custom Screening	-	-	-	✓	✓	-
Auto Trapping (Fixed)	✓	✓	✓	-	-	⊙
Fiery Color Profiler Suite	⊙	⊙	⊙	-	-	⊙
Fiery Graphic Arts Package, PE	✓	⊙	⊙	-	-	-
Fiery JobFlow	⊙	⊙	⊙	-	-	⊙

✓ Standard   ⊙ Option   - Not Available   SFM = See Feature Matrix

Color Management Tools

Fiery color management tools give the expert user maximum control over color quality with a suite of advanced and precise tools. Personalized settings can be configured to accurately simulate and fine-tune the output of other devices. The color management technology included in every Fiery server supports any color space, including CMYK, RGB, spot colors and CIE L*A*B*. It also supports ICC sources, simulation, output and device link profiles. Fiery servers deliver great out-of-the-box color and have an intuitive and easy-to-use graphical user interface (GUI).

Out-of-the-Box Image Quality Enhancements

Fiery FS100 Pro and above servers give customers the best performance and quality with new default Job Properties settings. The new default settings provide improved image quality without affecting performance and add an enhanced path for printing gradients and blends.

Image Smoothing has been extended to enable 12-bit smooth shading for the best quality printing of gradients for any image resolution type.

Composite Overprint and Best Image Quality, now enabled by default, deliver prints that better match the design on the first print, even if the designer has applied techniques such as overprinting.

Caching reusable objects improves performance, and 12-bit smooth shades give better quality on gradients, right out of the box.
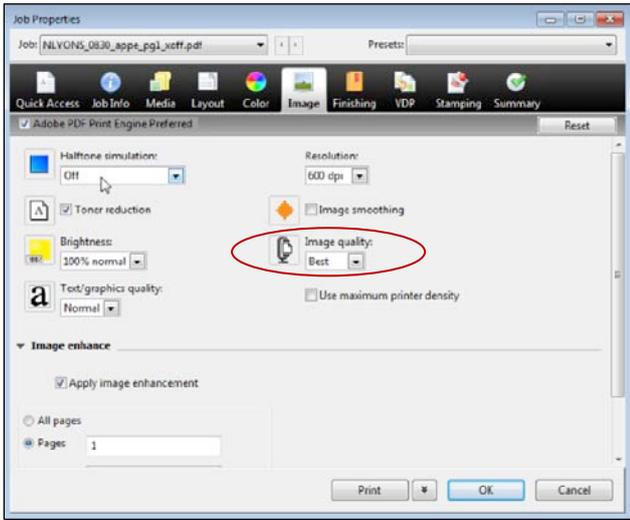
These imaging improvements can be seen in the Job Properties > Image tab. VDP caching improvements are located in the Job Properties > VDP tab, and Composite Overprint is located in the Job Properties > Color tab.

Benefits:
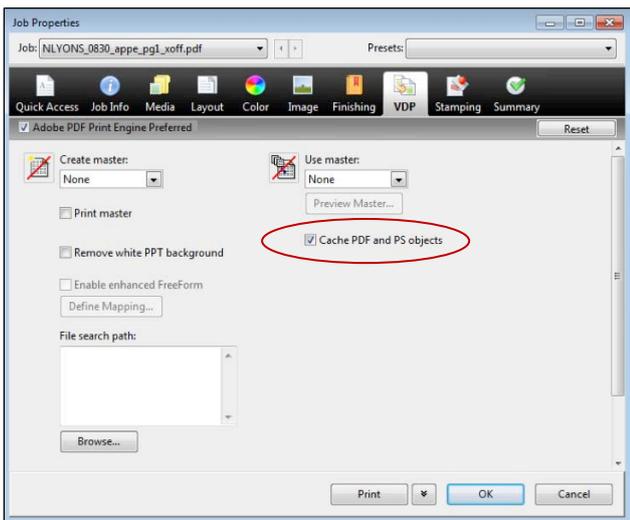
 ◆ *Provides the highest level of performance with superior output quality, even on complex jobs with transparencies.*

 ◆ *Reduces potential for error and eliminates the need to reprocess or reprint jobs.*

 ◆ *Speeds job setup.*

 ◆ *Adds an enhanced path for printing gradients and blends.*
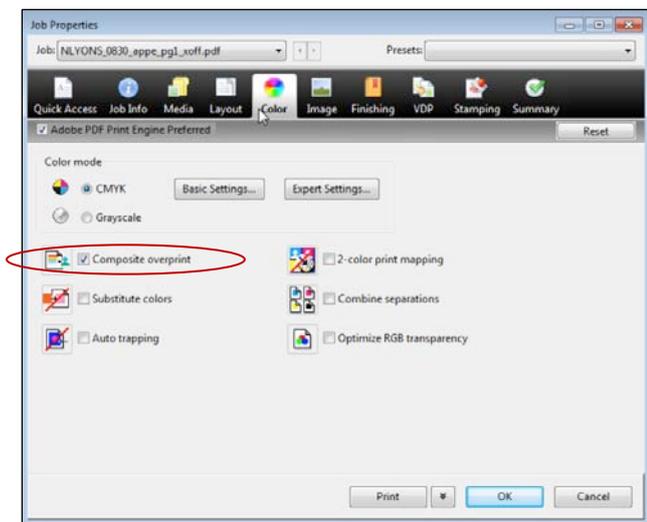
New Composite Overprint default setting

New Image Quality Best default setting

New VDP Caching default setting

PDF/X Support

EFI leads the industry in PDF/X-4 compliance and the Fiery FS100 Pro and FS150 Pro servers are the first print servers to produce perfect PDF prints. Print providers using a Fiery print server can have confidence that their print jobs will accurately reflect the true intent of the graphic designer using tools such as Adobe® Creative Suite and Adobe Creative Cloud. Thus, they can avoid costly reprints, delivery delays and dissatisfied print buyers.

Fiery FS100 Pro and above print servers support PDF/X-1a, PDF/X-3 and PDF/X-4.

FS100 Pro servers achieved the first Perfect Pass score.

VIGC is a member-based, international organization that follows recent developments and innovations in graphic technologies. One of its primary purposes is to provide assessments of the available products to strengthen companies' competitiveness. VIGC developed the PDF RIP Audit to determine which systems can render print jobs accurately and consistently.

VIGC used a specific set of files designed to test PDF/X-4 compliance from three different organizations — European Color Initiative

(ECI), Ghent Workgroup (GWG) and VIGC — as its test set and ran it through an undisclosed number of systems.
The organization does not publicize the names of systems that do not fare well in the assessment, but of those tested only seven received a Pass certification, and the Fiery FS100 Pro server was the only one to receive the 100% Perfect Pass label. Due to various controversies and with EFI Fiery FS100 Pro being the only RIP to achieve the Perfect Pass score, VIGC has discontinued RIP audits since March 2013.

FS150 Pro servers are based on the same PDF processing technology as FS100 Pro servers; therefore, they guarantee delivery of the same perfect results.


Perfect PDF Output with Fiery FS100 Pro

Transparencies may not be rendered correctly with a non-Fiery DFE

Images may result desaturated with a non-Fiery DFE

To read more about what it means to be the best system on the market, visit the following pages:
http://www.largeformatreview.com/rip-software/3527-vigc-confirms-pdf-rip-is-making-significant-strides-forward,
http://www.vigc.org/vigc-pdfx-4-audit/ and http://www.eci.org/en/projects/ats

Benefits:

◆ *Achieves expected, desired results on even the most complex graphics files.*

◆ *Meets and exceeds requirements of even the most demanding customers.*

PDF/X Output Intent

PDF/X standards enable graphic designers and document creators to distribute standardized PDF files that will reproduce consistently even when output on different print systems. The Output Intent tag in PDF/X lets users embed the ICC profile for the final desired color appearance when a PDF document is printed. The server uses the PDF/X output intent profile in conjunction with the color definitions for each page object in the PDF and applies the appropriate color transformation.

Benefits:

◆ *Reproduces color output as the designer intended.*

◆ *Ensures that each individual element within a job is reproduced accurately.*

Optimize RGB Transparency

Transparencies are part of the PDF language, but PostScript does not recognize such definitions. Therefore, the Optimize RGB Transparency feature flattens multiple overlapped RGB transparencies in a PDF file into one CMYK element during the processing of the PDF.

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

To use this feature, operators check the "Optimize RGB transparency" box in the Color Tab of Job Properties.
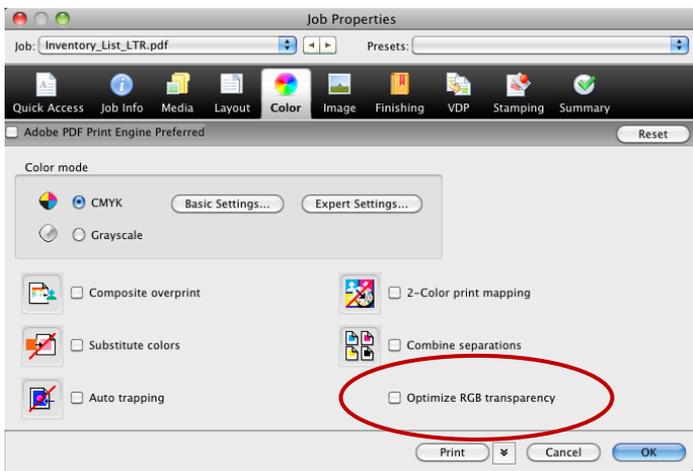
"Optimize RGB transparency" box in the Color Tab of Job Properties

Benefit:

◆ *Increases color accuracy when printing PDF.*

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 discrete color profiles, such as when different RGB or CMYK sources are used in a design, Fiery

servers are able to respect source profiles embedded in a document. The checkbox "Use embedded profile when present" specifies whether embedded color profiles should be used or ignored when present for RGB and CMYK sources.
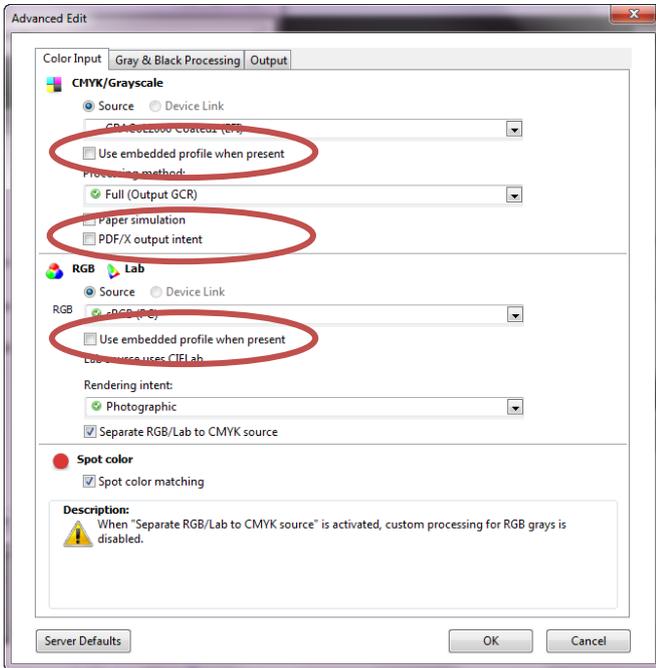
Fiery Expert Color settings for use with PDF/X Output Intent and/or embedded source profiles

Benefits

◆ *Fiery servers give users the flexibility to handle a variety of input color spaces based on embedded ICC source profiles.*

◆ *Support for PDF/X rendering Intent ensures consistent reproduction of color on a variety of output devices.*

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 application, it can be imaged directly on top (overprinting) or a "knock-out" can be created in the underlying object (erasing that section of the underlying object).

Before overprint was supported in composite data, designers needed to print native documents as separations. In such a workflow, the native application calculated the overprints and generated color separations, creating large PostScript data streams of network-intensive, color-managed file transfers before the Fiery server could print them. This is not an optimal workflow for processing color and doesn't provide adequate support of new design features such as transparency. This process produced unsatisfactory print results, was inconvenient and the submission of a composite file took four times longer.
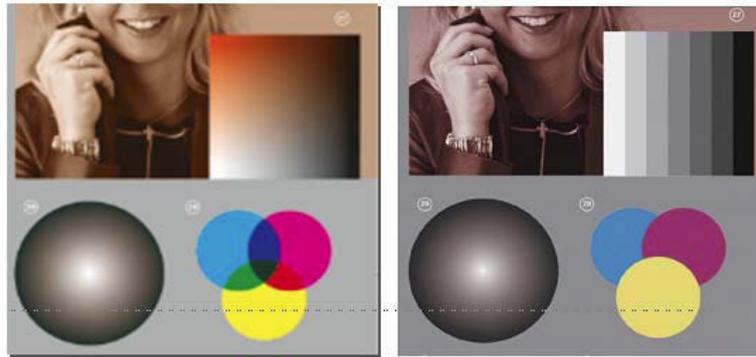
Correct overprint simulation   Missing overprint simulation

Fiery's Composite Overprint feature enables overprinting only for objects specified to overprint in composite PostScript and PDF files. Several important feature benefits are a smaller file size for network transfers, honoring of overprint commands specified in source applications such as QuarkXPress and Adobe InDesign, one-time color management by the RIP and overprinted objects in separated data that will be overprinted in composite data to match overprint results.

Enable this feature for best results when print jobs contain spot colors that may be overprinted.

CPSI

The Fiery server's configurable PostScript interpreter (CPSI) can process up to 250 spot colors (including C, M, Y and K) per page when Composite Overprint is enabled. When Composite overprint is disabled, there is no practical limit. Files set to print PANTONE charts exceeding 250 colors on a page will show an error message with Composite Overprint on because the file exceeds the limit of supported colors for overprinting even though the objects are not set to overprint. Turn off Composite Overprint to print these files without an RIP error.

Fiery servers support overprinting 64 colors (e.g., CMYK plus 60 spot colors) on a page through CPSI. Pages containing more than 64 colors apply knockout to objects filled with the colors that exceed the overprint limit. These colors will be rendered according to the color definition in Fiery's spot color library, and if the color definition is missing, the alternate color space is used.

This overprint limit is well in excess of Adobe Creative Suite's limit of 27 spot colors for overprint preview modes and printing separated data. Because Fiery supports overprinting for more colors than can be previewed in Adobe design applications, the customer's documents will accurately print overprinted objects as they are displayed in native design applications such as InDesign or Acrobat.

Adobe PDF Print Engine

Adobe PDF Print Engine (APPE) supports overprint for at least 31 colors per page (e.g., CMYK plus 27 spot colors) when Composite Overprint is enabled, though APPE continues to apply overprint to additional colors with a nondeterministic algorithm. A comparison of printed results from CPSI and APPE with a test file containing 64 overprinting spot colors is expected to show the differences in the way APPE applies overprint and knockout. If transparent objects are on the page, APPE will not accept a group of overprinted objects that exceeds 56 colors. APPE also renders spot colors according to the color definitions in the Fiery spot color library; if the definition is missing, the alternate color space is used.

Fiery servers support Composite Overprint from applications that output PostScript/PDF overprints according to both Adobe and Quark standards. The system supports files generated by the current versions of these applications:

- Adobe Acrobat
- Adobe Illustrator
- Adobe InDesign
- QuarkXPress
- Corel Draw

Benefits:

- *Increases productivity by accelerating the processing and spool times, speeding up print time by sending a single composite file instead of four separate files over the network.*

- *Improves output for PDF workflows and throughput for native applications such as Quark by sending jobs as a composite rather than as separations.*

- *Ensures a more accurate print of the specified document if overprints are present.*

Grayscale Composite Overprint

The Grayscale Composite Overprint feature allows overprints, drop shadows and transparencies in color print jobs to render accurately even in grayscale mode This unique Fiery feature works when printing in Grayscale color mode with Composite Overprint setting enabled and works for both CPSI and APPE interpreters.
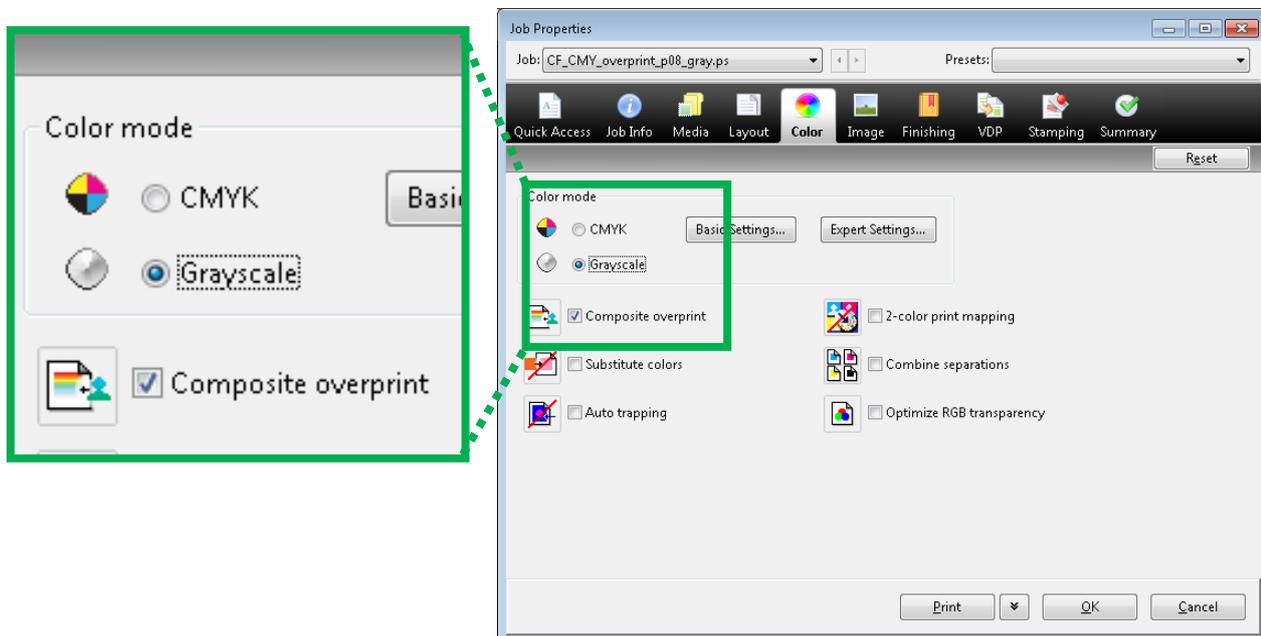
Grayscale and Composite Overprint settings need to be selected in Job Properties to guarantee correct representation of overprints in black-and-white output
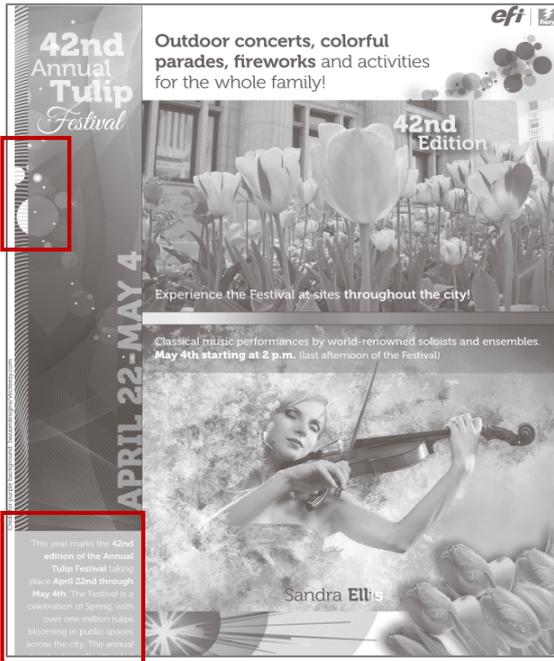
Red boxes indicate where errors occur because overprint is not applied
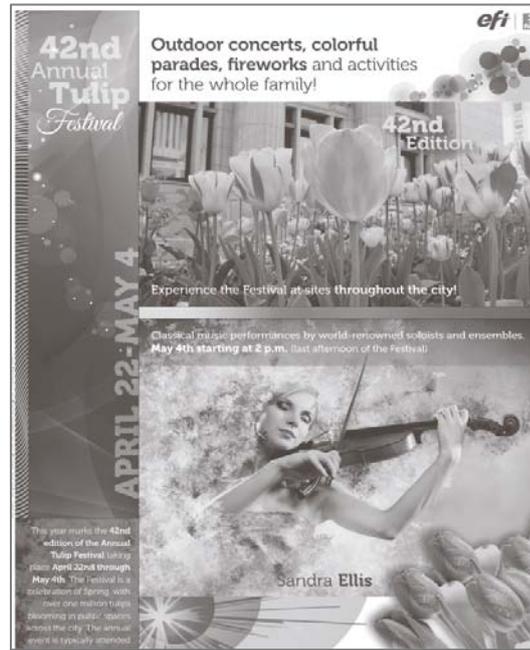
With Grayscale Composite Overprint enabled

Benefits:

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

Automatic, In-RIP Processing for Smoother Workflow

With Fiery servers, color processing takes place only once, in RIP at the Fiery server near the printer — not at the workstation. And it is automatic. There's no need to manually balance different color management systems that can work against one another within various applications. Fiery color management technology doesn't rely on the skills of individual operators to check job settings. Once specified, the correct settings are applied consistently and are not subject to operator error. Fiery servers maximize color quality quickly and intelligently, enabling workflows to run smoothly.

