Fiery System 10/10e

Product Guide

Contents

Introduction

The Changing Market for Digital Front Ends

In a 2011 U.S. survey, *Digital Front Ends***:** *Understanding Market Dynamics and Customer Requirements*, Info Trends identified the key features 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, trapping, etc.*

- **Automation support (job ticketing)**

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

- 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 do a wide variety of prepress, make-ready and job management tasks, as well as releasing jobs into print. InfoTrends also projects from the survey information that digital front ends will quickly becoming 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 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:

Performance

Fiery Systems Maximize Productivity and Automate Workflows

In a digitally connected and managed document production setting, users no longer judge system performance only on how fast a job is processed and printed. Instead, high-performance solutions need to streamline all aspects of document production with efficient use of available resources, plus productivity tools that simplify tasks and create adaptable workflows for users.

At the heart of Fiery performance is a comprehensive understanding of what it takes to drive complex documents through high-volume output systems at production speeds. Fueled by a powerful combination of powerful new hardware, developed specifically for document processing and industry-leading production printing software, the Fiery System 10/10e operating system is built on sheer horsepower, taking full advantage of the core technologies that made Fiery servers the most successful RIP on the market.

New features, such as Server Presets, Auto Preflight and Proof Print, further automate workflows, minimize clicks and increase productivity. The new variable data printing (VDP) enhancements boost performance and increase workflow flexibility with support for the PDF/ VT-1 format.

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

Color

Fiery Systems Deliver Amazing, Precise and Consistent Color Across Applications and Platforms

Color quality is a key issue for digital print businesses. The top issue for print buyers is color consistency, and almost half of digital printers call color matching their most difficult challenge. Fiery servers deliver the most precise and consistent color output. Its color technology guarantees the flexibility to use digital presses for quality results in high-value, color-intensive applications and the ease of use, so even novice users are still able to achieve great color results without the need of using more advanced color management tools.

Plus, Fiery servers integrate all these professional tools to meet the color requirements of demanding customers and ensure accurate and repeatable color every time by giving operators total control of color output quality.

- Fiery color management technology offers great color out of the box.
- All Fiery servers are PANTONE calibrated to guarantee the best match for all PANTONE color libraries.
- The Fiery Spot-On™ tool accurately and easily matches colors for corporate and other spot colors.
- Fiery Color Profiler Suite is an integrated color management solution for creating ICC-profiles to define the color gamut of the output device and ensure optimal color accuracy.
- Image Enhance Visual Editor is an easy, interactive real-time image-editing tool that adjusts image colors in a job without the need to open the file in the originating application.
- Fiery Graphic Arts Package, Premium Edition is an option for color professional to preflight and troubleshoot jobs before printing.
- The integrated calibration process includes job-based calibration and customized calibration status alerts to guarantee even higher color consistency at all times.

This makes the Fiery server ideal for producing marketing materials and packaging, or for photo publishing applications. Fiery servers produce high-value, color-intensive output with such high-quality results that it amazes even the toughest customers.

Usability

Fiery Systems Deliver Ease of Use

The latest Fiery Command WorkStation® 5.3 print job management interface includes many new features. Fiery SeeQuence Compose provides Mixed Finishing Sets to automate document production with multiple finishing requirements in a set. Fiery SeeQuence Impose supports user-defined trim and bleed definitions, so the operator has more control over imposition settings.

Fiery technology also adapts to anyone's skill level. Job management and preparation are faster and more efficient, regardless of the jobs' complexity, using award-winning Fiery Command WorkStation and Fiery SeeQuence Suite.

Integration

Fiery Systems Deliver Seamless Integration
Fiery technology offers a high return on investment because the open platform integrates seamlessly with most EFI™ and third-party vendor solutions worldwide.

Fiery job description format (JDF) technology serves as a gateway to other EFI solutions and Fiery-enabled solutions such as EFI Digital StoreFront® Web-to-print ecommerce software and EFI Pace MIS software. Users can move job details — such as job numbers, descriptions, media, production counts and start and stop times — through their systems faster and more efficiently. Integration with Xerox® FreeFlow™, KODAK PRINERGY® and Agfa: Apogee Prepress workflow. These integrated solutions provide flexibility and efficiency with centralized control that lets print service providers easily and quickly direct jobs to the appropriate offset or digital systems using the same content files and dynamic layouts for the target device.

Sequential Print enables Fiery servers to integrate into workflows that require jobs to be finished based on the order in which they were submitted. System 10/10e automatically prints set page device (SPD) embedded files from specialized applications that require mixed media, eliminating the need for operator intervention.

By supporting the Adobe® PDF Print Engine (APPE), Fiery servers also offer native PDF workflows, allowing users to improve the end-to-end consistency and flexibility of their printed output.

In addition, a wide range of Fiery server families give 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} — offer an extremely high-performance system, geared towards 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^{100} - For small, medium businesses and enterprise office users alike, Fiery RIP is the ultimate document publishing system that takes the pain out of producing complex color documents with efficiency and ease

- Fiery Fiery PRO^{80} BW and Fiery E^{100} BW — In black-and-white production printing environments with tight deadlines and high customer expectations, the EFI Fiery X7 delivers outstanding performance, seamless workflow management, and superior image quality.

Fiery QX100

Standard
- Fiery SeeQuence Suite
  - Fiery SeeQuence Impose
  - Fiery SeeQuence 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 PRO90

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

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

Fiery PRO80

Standard
- Fiery Graphic Arts Package

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

Options
- Removable Hard Disk

Fiery E100 BW

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

Fiery E100

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