These features allow print jobs to be generated faster and to free the operator's system up sooner for greater productivity. Fiery color management technology also allows people to use a variety of software applications, operating systems, and virtually any file format while working in any color space — CMYK, RGB, spot colors or CIE L*A*B*.
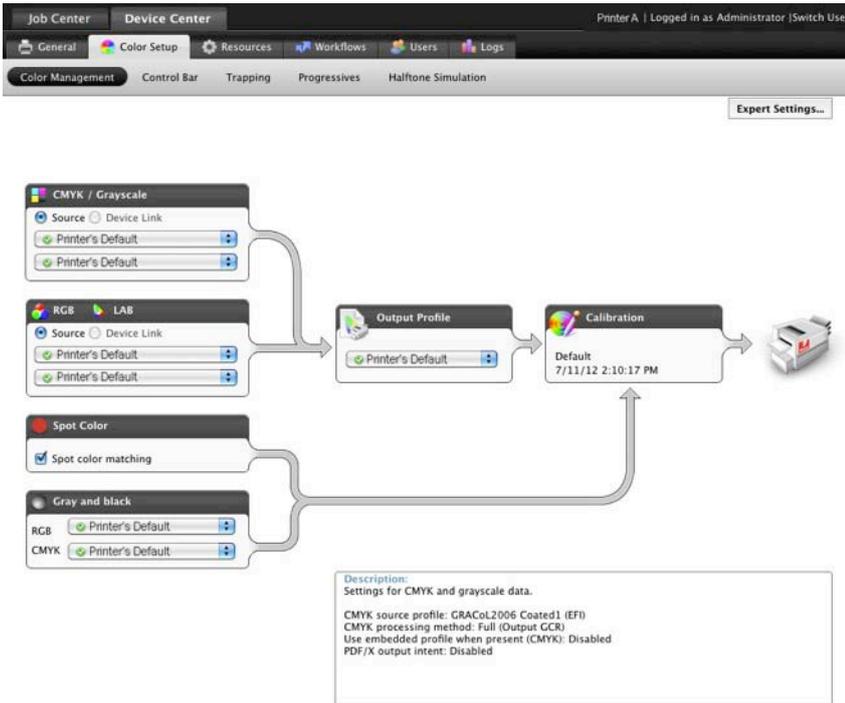
Color Setup in Command WorkStation

Color Transformations for Accurate Simulations

Fiery color management supports color transformation by providing all the tools needed to create accurate simulations quickly and easily. Basic color users also benefit from fast, hassle-free, superior color printing. Fiery color management technology offers great out-of-the-box color with features that convert raw files to stunning color prints quickly, easily and consistently. ICC profiles are used by Fiery servers for accurate color printing, even from RGB applications such as Microsoft Excel, PowerPoint and Word. Users can download ICC sources, simulations, output or device link profiles with Fiery Profile Manager for complete control over source color spaces, press simulations and copier output. The Color Editor allows operators to edit simulations and output profiles, which can then upload to Windows or Mac OS computers and download to other devices to provide the closest possible match between devices.

Benefits:

- ◆ *Achieves maximum color control for expert users.*
- ◆ *Minimizes operator errors with easy user interface.*
- ◆ *Provides excellent color quality for proofs, comps and short-run color.*
- ◆ *Shortens learning curve with easy access and unified interface with Fiery Driver.*

Rendering Intent

- **Photographic:** Prioritizes smooth color transitions typically found in photographs and scanned artwork.
- **Presentation:** Prioritizes bright saturated colors typically found in presentation graphics and charts. Optimizes for mixed use of graphics and photographs.
- **Relative Colorimetric:** Setting for handling spot color data.
- **Absolute Colorimetric:** Prioritizes color accuracy while optimizing brightest whites in photographs.

Processing Method

- **Full (Source GCR):** The black channel from the original document is preserved. Recommended for proofing.
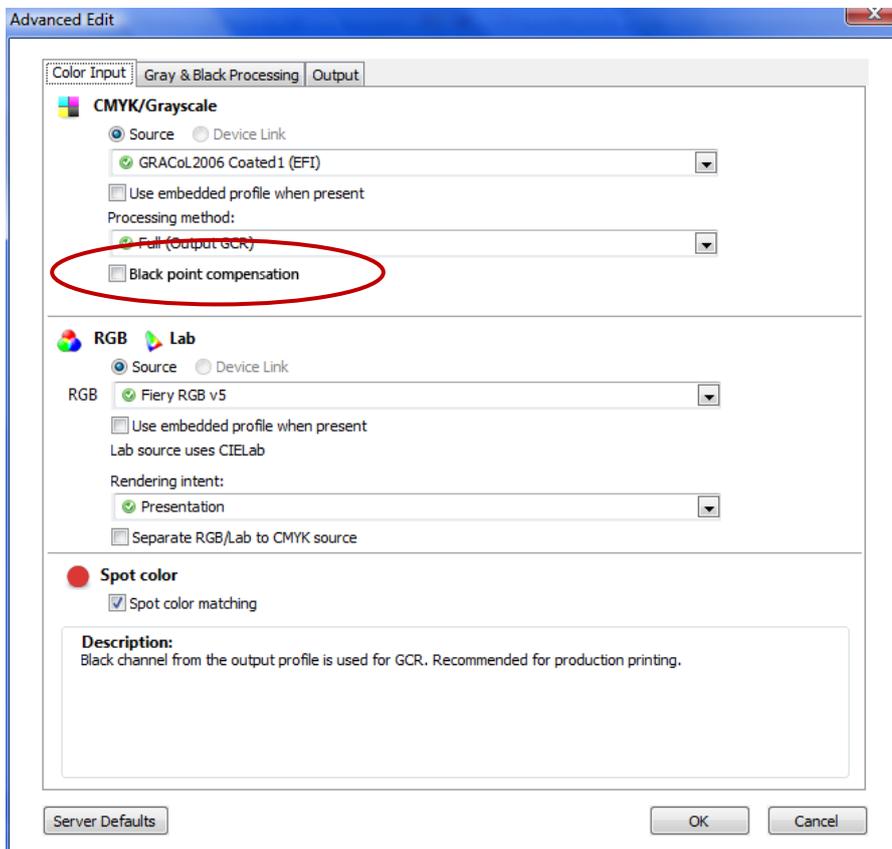
- **Full (Output GCR):** The black channel from the output profile is used for GCR. Recommended for production printing.

- **Pure Primaries:** Uses selected profile for RGB data.

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, which are printed on low-quality media that deliver a smaller CMYK gamut, such as plain, uncoated paper.

CMYK Black Point Compensation is one of the features that must be enabled for perfect PDF/X-4 output or to pass the Altona and Ghent test suites. When proofing small-gamut CMYK sources such as newsprint, the feature can be disabled to more accurately render colors as they would appear on the newsprint press. Black Point Compensation is always enabled for RGB sources being converted using the Relative Colorimetric rendering intent.

The feature requires Fiery FS150 system software and Fiery Command WorkStation v5.6. See the Fiery Command WorkStation new features guide.

Black Point Compensation setting in Job Properties

Benefit:

◆ *Guarantees perfect PDF/X-4 output or to pass the Altona and Ghent test suites.*
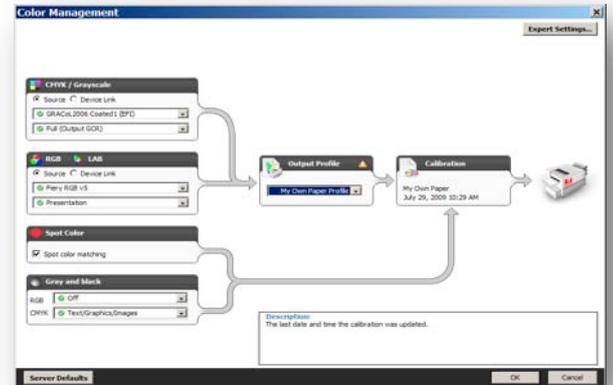
Calibration

Fiery Calibrator

Digital print engines, particularly color copiers, are susceptible to gradual shifts in color consistency caused by changes in temperature and humidity, fluctuation in CMYK toner levels and use of various paper stocks. To compensate for these variables, the print system needs to be brought back to a standardized color appearance. Users can accomplish this task by applying new calibrations at regular intervals or before printing jobs with critical color requirements. When the user calibrates, the Fiery server corrects for current color behavior of the print engine.

Fiery Calibrator allows the user more visibility into a job's calibration status.

The calibration tool, located in Job Properties, allows users to see details of each calibration set, including the date the set was last calibrated. Operators can see the optimal paper brand and media settings for each calibration set, allowing them to make more accurate choices when setting up a job to print.

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.*

Easier to Calibrate

The Fiery Calibrator tool helps operators consistently achieve the color they want with a user interface that makes the calibration process easier to navigate, featuring a wizard to guide users through it. Contextual Help is available to explain every choice in configuring and using the Fiery Calibrator.

The Calibrator separates the different calibration functions in different windows:

• Calibrate : perform the actual calibration process.

• Manage: manage calibration sets.

• Preferences: set up functions.

This separation simplifies the user interface, making the calibration process easier to navigate.
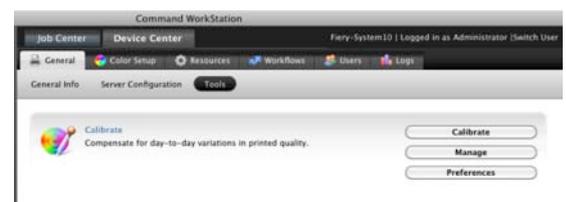
Command WorkStation Calibration user interface

Guided Calibration

With Fiery servers, the calibration process is extremely simple. The user only has to select the media, and the system automatically populates tray information for that media. It is now also possible to calibrate using any paper type and size equal to or larger than letter/A4.
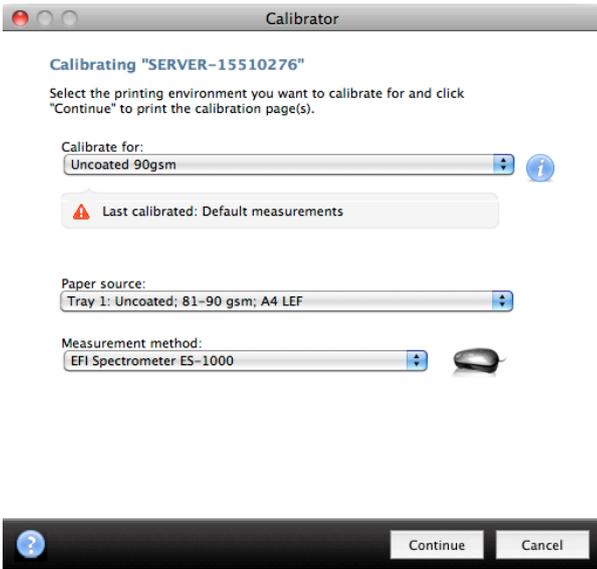
More flexibility setting up paper preferences

The Calibrate button launches the Calibrator Wizard to guide users step by step through the calibration process; even someone with no training can calibrate.
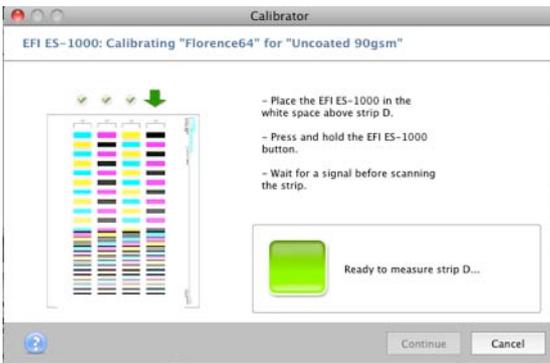
Calibrator Wizard guides operators through every step of the process.

Contextual Help

Fiery servers provide comprehensive information for calibration functions. Each window displays a Help icon that provides contextual help information specific to the content in that window.

Printing the calibration page

The calibration process starts with printing a page of a specific color layout that you can use to measure the current color output of the copier/printer. The calibration page is printed with the settings that you select.

To print the calibration page:

1. Choose the settings for printing and measuring the calibration page.
    - Calibrate for (Calibration setting)
    - Paper source
    - Measurement method
2. Click **Continue** to print the calibration page and proceed to the measurement procedure.

    Note: The color output of the copier/printer changes with time and usage. To obtain the most current data, always measure a newly printed calibration page.

Related Topics

Help is specific to the content of the window.

Any User Can Calibrate

Administrators can increase productivity by enabling any user to calibrate. Calibration is so simple that operators really need no training to do it. Operators can set up their preferences in the Users and Groups window under the Users tab in Device Center. Also, because calibration functions are now separate from management functions, administrators do not have to be concerned that users may accidentally change or modify any of the system preferences or global settings.

Privileges	Administrators	Guests	Operators	Scan Users	Standard Users
Calibration	✓	✗	✓	✗	✗
Create Server Presets	✓	✗	✗	✗	✗
Fiery Mailbox	✗	✗	✗	✓	✓
Manage Workflows	✓	✗	✗	✗	✗
Print in B&W	✓	✗	✓	✗	✓
Print in Color and B&W	✓	✗	✓	✗	✓

Administrators can grant privileges to any and all users.

Benefits:

- ◆ *The Calibrator user interface has been simplified to make the calibration process easier to navigate.*

- ◆ *Calibration is very easy; it requires one decision to guide the entire process.*

- ◆ *Contextual help is available to explain every choice an administrator has to make.*

- ◆ *Because Fiery Calibrator is easy, operators can calibrate more frequently and efficiently; therefore, color output quality and system productivity are enhanced.*

Manage Calibration Sets

Calibration sets define linearization for a specific paper type, including settings that affect calibration results. A set contains information about the media, the engine's halftone screen setting and other media-specific variables. Calibration normalizes the tonal output of the device so that color responses for this combination of print settings are normalized. These new calibration sets control all variables for how a medium is calibrated, ensuring consistency for recalibration in the future.

Fiery Calibrator makes it much easier for users to create new sets, edit existing sets and delete unneeded sets. The ability to create and manage calibration sets increases the effectiveness of calibration because it ensures that calibration applies to a specific set of printing conditions.
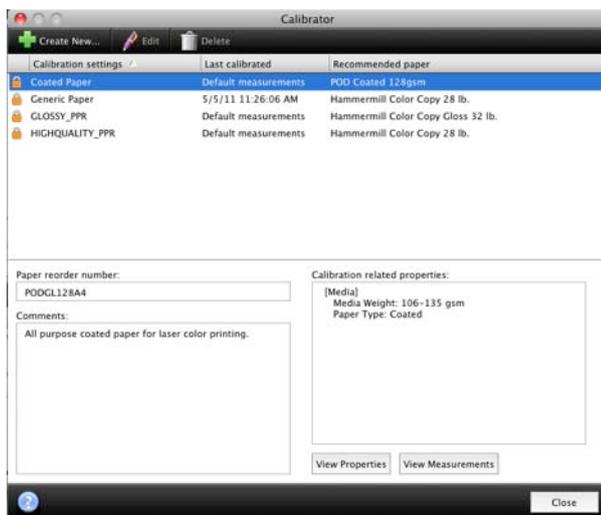
Manage calibration sets in Calibrator.

In addition, the Color Profiler Suite is integrated directly with the Fiery Calibrator to create new ICC profiles. The calibrator wizard leads the user directly into the Color Profiler Suite at the conclusion of calibration to make an ICC color profile for the media. Creating a new profile from this stage ensures that the right settings are in use in Job Properties because the user already selected paper properties in Calibrator.
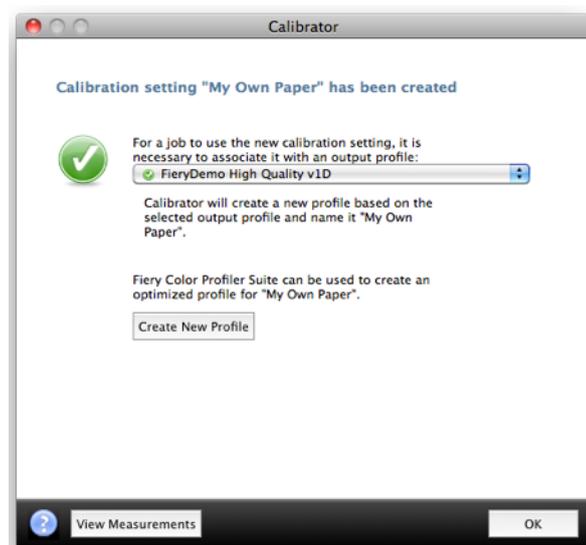
Create new profiles in Color Profiler Suite without leaving the Calibrator interface.

Benefits:

♦ *Allows any authorized user to create new sets, edit existing sets and delete unneeded calibration settings.*

♦ *Increases the effectiveness of calibration because it ensures that calibration applies to a specific set of printing conditions.*

Calibration Guard

Fiery servers have now incorporated Calibration Guard to provide calibration status, warnings and alerts to require the use of Fiery calibrations. If a calibration has expired, Calibration Guard can prevent jobs from printing, ensuring color consistency in every job.

The new Calibrator Preferences include the settings to activate Calibration Guard. To configure the guard, administrators simply check the box "Set time limit and display status in Job Center" in the Calibration status section of the Calibrate window. They must also specify the time frame for which the calibration will remain valid. If calibration and color consistency are critical, they should also check the "Suspend printing when calibration has expired" preference box. Jobs sent to the Print queue with an expired calibration date will move to the Hold queue without printing. This saves money and resources by not printing jobs with expired calibration.
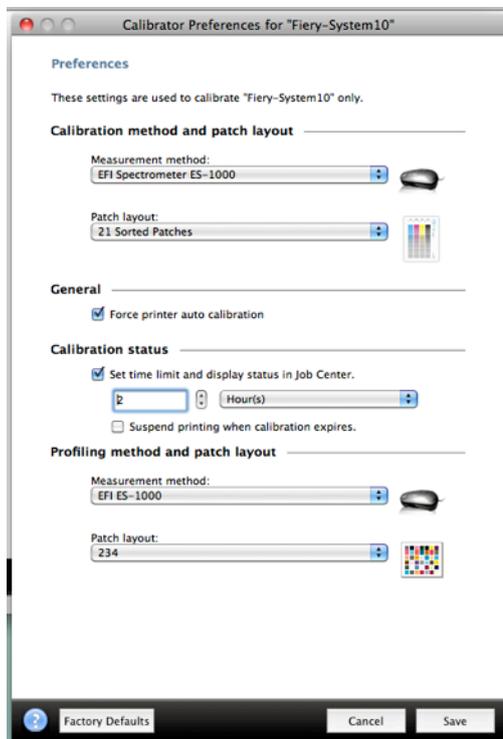
Calibrator Preferences

The Calibration Guard displays the Calibration Status in two areas:

- The Calibrator window

- In the job summary for a selected job
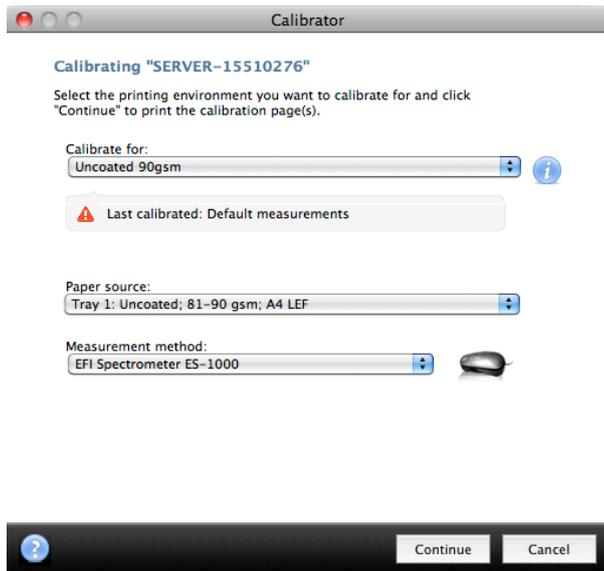
The calibration status will also include a status icon: A green check signifies that calibration is current, a yellow triangle warns that the calibration time limit is near and a red triangle indicates that calibration has expired. Fiery servers make it very easy to see and determine the calibration status of jobs.

## Integrated Color Profiler Suite Profiling Method and Patch Layout
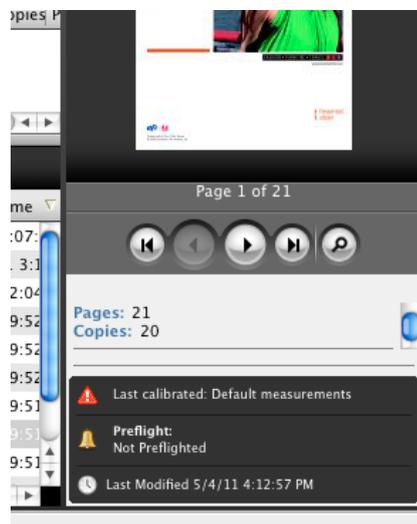
If Fiery Color Profiler Suite 3.x or newer is installed on the Fiery server running Command WorkStation, the patch set and device to use for integrated media profile creation from the Calibrator wizard can also be specified. This allows the user to create an ICC profile for a paper in the same wizard-based workflow that the new calibration set is created in. By doing this as one process, user error is reduced because the proper calibration set is loaded when profiling patches are printed and then linked to the resulting ICC output profile automatically when it is loaded on the Fiery server. Because the wizard configures all expert profiling settings in Color Profiler Suite, even entry-level users can make calibration sets and ICC output profiles have top-quality color on any paper.

Benefits

- *Saves time because calibration and profiling are completed at the same time.*

- *Greatly increases user success levels because users do not have to be experts at how to load a certain calibration set when profiling; this is the point at which most users fail with other profiling tools that are not integrated directly with the Fiery server.*

- *Configures expert settings automatically, giving even novices professional-quality profiling results.*

- *Improves color consistency with status icons that remind operators to recalibrate.*

- *Saves time and minimizes waste by suspending jobs with expired calibration.*

Calibration Guard in the Calibrator interface

Calibration Guard in Job Summary interface

Job-based Calibration

Job-based calibration increases accuracy and effectiveness because users customize calibration for a specific job and its associated media and profiles. This is extremely useful for jobs that use nonstandard 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. A Calibrator Wizard will open to guide the user through the calibration process. With job-based calibration, only the calibration setting(s) used by that job will display automatically. When the job uses mixed media, the user can repeat the calibration process for all the media used in the job.
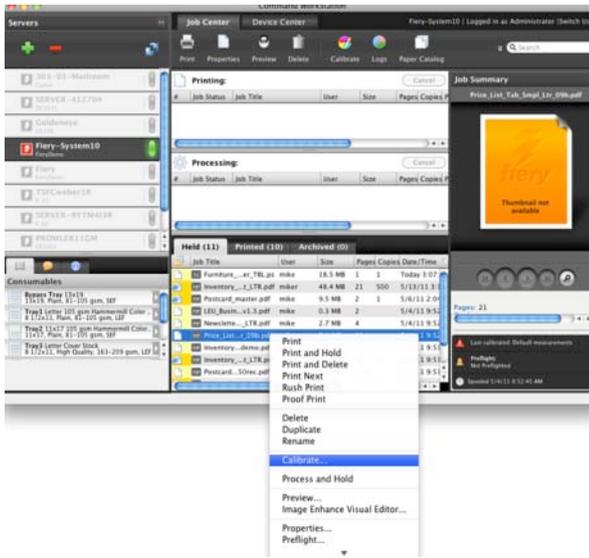
Starting job-based calibration from Job Center

Benefits:

- *Increases color consistency by calibrating for specific media.*
- *Saves time by allowing operators to calibrate for the media they need at the time they need it.*

Grayscale Calibration

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

Grayscale calibration is similar to color calibration. It measures tonal variance from the desired target performance and then compensates for that print engine variance.

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 on the same print engine.

Fiery Grayscale Calibration maximizes the dynamic range of detail in images from the darkest shadow to the lightest highlight. This ensures that shadows do not plug up, even at maximum densities.

Before calibration

After calibration

Fiery Grayscale Calibration also improves print quality on lower-quality paper stock. This type of paper stock is rougher and more matte than the recommended white paper, lowering the tonal reproduction range. Fiery Grayscale Calibration compensates for the lower tonal range of low-quality stock, preventing plug-up and improving overall print quality.

Benefits:

- *Maintains a precise match to the ideal tone reproduction.*
- *Preserves and enhances details in shadow areas.*

Maximum Printer Density

The Use Maximum Printer Density feature enables printing of all the primary inks (C, M, Y and K) at an engine's maximum density. The feature allows the use of a larger available gamut, resulting in punchier colors on printers that perform beyond the average. This feature also allows highly saturated colors to bypass calibration, so color results may vary over time, depending on the engine state.

The feature can be combined with the Pure Primaries feature to deliver the widest gamut a printer can produce, even when simulating color spaces, and is ideal for applications that require eye-popping colors and extra color punch. This would be valuable for the photo-printing market because it leverages a printer's maximum gamut to produce the most vibrant colors.

Print providers can achieve this extended-gamut output by using the Fiery Color Profiler Suite, if they have it. The Use Maximum Printer Density feature also provides a simpler way to maximize the gamut.

The Use Maximum Printer Density feature reaches the same high density levels as ColorWise Off without disabling color management. When Use Maximum Printer Density is enabled, only the highly saturated areas lose color management accuracy in favor of higher densities.

Benefits:

- *Extends the gamut of reproducible colors while delivering more vibrant and vivid colors.*
- *Provides this extension without the need for an external profiling solution.*

Device Link Support

In certain instances, it is important to override default color settings in lieu of a specific device's capabilities. A device link is a unidirectional transformation from one color space to another, allowing users to create specific color environments without being forced to use EFI color management.

EFI's Device Link Profile feature gives advanced users full control over color conversion between a color space and the Fiery-driven printer, allowing them to dictate the exact color transformation and subsequent output quality they'd like to generate by passing on Fiery's own color management techniques. It provides EFI's partners and other advanced users with the tools and knowledge to build their own color transformations and save them in the Device Link class of ICC profiles.
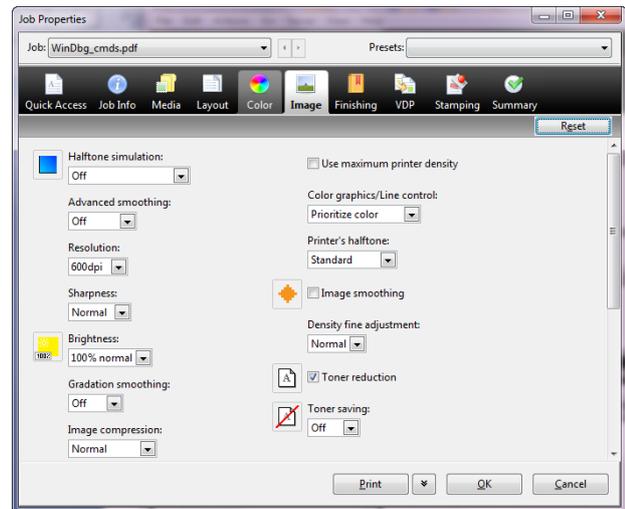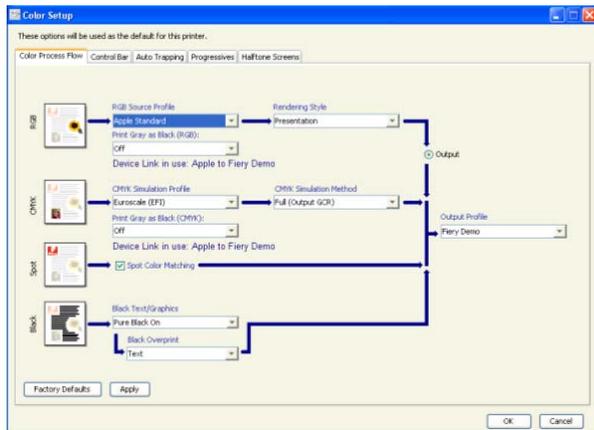
Benefits:

◆ *Gains complete control over color management space. Achieves a controlled and secure simulation, preserving pure colors and levels of UCR and GCR.*

Provides a toolset for users who have predetermined color output needs and do not want Fiery color management to modify output in any way.

Fiery Color Profiler Suite

Fiery Color Profile Suite is an stand-alone option that provides integrated color quality control at every stage of the printing workflow. It offers its users modular functionality that ensures color accuracy and consistency across platforms, applications and all types of media while increasing productivity and return on investment. It also extends the color capabilities of Fiery Driven printers with the most advanced color management tools available and seamless communication between the software and the Fiery server.

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

Integration with Fiery Color Profiler Suite

Fiery Color Profiler Suite makes world-class display and output profiles for Fiery systems. Output profiles can be converted to Device Link profiles to achieve the best precision using an iterative color measurement and device-link-optimization technology. Fiery Color Profiler Suite 4 can also optimize spot color matches using the same iterative technology. Color Profiler Suite fully supports the new EFI ES-2000 spectrophotometer, in addition to X-Rite iSis and iO table, and gives users the tools they need to precisely match industry color standards such as ISO, FOGRA and GRACoL. It provides tools that any operator can use to verify colorimetric precision, and the results appear in the Fiery Dashboard — a cloud-based service that captures and aggregates a wide array of performance data from one or multiple Fiery Driven™ engines. It gives users a single view into digital print productivity, including usage rates, uptime, color metrics, error rates and more. With Fiery Dashboard, plant managers are able to monitor color precision, even from a remote location.

All Fiery Color Profiler Suite tools are available at the user's fingertips to diagnose profile problems, compare color gamuts and create and edit profiles — without leaving Command WorkStation. The suite is the only set of profiling tools that is tightly integrated with the DFE to make output profiles and device links directly on the DFE.

• Color Profiler Suite is integrated with the Profiler user interface in Command WorkStation, enabling users to quickly diagnose profiles and apply profile changes without leaving Command WorkStation. Users can also edit, inspect and compare profiles using the Edit and Inspect modules.

• Color Profiler Suite is integrated with Spot Color UI in Command WorkStation so that users can get a quick view of how closely a printer can match a spot color by comparing gamuts of an output profile to a spot-color group. Operators can also tune the spot-color libraries and verify color precision for jobs in the queue on the DFE.

- Color Profiler Suite is integrated with the Fiery ImageViewer, allowing users to quickly check how well the monitor can represent the printed output on the screen and create new monitor profiles by launching the Monitor module without leaving ImageViewer.

Benefits:

- Simulates industry standards more easily and more precisely.

- Verifies color match from day to day.

- Creates monitor profiles for soft-proofing.
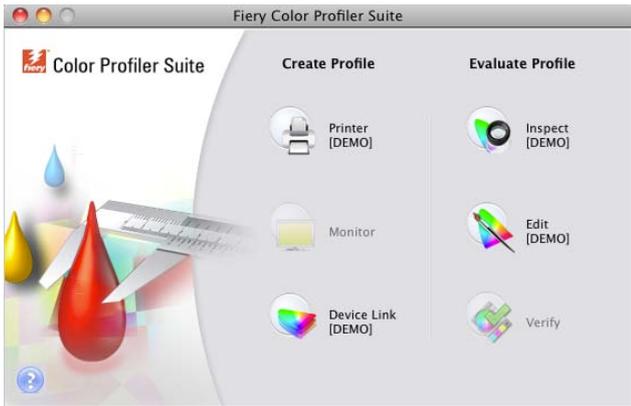

Color Profiler Suite launch pad

Color Profiler Suite Printer Profiler
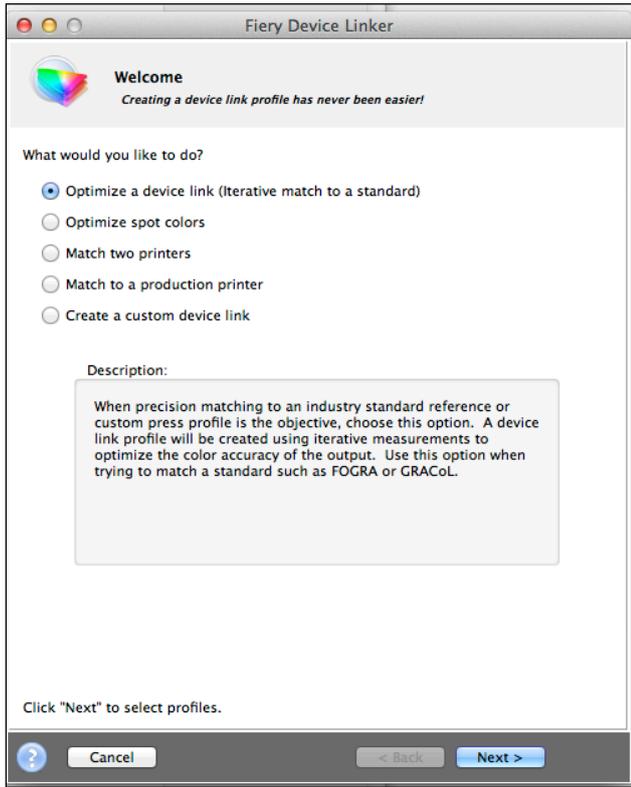
Color Profiler Suite Device Linker, including "optimize a device and optimize spot color" links

Color Profiler Suite Integration with Calibrator

The Color Profiler Suite is now directly integrated with Fiery Calibrator so that the user can choose Manage Calibration Sets to create new profiles using the same wizard they use to create the new calibration set. Just click on "Create New Profile" to create a new profile in the Printer module.
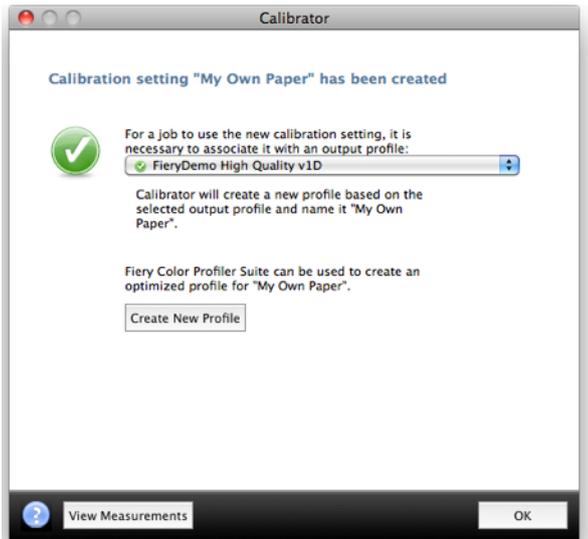
Color Profiler Suite Integration with Spot-On

The Inspect button in Spot-On launches the Profile Inspector module directly from Command WorkStation. This feature provides a comparison of the output profile to a spot color group. This comparison represents which spot colors can be printed using the selected output profile based on the device gamut.
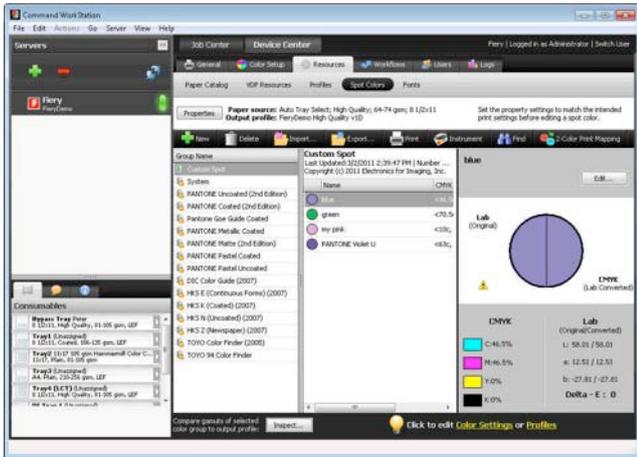
Note how closely spot colors can be printed using the selected output profile.

Color Profiler Suite Integration with Fiery ImageViewer

Users can create a custom monitor profile with the integrated Monitor Profiler in the Fiery ImageViewer preferences. A custom monitor profile allows for a more accurate onscreen soft proof within ImageViewer.
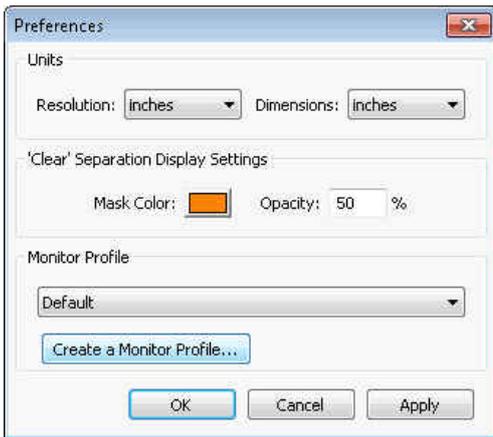
Create monitor profilers without leaving ImageViewer.

The integrated Profile Inspector module provides a comparison of the monitor profile and output profile, visually representing the gamut of the display compared with that of the output color space being previewed.
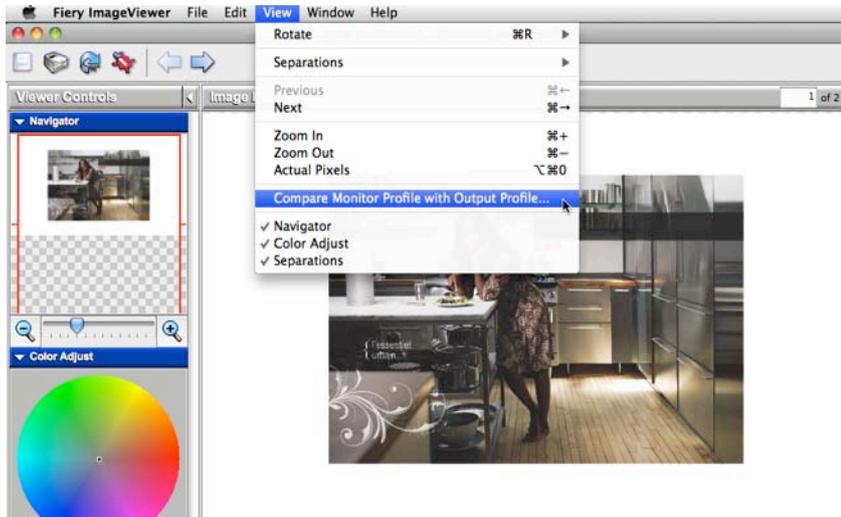
Compare monitor and output profiles.

Benefits:

- ◆ *Increases productivity and ease by enabling users to do all their work within one system.*

- ◆ *Allows users to create new ICC color profiles as needed.*

- ◆ *Helps users determine whether spot colors are in the gamut of the current output profile with the integration of the Profile Inspector module.*

- ◆ *Allows users to compare profiles to get a sense of the precision of a soft proof.*

Spot Color Accuracy Tools

Pantone Approved

EFI and PANTONE® have established an extensive business relationship to provide the best color tools and workflows for print providers. EFI offers the PANTONE Plus™ as well as older Pantone libraries such as PANTONE GOE and PANTONE FORMULA GUIDE, 2nd Edition, which users can download to Fiery servers. Loading the latest Pantone libraries on a Fiery server ensures that spot color output is accurate and consistent for all users.

Fiery Servers Come with Integrated Color Management Features and Tools

A scalable approach to color management provides integrated color features and advanced color tools to create the perfect color recipe for the specific needs of different print buyers. Fiery servers deliver exceptional out-of-the-box color with Fiery color and imaging technology. To measure colors, use the EFI ES-2000 spectrophotometer. For greater control over spot color matching, choose Fiery Spot-On. To guarantee that color reproduction is always accurate, consistent and reliable, use Fiery Color Profiler Suite. For more advanced tool requirements, choose Fiery Graphic Arts Package or Fiery Graphic Arts Package, Premium Edition to make color troubleshooting, preflight, and proofing tasks quick and precise.

Pantone-Approved Fiery Servers Provide State-of-the-Art PANTONE Colors

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

Using Spot-On on your Fiery server takes the guesswork out of color matching via an intuitive interface that makes it fast and easy to define or modify spot colors, eliminating the time-consuming task of looking up CMYK tint values. Spot-On reduces the potential for error by allowing users to create libraries of custom colors for reuse later and to accurately map substitutions between applications that use CMYK and RGB color spaces to define spot colors.

The built-in color lookup tables in the Fiery system automatically convert the PANTONE color to optimized CMYK values based on the output printer profile. Operators can use the Spot-On Spot Color Search to further fine-tune the output of any PANTONE color.

PANTONE Libraries: Defines the spot colors typically used in North America. Provides color conversion tables for use with Fiery Spot-On. Includes the new PANTONE PLUS SERIES and PANTONE FASHION + HOME libraries.

HKS, DIC and TOYO Ink Spot Color Libraries: Defines the spot colors used in Europe (HKS) and Asia (DIC and TOYO). Provides color conversion tables for use with Fiery Spot-On.

PANTONE Color Libraries and Color Reference Charts

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

- PANTONE Coated
- PANTONE Uncoated
- PANTONE Matte
- PANTONE Metallic Coated
- PANTONE GOE
- PANTONE Pastel Coated
- PANTONE Pastel Uncoated
- PANTONE PLUS
- PANTONE FASHION + HOME
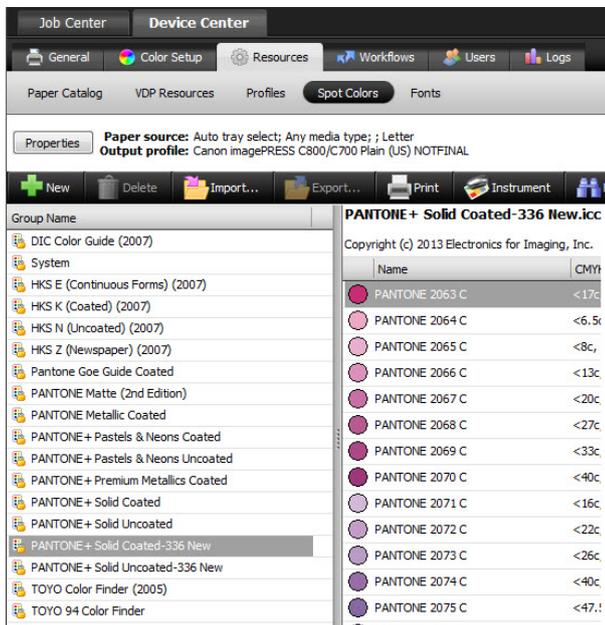
PANTONE PLUS/ 336 and 84 New Colors / PANTONE Fashion + Home

New PANTONE library support allows users to reproduce even more PANTONE colors accurately, with new PANTONE library support for the PANTONE PLUS and PANTONE FASHION + HOME libraries on their Fiery server. The Fiery server preserves all the previous PMS colors while adding a host of contemporary colors. It offers updated color definitions for Pantone Coated 2nd Edition colors in the PANTONE PLUS library.

The library is located in the Device Center > Resources > Spot Colors in Command WorkStation.

Benefits:

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

PANTONE libraries available on the Fiery server
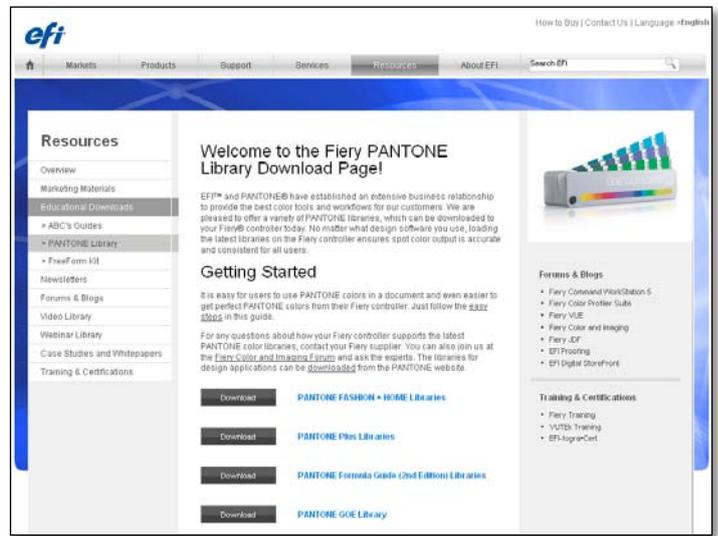
The latest PANTONE libraries are always available for download from efi.com

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

Fiery Spot-On

From corporate branding to high-level color matching in commercial printing settings, creating consistent, predictable color the first time, every time, is essential. With the growth of digital workflows, more users are able to create and influence color in documents and streamline the production process. These advantages do have drawbacks, such as a potential color-management nightmare and the misuse of color naming and callouts. Any of these can lead to bottlenecks in prepress and proofing.

Sometimes offered as an option, Fiery Spot-On provides a graphical user interface to help zero in on the CMYK toner equivalents needed to create or edit a desired spot color on a given printer. It also enables creation of custom spot colors with specific names and CMYK values. With Fiery Spot-On, users can achieve accurate color matching for spot colors used in logos and brands, using specific spot color libraries such as PANTONE, HKS, TOYO and DIC.

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

With fewer steps than other digital software applications and an integrated color management system, users can edit colors in Fiery Spot-On without having to switch back and forth from one tool to another or re-enter information to set up color profiles for repeatable results.

Built-In Spot and Substitute-Color Capabilities

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

- Enables the user to edit spot-color conversions in order to adjust colors to better match a customer's preference.

- Allows users to create and manage new color libraries.

- Captures spot colors using an ES-2000 spectrophotometer if the color the user wants to reproduce is not included in any color-matching system.

- Supplies tools to visually select a better combination to match the desired spot color.

- Permits custom spot-color libraries to be exported as named color ICC profiles for use elsewhere in the workflow.

In addition, the substitute color feature allows users to do the following:

- Achieve spot-color consistency across documents to maintain brand colors.

- Establish company-wide RGB color palettes for applications such as Microsoft Office that don't define named colors.

Taken together, Spot-On features allow users to establish an enterprise-wide color management structure that is faster to implement and easier to maintain, requiring less user training while still providing the consistent, accurate color that print providers want and need.

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

Spot Color Management

Fiery Spot-On allows editing of CMYK values associated with named colors so users can reach better perceptual color matches when the default calculated CMYK value produces unsatisfactory results. Fiery Spot-On provides a graphical user interface to help the user zero in on the CMYK toner equivalents needed to create a desired spot color for a given print condition.

Custom Spot Color Creation

Fiery Spot-On also enables users to create custom spot colors with specific names and CMYK values. This helps users to conceptualize and communicate custom colors with ease. For instance, they can quickly associate a color with the name Fiery Red instead of Pantone 032 CVC. Fiery Spot-On allows users to create a customized color group (exportable as a named color profile), which enables them to manage custom colors in an organized fashion. Commonly used customized color names can be grouped under a specific list name.

To further simplify operation, Fiery offers two ways to find the right spot color:

- Spot Color Search provides an intuitive graphical user interface for creating and editing named colors directly.

- The ES-2000 spectrophotometer is supported for measuring samples or swatches of new spot colors and adding them to a Spot-On library.

In Command WorkStation 5, the Spot-On tool is under Device Center > Resources > Spot Colors. The availability and functionality of this spot color management tool is determined by the configuration of the connected Fiery server. In particular, only a Fiery server offers the ability to select Job Properties for printing from Spot-On and for specifying the output profile associated with the spot colors.
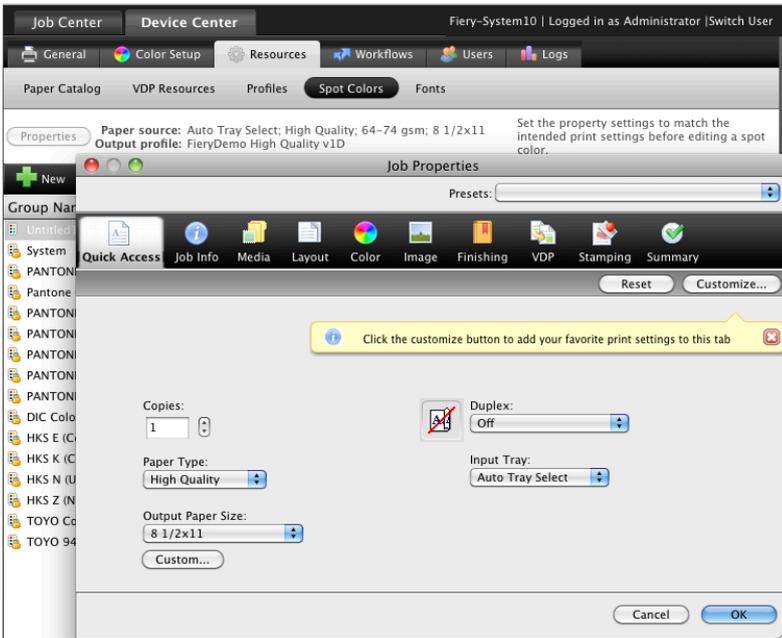
Use Job Properties to define the specific paper to use for printing the Color Search Pattern

Benefits:

- *Delivers accurate and simplified corporate color production.*
- *Offers intuitive user interface and reduces training needs.*
- *Eliminates spot color rework with late-stage color editing without opening the native original application.*
- *Produces increased color accuracy by using the same media used in the final run.*

Image Quality Settings

Fiery Image Enhance Visual Editor

Image Enhance Visual Editor is an easy interactive Command WorkStation plug-in tool for adjusting image colors in a job without the need to open the file in the originating application. This feature is part of the Fiery Graphic Arts Package, Fiery Graphic Arts Package, Premium Edition and Fiery Productivity Package options. It provides real-time image editing with visual feedback and eliminates the need for additional image-editing software. Image Enhance Visual Editor works with both PostScript and PDF files and supports XObject editing for PDF files, so adjustments are applied to all instances of the image in the file.

Image Enhance Visual Editor presets allow novice users to apply expert image enhancements and even assign the enhancements to a range of pages in the file. The default preset for Automatic Correction from the Preset pull-down menu will analyze and automatically enhance the image quality. For more advanced users, the feature offers manual controls to adjust tone, color and sharpness. Operators can see image adjustments before they save changes.
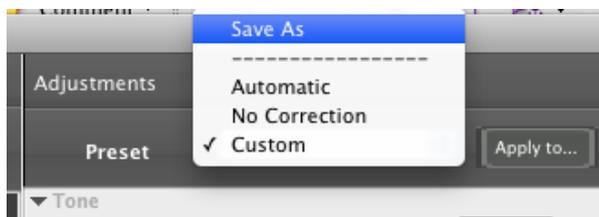
Before Image Enhance	After Image Enhance

Users may save manual image correction settings as a preset and apply it to other images, pages or documents.

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

Image Enhance Visual Editor also corrects for red-eye. When an operator has set red-eye correction for an image, marquees appear to show all instances of red-eye in that image. Users can select additional red-eye regions to correct or deselect areas that don't need correction. The user can make these adjustments in the onscreen preview rather than wasting time and money on printing a sample.
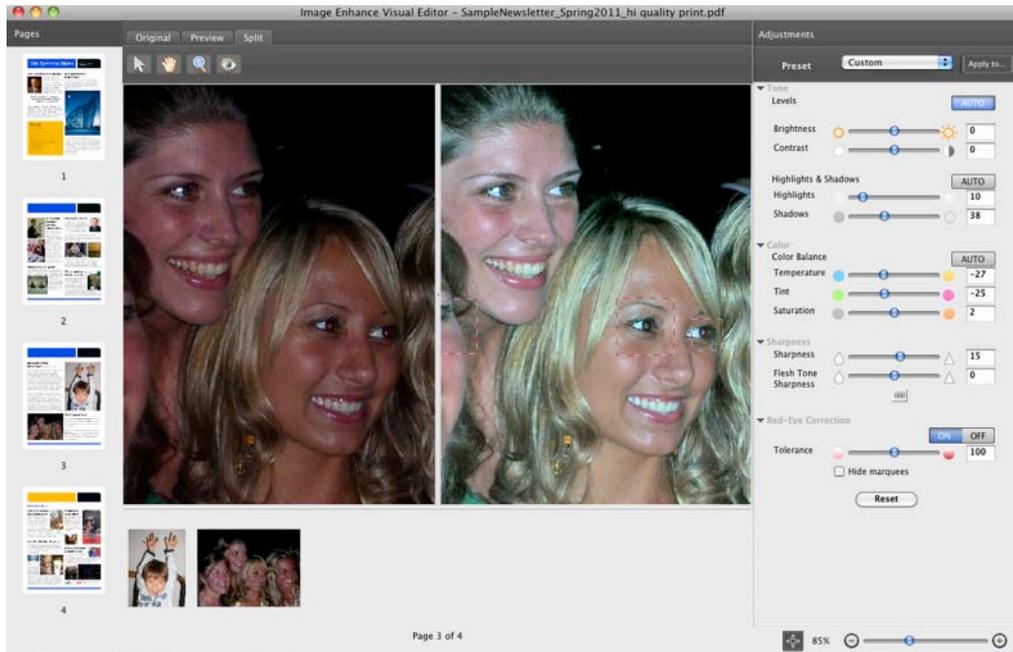
Users can select additional red-eye regions to correct or deselect areas that don't need correction.

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

Image Enhance Visual Editor works with file sizes under 2 GB, documents less than 100 pages and pages that contain fewer than 50 images. Additionally, the feature is designed to detect and enhance only natural images so it won't affect bitmap versions of graphics such as charts and graphs. Image Enhance Visual Editor supports RGB and CMYK input color and 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 aspect makes it the most complete toolset of this type in today's market. It can be used to improve the image quality of many types of applications such as office documents, photo books and professional publishing layouts.

Visit the Demos section at the Fiery Command WorkStation website at www.efi.com/CWS5 to watch the Image Enhance Visual Editor video demonstration.

Benefits:

- *Reduces turnaround time because operators do not need to return to the originating software application to correct images.*
- *Saves money because expensive image retouching and layout software is not needed at every workstation.*
- *Corrects saturated colors without harming flesh tones.*
- *Definition control allows localized sharpening or smoothing.*
- *Allows users to fix images late in the production process after the job is already on the Fiery Driven engine.*
- *Makes it easy for any operator to enhance images with automated tools.*
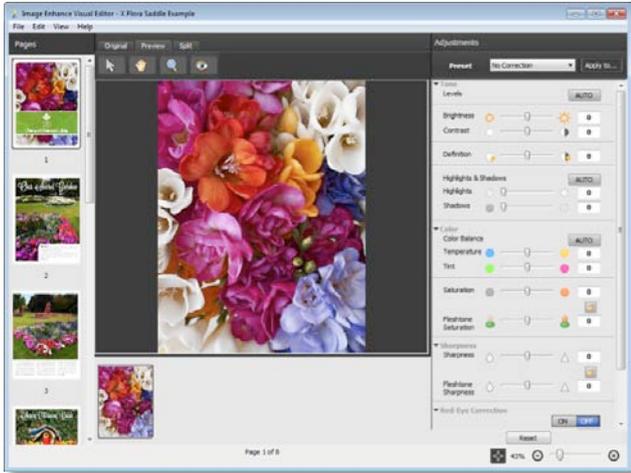
Image Enhance Visual Editor is located in the Image tab in Job Properties and can be launched from Command WorkStation (highlight job, right-click).

Image Enhance Visual Editor requires Fiery external servers running Fiery System 10 and above or the Fiery Productivity Package for embedded Fiery servers.
Users can also obtain these updates in Fiery Extended Applications, which are available for download on efi.com/CWS5.

Benefit:

◆ *On-the-fly correction for individual images yields higher-quality products in less time without the need to go back to the original design files*


The new Fiery Image Enhance Visual Editor "definition" and "saturation" controls

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 it does not require special commands other than Auto Trapping: On/Off. The Graphic Arts Premium edition extends this feature to allow trapping between image and graphic data as well as trapping of pixels within a single image. The Fiery Auto Trapping feature is not a simulation of trapping on other devices.
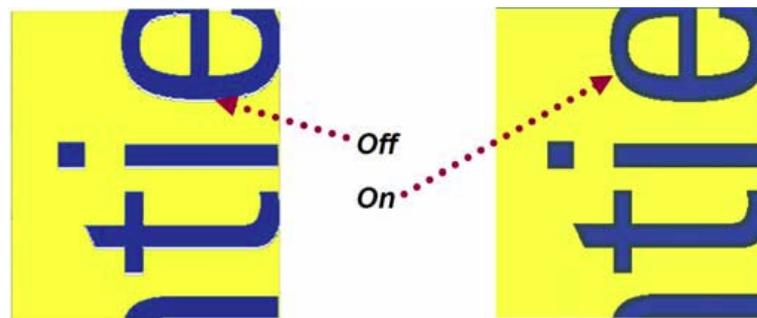
Fiery Image Enhance

Fiery Image Enhance improves the output quality of digital photos and saves prepress time by eliminating lengthy image editing and file manipulation tasks. Image Enhance addresses the widest range of images and jobs by supporting all color sources and the most commonly used file formats, including Microsoft Office documents, making it the most flexible feature of this type in today's market.

Image Enhance automates workflows so operators don't need to preview or tweak images before printing. Just turn it on in Fiery Job Properties. It streamlines job submission through Fiery Hot Folders, Virtual Printers or File-Print and achieves the best image results.

Key Features:

- File types: PostScript, EPS, TIFF and PDF files. For PostScript and PDF, the feature enhances any image type embedded in the files.

- Color source: RGB, CMYK or grayscale.

- Support for the following items:
    - Quick DocMerge files
    - Freeform files, PostScript and PDF (master and variable elements)
    - VDP files
    - Cached XObject elements when Use Optimized PDF is applied
    - Jobs defined with Defined Record Length

- Content: Images can be part of a document or can be individual images (e.g., JPGs merged using Fiery Hot Folders submission).

- Scope: It applies to specific pages, sheets or the entire job.

- Types of adjustments: exposure (brightness and contrast), color (cast correction, hue, saturation), shadows and highlights, sharpness and red-eye reduction.

- Preference controls: at the Device Center.
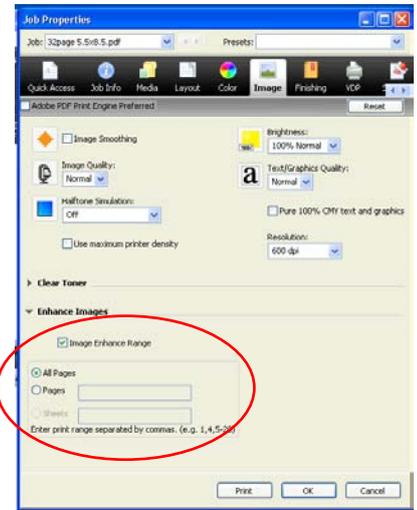
Before Image Enhance   After Image Enhance

Fiery Image Enhance provides the greatest value in environments with the following scenarios:

- PDF files — For many production environments, files are received in PDF format, so if a photo's image quality is poor, there is no way to correct it except by obtaining the native file. This process can be time consuming, and manipulating the native file can be difficult or impossible if the user doesn't have the appropriate application.

- Amateur photos — In the quick-print market, customers often bring digital photos for printing that are not done professionally and have less than optimal lighting in the background. The photo's printed output can be automatically optimized upfront without wasting any production time or pages.
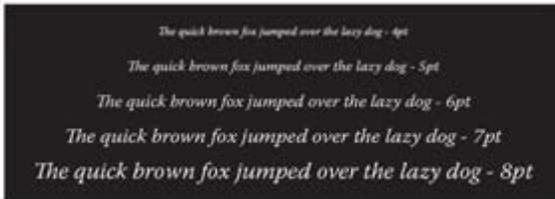
Benefits:

- *Makes quick and easy corrections for photographs and all of the images in a job without operator intervention.*

- *Offers one-click photo enhancements without the time or expense of traditional photo manipulation.*

- *Chooses the optimal exposure and color tone to bring out the picture's utmost brilliance.*

- *Reduces waste from jobs printed with less-than-optimal quality.*

Text and Graphics Quality (Engine Specific)

Text/Graphics Quality applies processing enhancement to text and graphics, sharpening the edges of text and graphic images. Text/Graphics Quality is applied only when 100% 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.

Text Quality

Line Art Quality
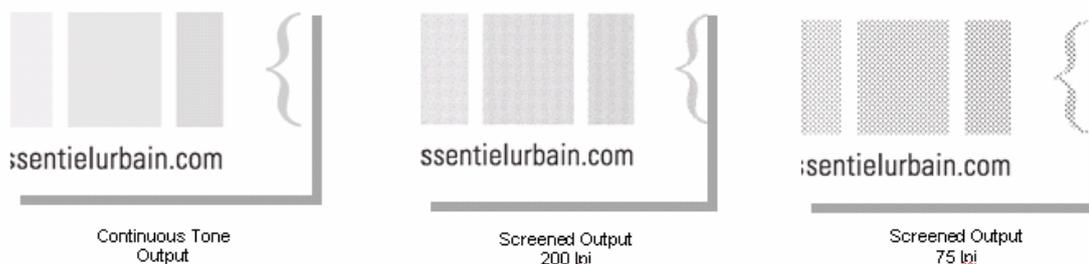
Benefit:

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

Black Custom Screening

Black Custom Screening allows the user to simulate a conventional halftone dot pattern for proofing output that will be run on a conventional press. For Fiery servers connected to a black-and-white device, users now have the option of halftone screening for the black channel. Operators adjust the screen angle and line-per-inch (LPI) values for halftone screening and control how the system applies screens when processing jobs.

Continuous Tone Output   Screened Output 200 lpi   Screened Output 75 lpi

Benefits:

- *Simulates other print output, such as newspaper, exceptionally well.*
- *Allows print providers to better simulate a single-color offset press.*

12-bit Smooth Shading

This enhancement updates the Image Smoothing command to allow the reproduction of smoother blends between colors when printing objects filled with smooth shades. With Image Smoothing enabled, the feature will smooth transitions between steps to reduce visible appearance of bands in the blend.

There are seven types of smooth shades; the most commonly used are radial and linear blends as well as gradient meshes. Smooth shades are device independent and drawn with the optimal blend for a given resolution. They render more efficiently than when simulating a blend with contours, and 12-bit Smooth Shading reduces the visible appearance of the steps that occur when blends cover large distances by blending with 12-bit levels (1024) instead of 8-bit (256) levels of shading. The enhanced results are easily seen in blends that cover large distances, with low contrast between beginning and ending colors.

Benefit:

◆ *Improves overall image quality of blends in smooth shades.*

Specialty Colors Support

Specialty Color is a new feature in FS150 Pro systems that enables output device colorants beyond CMYK to be used for special effects. This includes transparent coating for a gloss effect, white colorant for brighter output on matte paper, and various spot colors such as red or metallics.

Specialty Colors are supported from the following user interfaces:
- ImageViewer — shows up as additional color plates or curves beyond CMYK.
- Job Properties in Fiery Driver and Command WorkStation — shows up as a new Specialty Color tab for job options specific to the specialty colors.
- Fiery Driver — shows up in the Watermark tab (for clear), in the Installable Options tab and in Consumables.
- Command WorkStation — shows up in the Consumables area and in a Specialty Color section under the Resources tab.

The automatic generation of watermark features and ImageViewer support are unique to Fiery servers.

Benefits:

◆ *Printers create can higher-value output with higher profit margin.*

◆ *Graphic designers can create documents that stand out from others, using special effects for highlighting.*

◆ *Marketers can create eye-catching pieces that attract and hold consumers' attention.*

Prepress Solutions

Fiery Graphic Arts Package

These features from the optional Graphic Arts Package are now built in and available as standard features in Fiery external servers.

- Soft Proofing provides color-corrected previews of RIPped jobs.

- Paper Simulation simulates the color of the paper to be used for final output and the effect that the color has on inks.

- Halftone Simulation prints in halftone mode to simulate the final dots that will be imaged on films or plates for offset printing.

- Image Enhance Visual Editor is an easy interactive tool for adjusting image colors in a job.

- TIFF/IT Hot Folder filter allows input of TIFF/IT files to the Fiery server through a Hot Folder.

- Unlimited Separations combines preseparated PostScript jobs into a composite color print. With support for unlimited separations, customers can incorporate multiple PANTONE® or custom colors into a job.

Benefit:

- ◆ *Provides higher color quality and increased productivity.*

Graphic Arts Package	Graphic Arts Package, Premium Edition
SOFT PROOFING	Fiery ImageViewer Local and remote soft-proofing and color-editing capabilities for rasterized jobs The ideal tool to view effects of trapping, screen moiré patterns, color profile changes, etc. Export PDF for remote soft proofing – ***Option to generate a smaller PDF with a lower resolution.*** – ***Ideal for network communications and file handling by standard desktop computers.***
PAPER SIMULATION	PAPER SIMULATION EDITING Allows the user to manually adjust the hue, brightness and saturation of the white point in CMYK simulation profiles. In this way, proofing of paper white can be fine-tuned.
HALFTONE SIMULATION	HALFTONE SIMULATION WITH FREQUENCY PER COLOR With customizable screen frequency per color
TIFF/IT FILTER	FILTERS FOR HOT FOLDERS Filters for CT/LW, PDF2Go, ExportPS, DCS 2.0, EPS, PDF/X TIFF, TIFF/IT, 1-bit TIFF and JPG
UNLIMITED SEPARATIONS	UNLIMITED SEPARATIONS Combine up to 250 colors from a preseparated file

Graphic Arts Package	Graphic Arts Package, Premium Edition
IMAGE ENHANCE VISUAL EDITOR	IMAGE ENHANCE VISUAL EDITOR CWS plug-in tool for adjusting image colors in a job without the need to open the file in the originating application
	CONFIGURABLE AUTO TRAPPING Gives users full control over trapping values with advanced settings.
	PROGRESSIVES Shows partial combinations of ink separations used in a job.
	CONTROL BAR Adds dynamic job information and user-selected color bars, including the Ugra/Fogra Media Wedge CMYK, to each printed page.
	POSTFLIGHT A diagnostic tool for RIPped jobs
	PREFLIGHT A fast and intuitive check of the most common errors to ensure that files will print successfully on a Fiery Driven printing device
	2-Color Print Mapping Proofing for two-color presses — useful when operators know the spot colors only at a later stage in the document approval process

Fiery Graphic Arts Package, Premium Edition

Fiery Graphic Arts Packages are professional "toolkits" that complement the Fiery server with a series of features that specifically address concerns and expectations of the graphic arts market. Each feature places high emphasis on color excellence and precision and focuses on control of output quality, repeatability, consistency and the ability to meet known industry standards and accurately reproduce the characteristics of other output processes. These features provide a comprehensive series of tools to address these requirements.

Fiery servers have always found a strong market in graphic arts environments, primarily those in the earlier stages of the printing process such as ad agencies and prepress shops. The evolution of digital printing technology has opened new opportunities in the higher end of the prepress market and in the final print production area — the commercial print or print-for-pay shop. This type of customer often has specific workflow requirements that cannot be handled through the EFI standard feature set. The Fiery Graphic Arts Package, Premium Edition meets the specific needs and requirements of this market.

To further extend the level of color control, the Premium Edition uses the most advanced tools for previewing output and troubleshooting digital print jobs. It also includes additional specialty features for applications such as proofing, customized trapping and high-end prepress workflow components. The optional Premium Edition maximizes productivity and profitability for a professional printing operation. Three key components lead to enhanced productivity:

The first is Preflight, which checks jobs for problems before they are printed. This feature is specific to the Fiery server and can be automated through a Fiery Hot Folder workflow with Command WorkStation 5.3 or above. Preflight catches problems before they result in bad prints that must be reprinted to satisfy the print buyer.

The second key feature is the Fiery ImageViewer application that allows the user to visually check the final processed job (raster output from the RIP) before printing and apply adjustments to color for the overall job. Because Fiery ImageViewer supports soft proofing, users can achieve color-accurate visual corrections on a properly calibrated and profiled display. The Fiery Color Profiler Suite can be used to make display profiles.

Finally, the Postflight tools in the Premium Edition allow troubleshooting of problem jobs by identifying types of content, reporting spot colors in case they need to be added in Spot-On, and printing test pages to confirm whether the problem is in the file or with the printer hardware.

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

- Fiery ImageViewer

- Control Bar, including Fogra Media Wedge

- Postflight

- Preflight

- Filters for Hot Folders

- Configurable Auto Trapping

- Halftone Simulation with Frequency per Color

- Paper Simulation Editing

- Progressives

- Two-Color Print Mapping
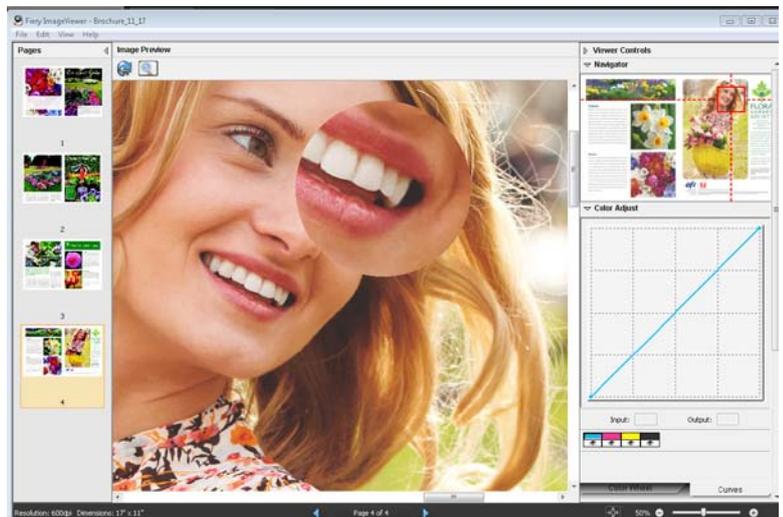
Benefits:

- *The solution increases quality and achieves higher productivity, enabling graphic artists to offer more services, driving profitability.*

- *New markets and capabilities ensure full utilization of equipment and resources, reducing overhead and increasing profits.*

Fiery ImageViewer

When considering the overall cost associated with producing documents, many print providers focus on the final "cost per page" for ink or toner on paper, according to a recent CAP Ventures study — *The Cost of Business Communication: A Look at the Business Document Lifecycle.* Conversely, the real cost of producing documents is veiled in the time, resources and money allocated to document processing. Processing expenses include authoring, design, proofing, revision control, ordering, warehousing, distribution and obsolescence.

The CAPV study mentioned above finds that internal preparation and review of documents accounts for 15% of the real costs of producing documents. Document 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 graphic artists.

Featuring the most powerful collection of preparation and review tools integrated into a color RIP, the EFI application provides local and remote soft proofing, online and offline soft proofing and intuitive color-editing capabilities for viewing and correction of a rasterized job before it is committed to the print device. It is the ultimate tool for users to view effects of trapping, screen patterns, moiré patterns and output color profiles.

Key functions and features include the following:

- Can adjust color on a per-page basis.

- Applies color modifications to that particular job and prints it without the need to rerasterize the job.

- Generates soft proof PDF: Exports low-resolution raster file in PDF format for offline proofing.

- Offers fast navigation through the navigator panel.

- Navigates to different areas of the image or through the pages of a job.

- Provides single or multipage preview.

- Comes with powerful zoom up to 3200%. Zooms to the dot cell level when Halftone Simulation is enabled to allow the review of dot shape, screen angles, traps and so forth.

- Can be used to preview jobs without wasted clicks.

- Can save custom color curve edits and apply them through job-submission methods such as Fiery Driver, Job Properties, Hot Folders or Virtual Printers.*

*The Custom Curve Presets feature requires Fiery FS150 system software and Fiery Command WorkStation v5.6. See Fiery Command WorkStation new features guide.

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 rerasterizing the job, saving valuable production time.*
- *Allows automation of last-minute color adjustments for jobs that require the same type of color correction.*

Fiery ImageViewer for Black and White

The ImageViewer for Black and White is an optional plug-in to the Fiery Command WorkStation application for Fiery servers driving black and white printers. It allows operators to preview full-resolution print data so they can see exactly how the job will look before they print it — saving time and reducing waste and mistakes.

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

With it, customers can match the output to customer satisfaction, and black tone curves can be stored and edited or reloaded over time to guarantee a consistent delivery of print results and accommodate changing print requirements.
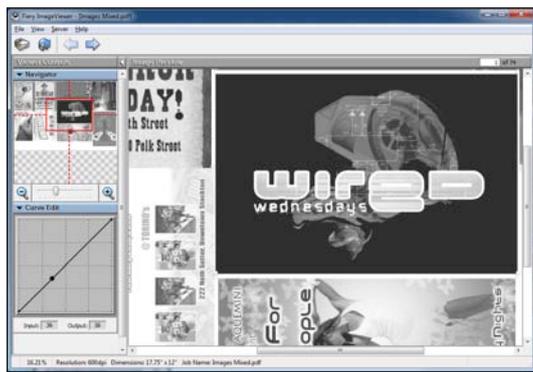
Before
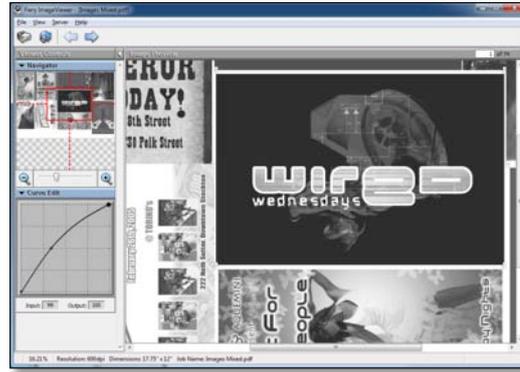
After
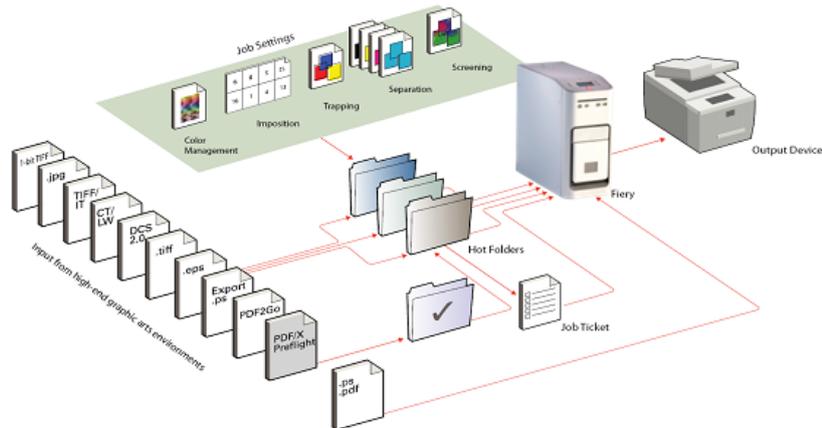
Benefits:

◆ *Full resolution previews allow operators to review the content and check for missing fonts, images, PS errors and layout issues. All this 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 Fiery-driven engines to ensure consistency of the output at all times.*

Filters for Hot Folders

In a prepress-intensive, commercial or in-plant environment, graphic artists demand compatibility and integration in their existing workflow. They also insist on proper file conversion with optimal productivity.

EFI Hot Folders, a separate EFI utility, is designed to provide users with an automated method for sending print files to a Fiery through simple drag-and-drop or print-to-file actions. Graphic Arts Package, Premium Edition adds a set of expert-level filters designed for Hot Folders, allowing users to submit 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 proofing and digital production in high-end graphic arts workflows.*

◆ *Relieves users from the repetitive task of configuring multiple jobs. Maximizes resources, reduces errors and decreases workflow redundancies.*

◆ *Saves time and increases productivity by sending files directly to printing without the need to launch an application.*

◆ *Reduces backlog by converting files of various formats in the Hot Folder application, not in the server.*

◆ *Publishes and shares Hot Folders with multiple users across a network and/or enterprise. Allows sophisticated, automated workflows for novice users. Also, offloads production workflow steps.*

The filters in Graphic Arts Package, Premium Edition include the following:

| 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 preseparated 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 prescreened) from one print platform to another. This filter converts TIFF-IT to preseparated 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, prescreened files that contain all the information necessary for printing the file, including dot size and screen resolution. The ability to print 1-bit TIFFs in a Fiery-driven device allows users to simulate the conventional screening on the Fiery.
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. 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 are files with 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. 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.
PDF/X PREFLIGHT	The PDF/X-1a option is not a file converter but a preflight check that verifies the compliance of the PDF 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 the compliance of the PDF job with the PDF/X-3 specification (defined in ISO 15930-6:2003). The main usage of the plug-in is to allow only PDFX-1a- or PDF/X-3-compliant jobs to be downloaded to the print server.

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 can waste valuable time and resources, and typically, it takes much more time to correct a problem once production has started. These are reasons production administrators and operators take time to review and test, or "preflight," a job prior to submitting it to production.

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 and to gauge expected quality on the selected printing device.

Especially created for digital color printing, EFI Preflight is the most viable preflight tool on the market. It is designed to check the most common areas of error to ensure that files will print successfully on a Fiery-driven printing device.

Preflight offers a fast process that does not affect the performance of the Fiery device because it is performed outside of the actual job printing. The user sees the Preflight report displayed on the screen in a matter of few seconds. In reviewing the report, the user knows at a glance whether there are errors in the job and can easily verify the status of every checked area with the aid of color coding and icons. Preflight is accessible from the EFI Fiery Command WorkStation Macintosh and Windows Editions.
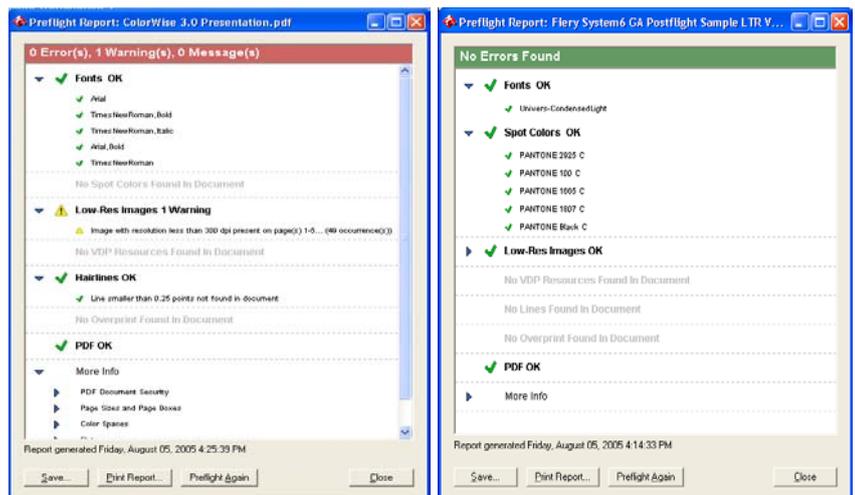
Preflight integrates a range of elements reported, including VDP resources, and is designed to optimize ways to communicate results, including the following:

- Fonts
- Spot colors
- VDP resources
- High-resolution files
- Hairlines below threshold
- Overprint
- PostScript errors

Preflight also reports on the following:

- PDF Document Security
- Page size(s) and page boxes (e.g., trim, media, crop, etc.)
- Color spaces
- Existence of transparency
- Flatness
- Image compression

Benefits:

◆ *Increases productivity in the overall process of job submission and printing by eliminating printing errors at the printing stage, reducing waste due to missing resources.*

◆ *Improves communications with document designers by using the preflight report to improve the quality of the jobs submitted to the Fiery engine, reducing turnaround time.*

◆ *Improves troubleshooting process of problem files by detecting printing errors in advance, saving time and resources.*

◆ *Eliminates the need for users to purchase third-party applications to perform preflight testing and provides a truly integrated solution.*

| Preflight Component	What It Checks	Default Error Level
Fonts	When not found on server	Critical
	When courier is present	Information
Spot Colors	When not found in server director and/or Spot-On Library	Critical
Low-res Images	When image resolution is less than ## dpi (## is the dpi selected from a drop-down list of the following values: 150 (default), 200, 300)	Warning
VDP Resources	"Resources Not Found" (on the Server or in location(s) specified by File Search Path)	Critical
	Preflight individual VDP resources (using same checks applied to entire job)	Off
Hairlines	When line width is less than ## points (## is a user-entered value between 0.00 and 6.00 points — 0.25 is the default value — limited to three place values.)	Warning
Overprint	When overprint is detected	Warning
PostScript Errors	PostScript error found (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

## Auto Preflight for Hot Folders and Virtual Printers
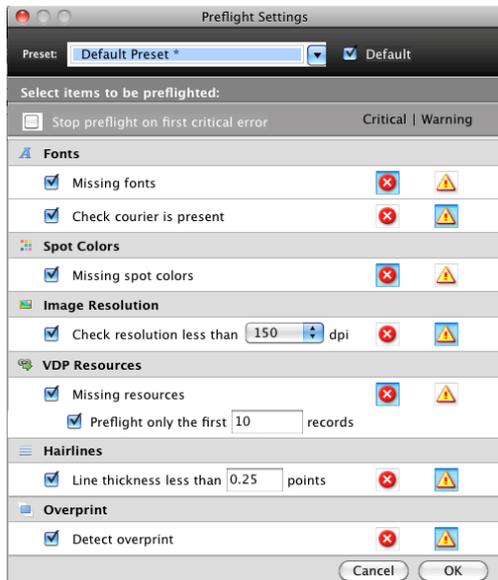
Prior to System 10, operators were able to apply Preflight to individual jobs they thought might have content problems that would cause the file to print incorrectly, such as missing fonts and low-resolution images. Now, Fiery users can apply Preflight to any jobs that use Hot Folders and Virtual Printers to automatically check files before processing. Files that fail the preflight can be routed to the Hold queue for an operator to check before printing. Automatically preflighting jobs saves time, resources and money, and it increases productivity by rerouting incorrect files before printing. Auto Preflight enhances the Preflight feature of the Fiery Graphic Arts Package, Premium Edition by automating it through Hot Folders and Virtual Printers.

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

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


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.*

Control Bar

A color control bar is commonly used with press and contract proofs. Without a color bar included in a proof, it is nearly impossible to determine the degree of color variance from proof to print. A proofing color control bar provides the means to measure the precision, consistency and capability of a proofing system to represent your chosen printing condition. Control bars can also be used to monitor color quality during a production press run. Most Fiery users today use the control bar for this purpose.
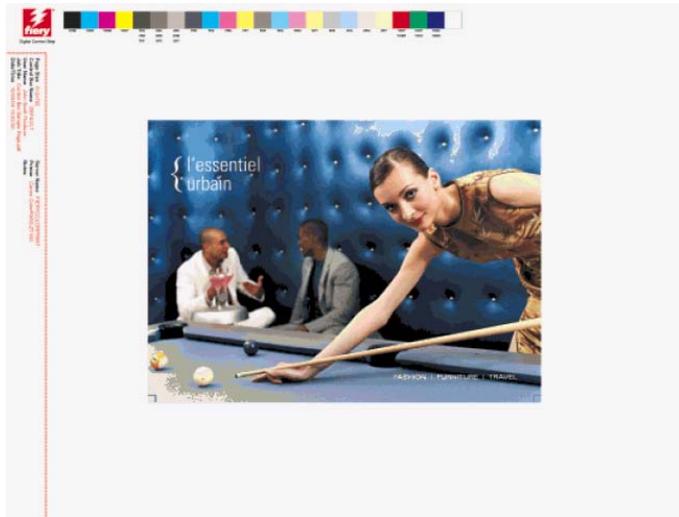
Control Bar displayed at top of page

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. These settings can also be saved for future use.

Ugra/Fogra Media Wedge CMYK

The Ugra/Fogra Media Wedge CMYK v2.2 can be used to check the accuracy and/or consistency of the CMYK colorimetric values based on the international ISO 12642 standard or other specifications. When the Ugra/Fogra Media Wedge is printed alongside a job, the user can measure the accuracy and consistency of a printer for final output, or of a proof for the conformance to the reference printing condition.

The user can print a job with the Ugra/Fogra Media Wedge by inserting it directly in the job at the creation stage or by adding it to the job using the Control Bar. Once it is printed, the user can check the accuracy and consistency of the color of the job by measuring it, using the EFI Verifier module that comes with the EFI Color Profiler Suite.

Benefits:

♦ *Increases quality control and eliminates errors by allowing operators to monitor color quality.*

♦ *Increases customer satisfaction and overall profitability by controlling color quality through the measurement of custom-designed Control Bars using the ES-2000 spectrophotometer.*

♦ *Enables graphic services companies to add a professional look to their documents by adding their own logo or job information to a slug line.*

Configurable Auto Trapping
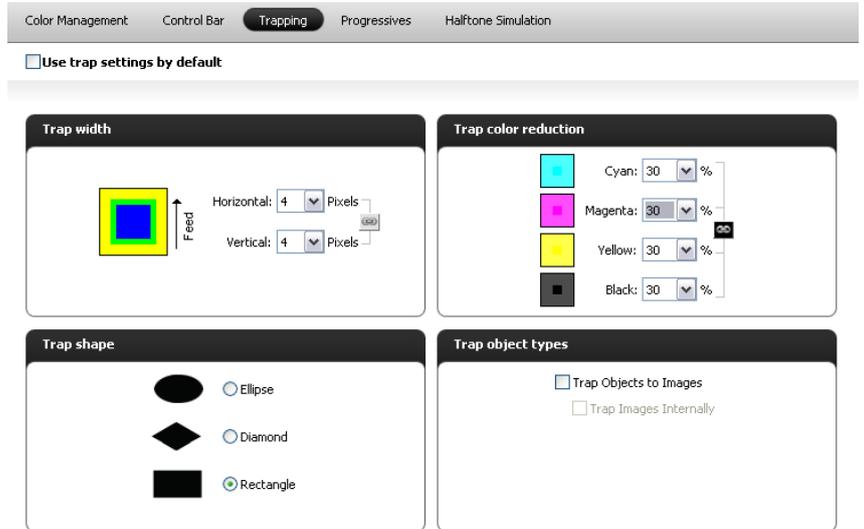
The Configurable Auto Trapping feature is available with the optional Fiery Graphic Arts Package, Premium Edition or Productivity Package (available for some Fiery embedded servers). The feature provides users with advanced trapping settings and offers greater flexibility and full control over the values. Auto Trapping is optimized for the Fiery Driven printer. It is so fast that it can even be applied to variable data jobs and still run the printing device at a rated speed.

The configurable parameters include the following:

- Width

- Color reduction

- Shape

- Types of objects to trap

Benefits:

◆ *Increases quality without performance impact, allowing operators to trap complex jobs without slowing down production.*

◆ *Offers full control over trapping values for adapting to different printing environments and job characteristics.*

◆ *Enables operators to avoid registration errors when printing on stiffer media, opening up new job capabilities and increasing revenue.*

The following are the trapping options available in Color Setup in Command WorkStation Device Center on the Color Setup tab:

| Option	Sub Option	Description
APPLY AUTO TRAPPING		When the checkbox is selected, Auto Trapping is enabled for all incoming jobs. The custom values specified are used for all jobs.
TRAP WIDTH		Determines the width of the trap (choke or spread).
	Horizontal (0–10 pixels), Vertical (0–10 pixels)	This feature allows the user to define the horizontal and vertical width of the trap. The two values can be locked together with the link icon.
TRAP COLOR REDUCTION		This feature determines how dark the trap is. The values entered refer to the percent reduction of the ink in the trap. A 100% reduction would result in no ink intensity applied to the trap, and 0% reduction would result in full ink intensity.
	Cyan, Magenta, Yellow, Black	This feature allows the user to define the trap color reduction on a per-color basis (0%–100% in increments of 10). Trap reduction values can also be locked together with the link icon.
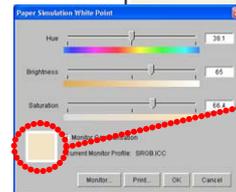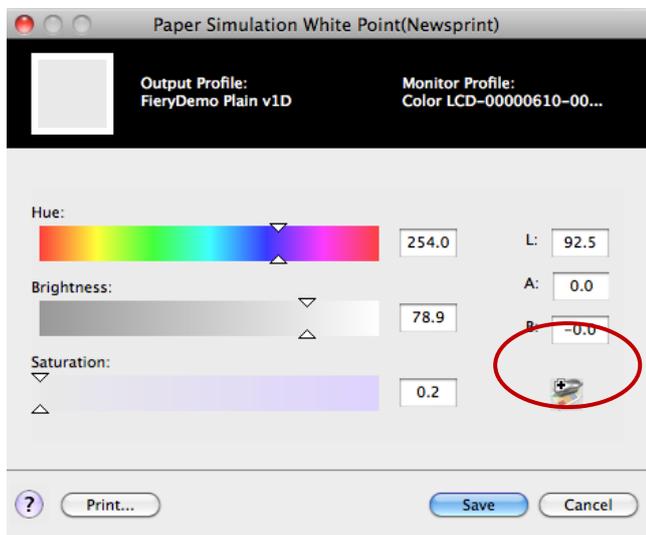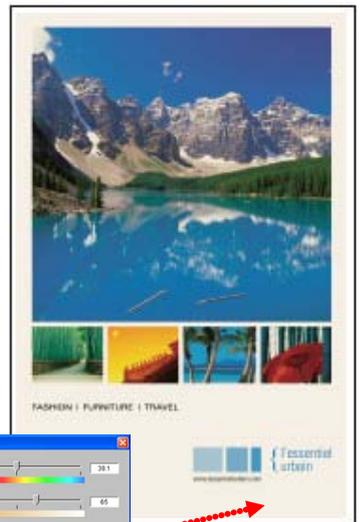
Option	Sub Option	Description
TRAP SHAPE	Ellipse Diamond Rectangle	This feature represents how traps around object corners are shaped.
TRAP OBJECT TYPES	(Checkbox)	When no selection is made in this area, only trapping of objects (text and graphics) against objects is applied.
	Trap Image Internally (Checkbox)	The trapping algorithm is applied to every abutting pixel of an image.

Paper Simulation with White Point Editing

The color or white point of paper used in the printing process can dramatically affect the final color of a job. When proofing, it is sometimes desirable to simulate the paper white that the final press run will have on a proof. Consider the noticeable difference between "newsprint" and "bright white" paper. The Paper Simulation with the White Point Editing utility in the Graphic Arts Package, Premium Edition provides users with intuitive tools to enter and edit the white point of a source profile so that a different paper white than the actual source profile can be simulated for proofing.

Paper Simulation with ES-2000

Paper Simulation editing enables more accurate simulation of special media such as newspaper, yellow pages and packaging. Previously, the L*a*b values defining the white point of the paper had to be entered manually. Fiery servers integrate the use of an ES-2000 spectrophotometer into the user interface of the Paper Simulation feature. The ES-2000 reads the white point value of the paper and automatically populates the L*a*b values.

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

In addition, the feature does the following:

- Allows the user to fine-tune the hue, brightness and saturation of the simulated paper.

- Downloads a custom CMYK Simulation Profile with the white point edit.

Benefits:

- *Allows users to adjust the paper simulation values of the CMYK Simulation Profiles to simulate a paper white different from the true paper white of the source profile.*

- *Enables users to create custom paper simulations to match the paper white point of special media that can be stored and reused for specific customers and/or applications.*

- *Increases efficiency when combined with Halftone Simulation, allowing operators to color manage both the white point and the halftone dot — particularly useful for shops that proof newsprint jobs.*

Postflight

Postflight is the process of analyzing processed files — PostScript, PDF, DCS2 and others — for quality control in a digital prepress workflow. EFI PostFlight is a perceptive utility that enables operators to troubleshoot previous problems with the color of a printed job or to use it as a preventative measure. Either way, the original document may be printed (or RIPped and previewed) with all objects (e.g., graphics and text) color coded. 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 test page to verify the condition of the print environment.

Operators can easily use Postflight from the driver.

Original   Color-coded Post Flight image   Post Flight printed report
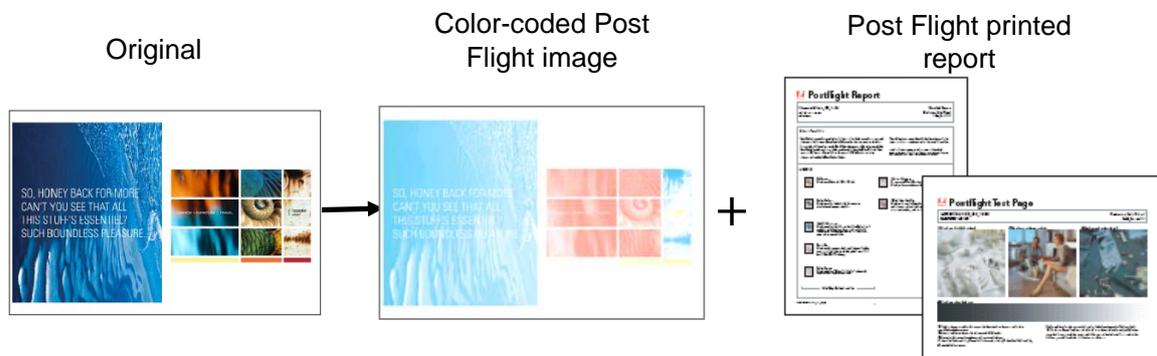
Benefits:
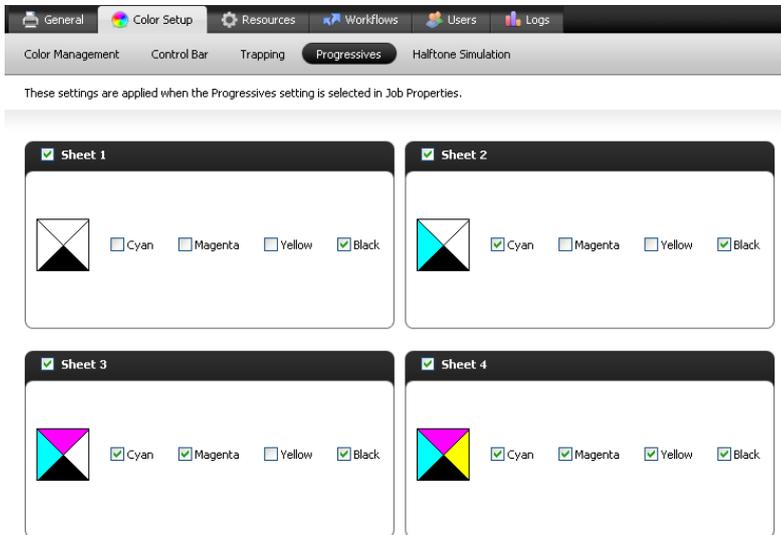
- *Decreases the amount of time an operator has to spend troubleshooting jobs, increasing efficiency and maximizing profitability for the print operation.*

- *Reduces the learning curve by teaching operators the effects of job-setting parameters, making it useful as a training tool.*

Progressives
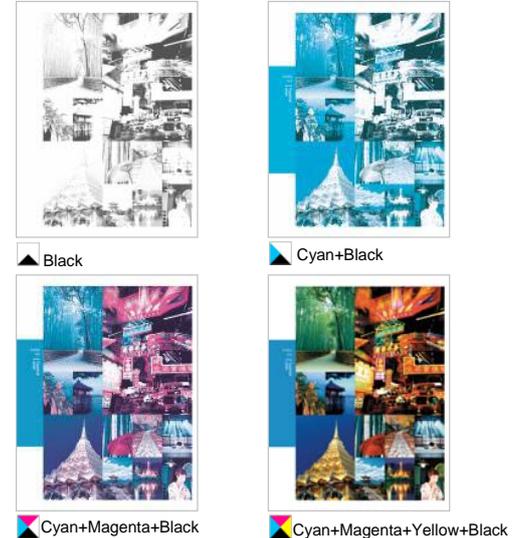
Progressives refer to printing variations of a multicolor document, where pages are printed using anything from one to all of the available color channels in a printer: C, C+M, C+M+Y and any other combination. The ability to print the various progressive combinations permits users to inspect the result of each color plane for a four-color document. It also simulates one- and two-color presses, including the sequence.

The EFI Progressives function is designed to show the separations used by a job on a Fiery Driven device, not the separations contained in the print job's source file. This feature helps operators to gain insight into how their images are composed and to better see image breaks for troubleshooting purposes. Users can also see the influence of trapping, check the halftone interaction between two inks, verify

registration of two associated plates and see the color separations individually to diagnose specific imaging problems and develop solutions.

Color separations as progressives

Benefits:

◆ *Progressives are useful for noncolor-critical proofing (e.g., two-color printers that do four-color print jobs, such as newspaper inserts or mail brochures).*

◆ *Progressives can be a good troubleshooting tool for certain types of print problems.*
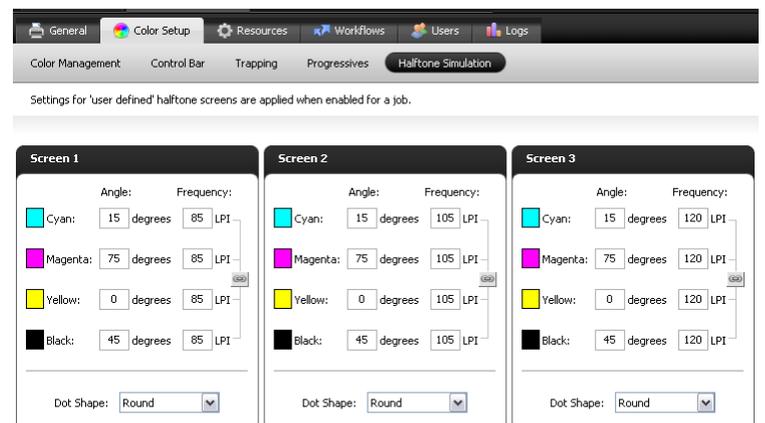
Halftone Simulation — Frequency per Color

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 in halftone mode and to define the custom screening parameters that will be applied to their print jobs.

A run-time feature that is included in the setup and does not require reboot, Halftone Simulation includes three user-defined halftone screens:

• Lines per inch (per color channel)

• Screen angles (per color channel)

• Custom or application-defined dot shape

Benefits:

◆ *Combines with the Paper Simulation feature, allowing users to simulate offset press output for proofing.*

◆ *Allows users to make adjustments prior to committing the job to plates or films.*

◆ *Provides accurate simulation of the screened appearance for newspapers and packaging.*

2-Color Print Mapping

Color publications are often printed on commercial printing presses using four colors. This process can be expensive because of the four inks used to print the job. When generating commercial publications using two colors, a grayscale and a spot color can be just as effective and less expensive. Many of the artists who design such pieces do not know the precise spot color to use. In these situations, the user has the ability to create a two-color job in which the generic colors are magenta and black.

The 2-Color Print Mapping feature, incorporated into the Graphic Arts Package, Premium Edition, includes the ability to replace the black and magenta of a two-color job with the required spot colors without modifying the original job.

Black → Black

Magenta → PMS Orange 021c
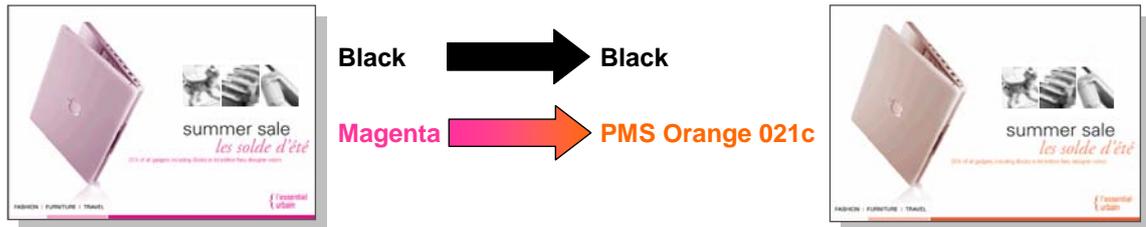
Benefits:

◆ *Ensures the best color rendering by using Fiery Spot-On when selecting the two final spot colors.*

◆ *Allows for last-minute decisions about spot colors.*

Fiery JobFlow

Fiery JobFlow delivers advanced prepress capabilities in a browser-based, cost-effective solution. Using best-in-class Fiery technology, it enables end users to define powerful workflows simply and intuitively. Customers can easily configure automated job workflows — including PDF conversion, preflight, correction and editing of PDF files, image enhancement, document imposition and job ticketing — saving time, reducing rework and waste, and increasing customer communication.

Fiery JobFlow:

- Provides accurate print output by printing only the jobs that pass the preflight check configured for each workflow.
- Offers a flexible and open "Approve Anywhere" module to securely review and approve jobs by internal and external reviewers.
- Automatically corrects for wrong media size or page orientation and adjusts bleed and crop-box properties.
- Allows users to make critical last-minute changes and corrections without going back to native applications.
- Allows the use of templates created in Fiery Impose to create imposed PDFs at any stage of the workflow.
- Allows customers to set up jobs faster with preset workflows optimized for the job type.
- Uses simple and intuitive browser-based interface so it's easy to use and customers don't need to install clients.

Fiery JobFlow supports targeted external servers on System 9R2, System 10, FS100 Pro and FS150 Pro. Fiery JobFlow replaces the previous Flow module for Fiery Central. For a complete list of supported printers, please visit efi.com.
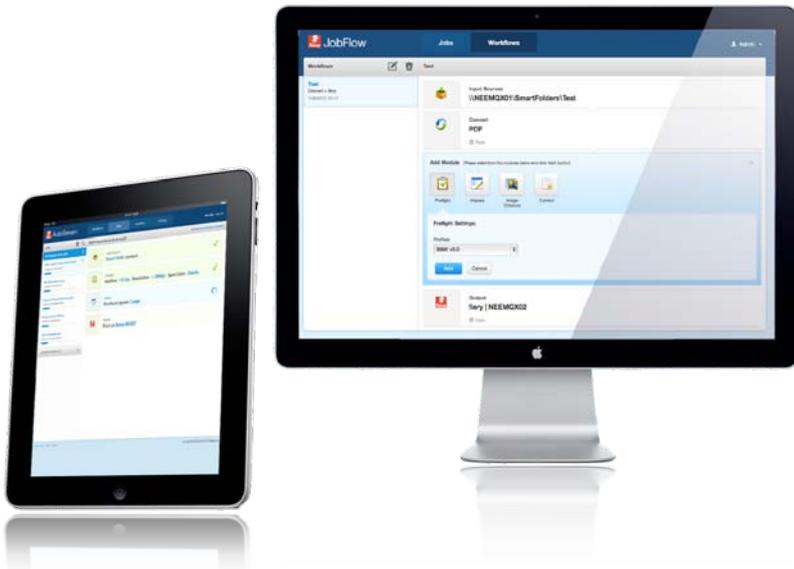
Fiery JobFlow saves time and money by automating repetitive tasks.

Benefits:

- *Cuts down on human errors by submitting jobs to the workflows you optimize for specific job types.*
- *Saves time by allowing users to make critical last-minute changes and corrections without going back to native applications.*
- *Saves time by proactively identifying file issues and applying corrections.*
- *Improves client communications and keeps customers informed by sending email notifications about their jobs.*

Integration

Fiery technology delivers valuable integration to any print environment type, offering a high return on investment because the open platform technology integrates with most JDF-enabled EFI, non-EFI and third-party solutions worldwide.

Fiery JDF technology serves as a gateway to other EFI solutions and Fiery-enabled solutions, allowing users to move job details such as job numbers, descriptions, media, production counts, and start and stop times through their systems faster and more efficiently.

Using Fiery servers and Command WorkStation, users achieve a new level of integration for process and profit improvement, including seamless connectivity to EFI print management information systems (MIS), Digital StoreFront and third-party prepress workflows.

In corporate environments, EFI networking technologies allow users to print and manage Fiery servers from the most popular network environments. 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.

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

Integration	QX^{100}	PRO^{90}	PRO^{80}	PRO^{80}BW	E^{200}BW	E^{200}
APPE 3.0	✓	✓	✓	✓	-	-
Integration with Color Profiler Suite	✓	✓	✓	-	-	✓
Fiery Option Software Licensing	✓	✓	✓	✓	✓	✓
Fiery Security	✓	✓	✓	✓	✓	✓
Cost-Accounting Integration	✓	✓	✓	✓	✓	✓
Fiery System Restore	✓	✓	✓	✓	SFM	✓
Fiery JDF v1.3	✓	✓	✓	✓	✓	-
MS Windows 7 Professional FESx64	✓	✓	✓	✓	✓	-
Fiery Dashboard	✓	✓	✓	✓	✓	✓
Job Submission						
Direct Mobile Printing	✓	✓	✓	✓	✓	✓
PrintMe Cloud Printing	✓	✓	✓	✓	✓	✓
PrintMe Mobile	✓	✓	✓	✓	✓	✓

✓ Standard ⊙ Option — Not Available SFM See Feature Matrix

For Security-related features, refer to the Fiery Security whitepaper.

Fiery JDF

What Is JDF Technology?

JDF is an open-standard technology that allows data to pass between different applications and systems for automatic print production workflow, specifying how jobs are managed and produced. JDF allows MIS, Web-to-Print and prepress solutions to talk to each other. The electronic JDF job ticket simplifies data exchange and collection, eliminates manual data entry and re-entry, makes print production faster and increases efficiency and accuracy.
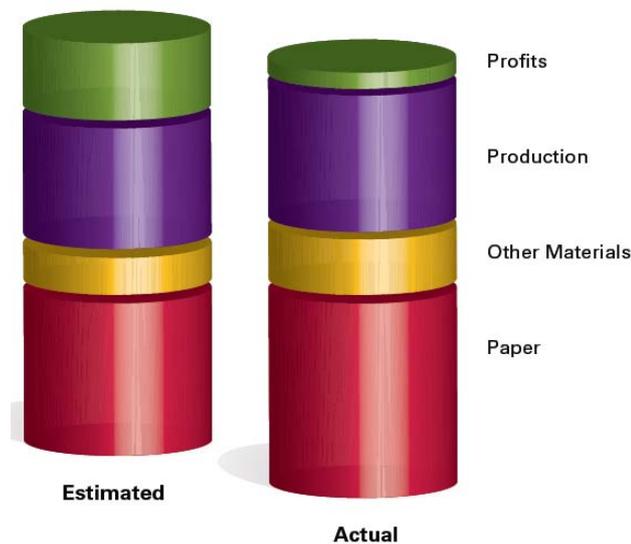
Fiery JDF, available in Fiery servers, provides support for JDF workflows from the Fiery system itself. It provides the functionality of the Fiery server and user-interface elements in Fiery Command WorkStation needed to integrate the Fiery server in JDF workflows. This enables bidirectional JDF device connectivity between JDF submission tools (submitting JDF intent or JDF process job tickets via JMF — Job Messaging Format) and the Fiery server.

Refer to http://www.cip4.org for more information on JDF and JMF.

Increases Productivity by Eliminating Manual Data Entry and Re-Entry

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

Job production component breakdown

Provides Highly Accurate Business Intelligence

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

Supports Hybrid Workflow for the Best of Both Worlds

If a print provider driven by prepress systems such as Agfa Apogee 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, being automatically routed to the most cost-effective devices.

500 Copies
Digital

50,000 Copies
Offset

Shared Prepress
Process

CTP

Incoming Job File
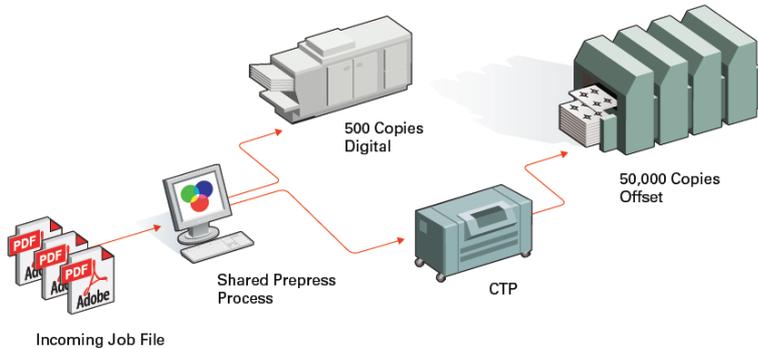
Hybrid Workflow Example

Fiery JDF technology also allows analog print shops to easily expand their businesses with 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 by working with many third-party solutions and by using JDF industry standards with nonproprietary formats for flexible, out-of-the-box interoperability.

It integrates seamlessly with EFI Web-to-Print, Print MIS and Proofing solutions and is supported by more than 30 partner technologies, including Agfa Apogee 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 http://w3.efi.com/en/Fiery/Products/Fiery%20JDF%20Technology/Supported%20Printers today to view the current list of JDF-enabled Fiery Digital Print Solutions. To talk to peers and EFI experts about the technology, participate in our JDF forums at http://fieryforums.efi.com/.

Fiery JDF Key Features

Live Status Updating

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

Benefit:

- *Enhances the status updating shown through the client user interface.*
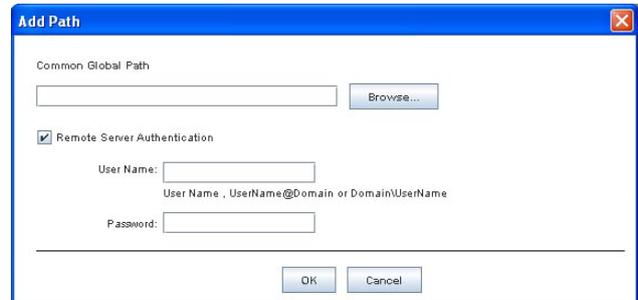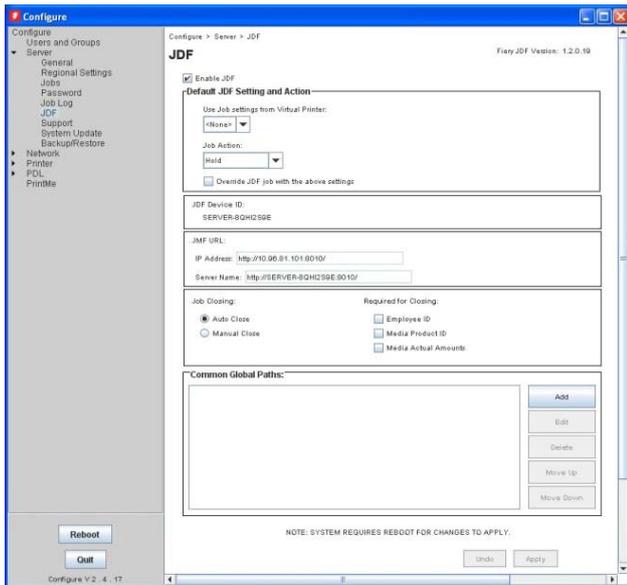
Common Global Paths

Fiery JDF can use the network credentials stored in the Fiery Command WorkStation Server\JDF\Common Global Paths 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 functionality, a user can configure the Fiery server to look in network directories and automatically find the content files without any operator intervention, increasing efficiency.

Benefits:

◆ *Improves existing JDF file path reference.*

◆ *Simplifies JDF integration.*

Common Global Paths

Dynamic Device Capability Updating

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

Benefits:
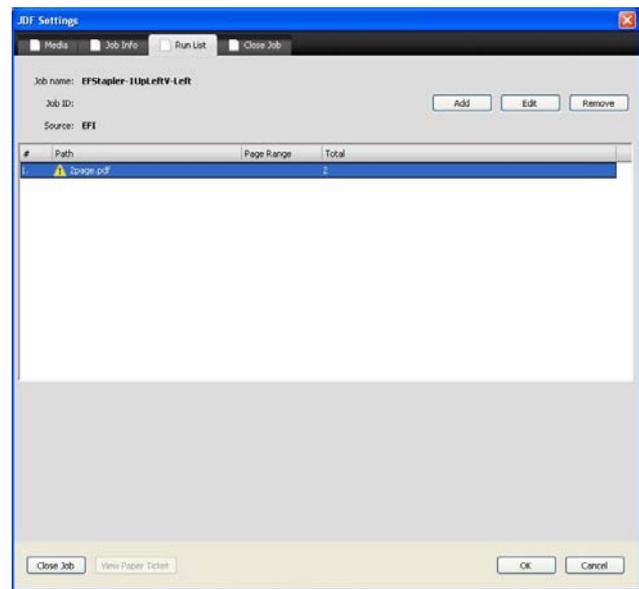
◆ *Simplifies JDF integration.*

◆ *Enables applications such as Agfa :Apogee to populate their UI with available finishing controls, and applications such as EFI Digital StoreFront to automatically map their job attributes to Fiery job attributes.*

◆ *Designs a job option dialog that matches the installed Fiery configuration with JDF applications that read Device Capabilities.*

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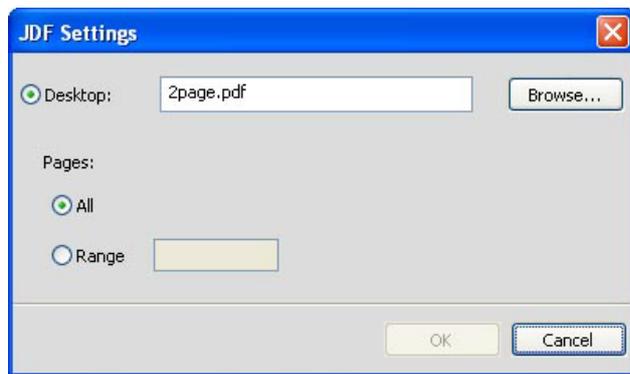
JDF jobs that fail to include a valid link to a content file will be flagged in Command WorkStation, and a dialog will allow the operator to resolve the missing content file link, eliminating errors.

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 Fiery server clearly flags media mismatches when a single media is not uniquely identified.

Benefits:

- ◆ *Saves operator time.*
- ◆ *Simplifies JDF integration.*

MIS Manual Job Close

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

Benefits:

- ◆ *Allows operators to control when the job is reported as "done."*
- ◆ *Validates the results.*
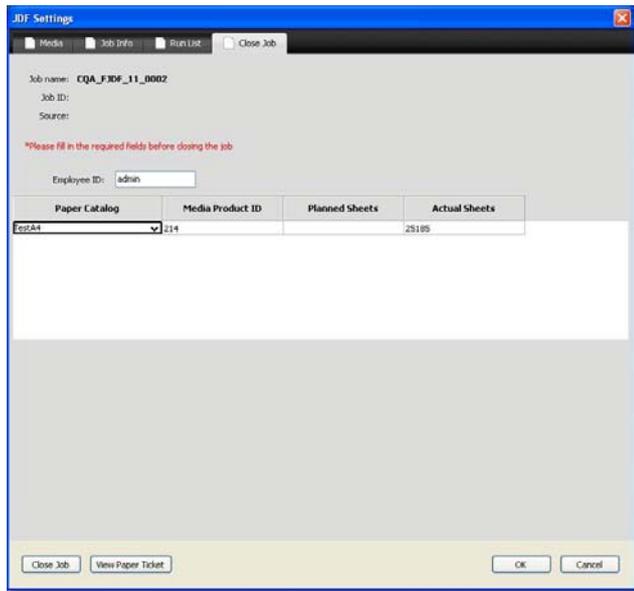
Manual close dialog

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 functionality provides more robust reporting to MIS and thus makes the Fiery server a strong choice for MIS-integrated workflows. The information is sent between the sending application and the Fiery server.

The JDF emitting application now receives more information, including the following:

- 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.*

View "Paper" Job Ticket

A PDF file representing the originating customer ticket (from Fiery Digital StoreFront®, Pace™ and others) can be linked to the JDF ticket and displayed in Command WorkStation, which tightens integration between components.

Benefits:

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

CIP4 IDP ICS JDF Certification

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

Benefit:

- *Trusted job option handling from the first certified DFE in the industry.*

QueueStatus Support

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

Benefit:

- *Richer job control from the JDF emitting application.*

Toner Level Reporting

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

Benefit:

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

Sample and Reprint Tracking

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

Benefit:

- *Accurate media usage tracking cost accounting.*

Preset Support

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

Benefit:

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

NumberUp and StepRepeat Imposition

The Fiery Gangup and Gangup Repeat imposition is now available via JDF.

Benefit:

 ◆ *First phase of Fiery server imposition dynamically accessed through JDF.*

Subset Finishing

Support for subset finishing for staple, punch and fold.

Benefit:

 ◆ *Print mixed sets of documents without user intervention at Command WorkStation.*

SlipSheet Support

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

Benefit:

 ◆ *Automatically separate job sets from the JDF emitting application.*

Stamping

Use JDF control for the Fiery Job Properties stamping feature.

Benefit:

 ◆ *Enable and control the Fiery server's stamping feature from the JDF emitting application.*

Last Calibrated Time

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

Benefit:

 ◆ *Manage the Fiery server 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.*

Fiery JDF Enhancements

Requires Fiery Command WorkStation 5.6 / Fiery Extended Applications 4.2, available by June 2014 through online download. For more information on the Fiery Command WorkStation 5.6 new features, go to the Fiery Command WorkStation 5.6 New Features Guide or visit www.efi.com/cws5.

For more information, refer to www.efi.com/fjdf.

Integration to EFI MIS and Web-to-Print Solutions

Fiery external servers are the only DFEs that integrate with EFI Management Information Systems (MIS) and Web-to-Print workflows.

Fiery users can leverage the power of their DFEs to do the following:

- Deliver job specifications entered at the Digital StoreFront® or PrintSmith Site client or at the EFI MIS. The information is validated and transferred to the Fiery server without the touch points, delays or errors common in a disconnected workflow. The Fiery server uses this information to configure the job, preparing it for output on the digital engine.

- Update job status, including the updating schedule and RunList, to the EFI scheduling system in real time.

- 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, refer to http://w3.efi.com/Fiery/Products/Fiery-Integration.

EFI Digital StoreFront

EFI Digital StoreFront is a Web-to-Print platform that provides an end-to-end content and eCommerce workflow that let print buyers order, edit and preview job specifications. Integrates with Fiery servers and EFI PrintFlow® to make the entire operation more efficient and profitable. Digital StoreFront offers the following:

- Personalized Marketing. DSFdesign Studio™ offers immediate entry into single-version VDP. Powerful VDP technology (from XMPie or FusionPro) complements the solution, with 1:1 personalized products to support more complex, direct marketing initiatives — all via the rich Digital StoreFront experience.

- Unlimited, customizable StoreFronts. Create branded, "sticky" storefronts specific to your customer base to drive adoption and more online revenue.

- Streamlined Job Submission. Digital StoreFront's powerful Visual Product Builder lets print buyers order, edit and preview their job specifications on a single page!

- Automated Workflow. Digital StoreFront creates an end-to-end content and eCommerce workflow by providing seamless integration with EFI Fiery servers and EFI Print MIS/ERP solutions. Integration means less re-keying of job data and fewer chances for production errors.

- Deployment Flexibility. Digital StoreFront can be deployed on-site or from the cloud, depending on your business requirements.

EFI Online Print Solutions

EFI Online Print Solutions (OPS) is a customizable solution with options to extend the Web-to-Print platform to help print service providers transform their print business into a print communications service provider.

EFI OPS, the leading innovator in Web-to-Print, dynamic publishing and cross-media solutions, helps you meet this challenge with a single integrated platform to interact with clients. EFI Online Print Solutions offers the following:

- Single, integrated platform covering Web-to-Print storefronts, job submission, variable data, cross-media and retail portals.

- Support for the management of co-marketing dollars and spending limits.

- Unlimited branded storefronts, PURLs and emails.

- Integration to workflow, MIS and accounting applications such as QuickBooks, MYOB, Enterprise MIS, EFI Logic, EFI Pace, EFI Prism MIS and many more.

- Live CASS certification and presort through third-party partners.

- Online payment through PayPal, CyberSource, and Authorize.net eliminates the hassle of invoicing and tracking payments.

- Pre-integrated into customer ERP or CRM applications such as SAP, Ariba, Salesforce.com, PeopleSoft and Oracle Financials.

EFI PrintSmith Vision

EFI PrintSmith Vision is a flexible, feature-rich business management software that offers powerful estimating, point-of-sale, account management, production management, receivables and sales analysis tools within a single, easy-to-use application. This browser-based platform is both modular and scalable, making it an excellent solution for growing businesses. Its primary target markets are quick printers, small commercial shops, in-plant facilities, specialty printers and print-for-pay operations. Companies running PrintSmith Vision find they are able to do the following:

- Attain greater visibility into business performance.

- Improve customer service.

- Increase billing accuracy and cash flow.

- Make informed decisions that improve their organization's profitability.

EFI Pace

EFI Pace is a browser-based, scalable, and customizable print management system designed to streamline operations, reduce costs and provide the information customers need to be more successful. Its primary target markets are small to mid-sized commercial print shops, in-plant operations, specialty and hybrid printers and government and school operations.

- Offers a complete suite of software modules that give total control anytime, anywhere, plus it uses an appliance model that allows for installation and training in a fraction of the time required by other solutions.

- The secure system architecture is XML driven and ODBC compliant, and it allows browser-based access from Mac and PC platforms to better leverage emerging technologies that will define the digital workflow process.

Integration to Adobe PDF Workflows

Adobe PDF Print Engine

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

EFI and Adobe have partnered to offer industry-leading print solutions by integrating the APPE PDF-rendering technology with the Fiery server. This support offers users a native PDF end-to-end workflow and enables them to improve the consistency and flexibility of the printed output from design to print.

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

Feature characteristics at a glance:

- It supports PDF 1.3, 1.4, 1.5, 1.6 and 1.7; PDF/X-1a, 3; and PDF/VT. (These formats also are supported in the PDF-to-PostScript converter with CPSI.)

- Job submission methods supported: Fiery Hot Folders and File/Import from Command WorkStation.

- CPSI and APPE workflows are simultaneously enabled, and users can choose between them.

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

- The print provider that uses a pure PDF workflow and requires PDF documents to remain device independent throughout the entire workflow.

- The print provider that frequently prints designs containing transparency, especially when the transparency interacts with black backgrounds.

- The shop that wants to unify offset workflows operating with APPE and with digital print workflows to ensure that the designer's intent is accurately reproduced on the press of both output solutions.

- The printer 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, 1.4, 1.5, 1.6 and 1.7; PDF/X-1a, 3, 4, PDF/VT v2.0	Same as APPE, plus: PostScript, TIFF, EPS, VDP (PPML 2.2, VIPP 8, VPS 1.5 , PDF/VT v1.0 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

	APPE	Fiery CPSI
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" (WYSIWYP) results.
Full Fidelity Desktop Previewing	Yes It reduces unwanted surprises and disruptive, last-minute prepress fix-ups in digital and variable print workflows. Jobs including transparencies, mixed color spaces and layers are accurately reproduced.	Yes The Fiery CPSI is a PDF/X compliant RIP, which guarantees that the printed results are delivered under the PDF/X specifications. This feature ensures consistent print previews and proofs for VDP and non-VDP jobs.
PDF Optimization for VDP and Non-VDP Jobs	Yes It supports PDF/VT, the emerging standard format for VDP file exchange (ISO 16612-2), and enables caching of repeating elements.	Yes It supports PDF/VT, the emerging standard format for VDP file exchange (ISO 16612-2), and enables caching of repeating elements.
JDF Print Processor	N/A	Yes The Fiery server in CPSI mode offers bidirectional JDF workflows, defining all details on how the job is processed and leaving the content device independent.
JDF Compatibility	N/A	JDF 1.1, 1.2 and 1.3

Benefits:

◆ *Offers a comprehensive solution for job management and job preparation tasks.*

◆ *Guarantees consistency in preview and print by supporting native PDF workflow from creation to final output.*

◆ *Saves time by eliminating the need to convert or flatten content prior to submitting the job to Fiery server.*

◆ *Uses the same jobs for offset, digital and VDP, allowing the same PDF print job to have a consistent output among print devices.*

Network Integration and Security in Corporate Environments

EFI networking technologies allow users to print and manage Fiery servers from the most 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 the widest security feature set in the RIP industry. Features such as User Authentication, IP Sec and Secure Socket Layer/Transport Layer Security (SSL / TLS) support make it the server of choice to integrate into current secure network environments. IPv6 Support adheres to IT standards with support for the latest revision of the Internet Protocol. SSL Support (IPP/LDAP/HTTP/SMTP) creates a secure connection for transmitting data between the client and the Fiery server over the Internet, using the SSL protocol to transmit private documents. Adhering to industry-standard certification policies, its open-architecture solution is preferred by MIS/IT organizations.

Microsoft Windows® 7 Professional for Embedded Systems (FES) x32/x64

Fiery external servers are based on the Microsoft Windows 7 Professional FES x32/x64 operating system. This operating system complies with the latest corporate IT standards and provides more efficient administration and implementation of security patches.

Benefits:

◆ *Complies with the latest IT and Government OS standards.*

◆ *Offers a more efficient administration and implementation of security patches because it supports automatic updates from Microsoft.*

◆ *Provides an extended support and maintenance life.*

For more information, see the Fiery Security White Paper.

Software Licensing
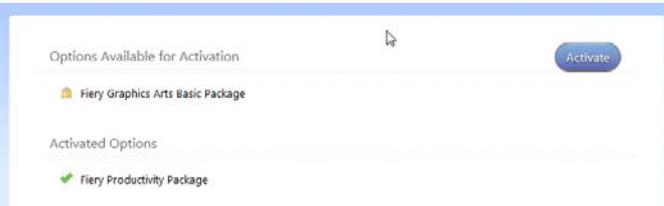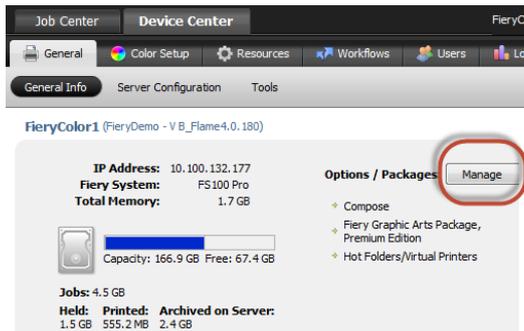
Software licensing allows users to enable Fiery options and activate features from Fiery software without a physical dongle. Dongles can be lost, broken or even stolen. Software licenses are easier than ever to install on a Fiery server through a common interface to manage the software license activation.

• Fiery server options (such as Graphic Arts Package Premium Edition, Hot Folders and Virtual Printer, and Fiery Productivity Package) can be activated from Device Center in the Command WorkStation or from WebTools through the Manage button.

• Fiery JobMaster, Impose and Compose are activated and deactivated from the Help menu and the Manage License menu.

Note: Legacy Fiery SeeQuence dongles are still supported in newer Command WorkStation versions.

Benefits:

◆ *Users never lose and can easily retrieve lost Fiery JobMaster, Impose or Compose licenses.*

◆ *Fiery server options are easier to install.*

◆ *Users can activate or deactivate a license without Internet connectivity. (Note: Fiery server option licenses cannot be deactivated; only software licenses such as JobMaster, Impose and Compose can be deactivated.)*

Users can easily manage software licenses.

Fiery Security

Encryption Strength Update

Fiery configuration settings on the hard disk drive are now encrypted with 168-bit encryption. This ensures that a Fiery server hard drive meets and exceeds the data encryption requirements from the National Institute of Standards and Technology (NIST). NIST requires encryption strength of >128-bit.

Secure Erase 3.0

For customers with either an embedded or server Fiery product, Secure Erase can be set to run at idle time for improved overall system performance. Additionally, for the embedded servers, there is a setting to execute Secure Erase when the server is idle.

Benefits:

- *Protects Fiery configuration data with a higher level of encryption.*
- *Prevents malicious attacks using PostScript files by implementing a mechanism whereby only EFI signed executables can be run on the Fiery server.*
- *Provides the benefits and confidence of securely erasing jobs without affecting performance.*

Cost-Accounting Integration

The Fiery server offers an integration solution that works with all major cost-accounting applications so that all of the jobs printed through a Fiery server are accurately captured. This means all print jobs are correctly listed with customer account information to accurately bill back the printing cost to the corresponding customers. It automatically intercepts and feeds cost-accounting data into the accounting system, eliminating the need for manual data entry. The integration solution provides instructions and interfaces to third-party vendors to allow their cost-accounting software to embed key information such as account codes into the Fiery print stream and to pull the cost-accounting information out of Job Properties for completed print jobs.

Benefits:
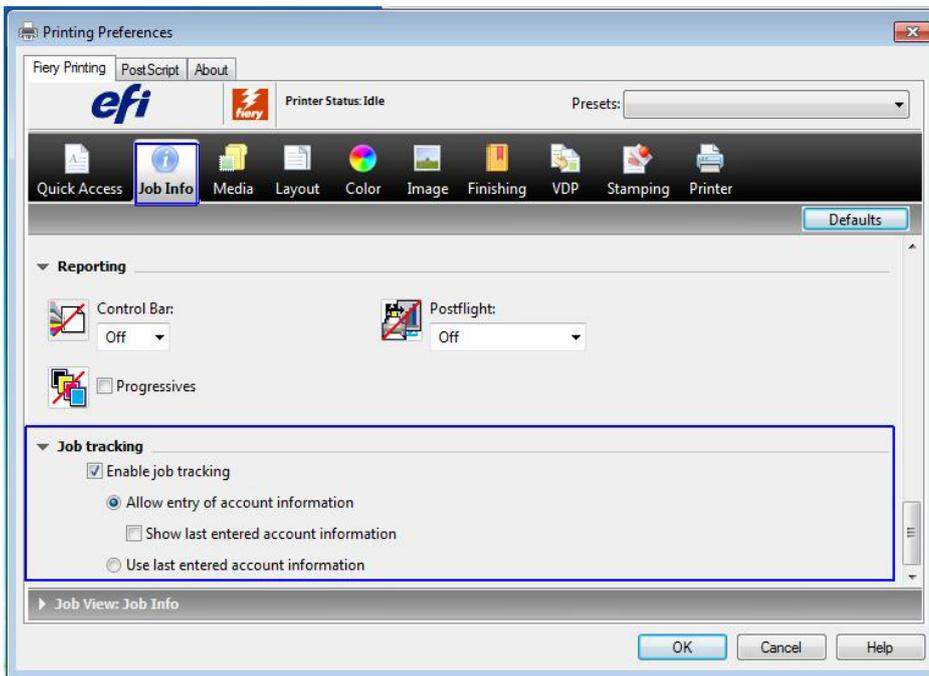
- *Enables customers to take advantage of the RIP and color capabilities on Fiery servers while accurately billing back jobs to customer accounts.*
- *Saves time and prevents errors by providing accurate job accounting data for print jobs processed through Fiery servers.*
- *Works with all major cost-accounting software.*
- *Ensures that the print jobs from Fiery servers are accurately reflected in the cost-accounting record and that the cost-accounting application will have a complete list of jobs processed through Fiery servers.*

Job Cost Tracking

Fiery FS150 systems include version 4.5 of the Fiery Driver, which has implemented Job Cost Tracking as its new feature. Job Cost Tracking configures the print driver to record the accounting information included in the print job so that print environments without a cost accounting solution have a way to track print activity. The account code assigned is associated with a specific department or client project and provides accurate printing costs that can be allocated back to the internal department or client project.

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

No validation is performed on the data entered in the pop-up dialog box. Any required validation is done by the print engine.

Job Tracking setting in Fiery Driver v4.5

Job Tracking account information required

Fiery Dashboard Integration

Requires Fiery Command WorkStation 5.6 / Fiery Extended Applications 4.2, available by June 2014 through online download. For more information on the Fiery Command WorkStation 5.6 new features, see the Fiery Command WorkStation 5.6 New Features Guide or visit www.efi.com/cws5.

Mobile Printing

Direct Mobile Printing

All System10/10e Fiery servers and above provide Direct Mobile Printing for Apple iOS devices running version 4.2 and above. Wi-Fi–enabled Apple iOS devices will automatically discover any System10/10e and later Fiery Driven printer on the same network inside the corporate firewall. Users or IT administrators don't need to install any additional print drivers or software for the iOS devices. Visiting remote employees can print using their Apple iOS device without looking for a printer, installing print drivers or requiring assistance from corporate support resources. Local employees can print while moving around to different departments, conference rooms and other locations in the company on the same network.

Benefits:

- *Allows visiting remote employees with Apple iOS devices to easily print without any additional steps.*
- *Allows local employees with Apple iOS devices to change locations and easily print without any additional steps.*

PrintMe Cloud Printing

Mobile professionals and business guests can use EFI PrintMe® Cloud Service on a Fiery Driven printer to easily send a file and print securely. Users can send files to the PrintMe Cloud from their desktops, laptops, smartphones or tablets and receive back a retrieval code. They can choose from a variety of ways to send files: by email, from mobile apps, by uploading with a Web browser, through a print driver, or by transferring from a cloud storage account. When users are ready to print, they simply enter their document retrieval code at the printer display screen, thereby not leaving sensitive documents at the printer.

The PrintMe Cloud Service is an ideal fit for a wide variety of industries:

- Hospitality businesses — offer customers a convenient printing service that is easy to use without setup or support. Use existing equipment to provide better services that increase customer satisfaction, loyalty and repeat business.

- Libraries and universities — provide the convenient printing services that students, visitors and patrons demand.

- Print service providers — attract new customers and grow revenue by making it easy for users to find your business for their printing needs with the PrintMe Locator tool.

PrintMe Cloud Service is free on Fiery Driven printers through June 2016.

Benefits:

- *Provides a hassle-free printing solution for mobile professionals.*
- *Offers a fast, secure and confidential cloud printing solution.*

- *Enables print service providers to offer new services.*

PrintMe Mobile

EFI PrintMe Mobile is a Windows server application that enables direct Wi-Fi printing from a wide variety of mobile devices (iPads, iPhones, Android devices, laptops and Chromebooks) to network printers. Users enjoy the ease of simply selecting Print within their application and choosing from the printers that automatically populate in a drop-down menu. PrintMe Mobile is scalable up to thousands of users across multiple wireless subnets and provides powerful management and job reporting capabilities for IT administrators. PrintMe Mobile is quick to deploy, simple to use and easy to manage.

PrintMe Mobile automatically recognizes Fiery Driven printers and grants a free license for perpetual use for any number of users and documents. The software can be downloaded free at www.efi.com/printmemobile.

Benefits:

- *Allows printing from any mobile device to a Fiery Driven printer for free.*
- *Enables users to send documents to print via Wi-Fi, email, app or Windows driver.*
- *Offers secure print release with internal or external hold queue.*
- *Allows multiple virtual printers to be created per printer license to enable the use of advanced printer features.*
- *Enables Wi-Fi printing for employees or guests from outside the firewall with optional PrintMe Mobile L100 appliance.*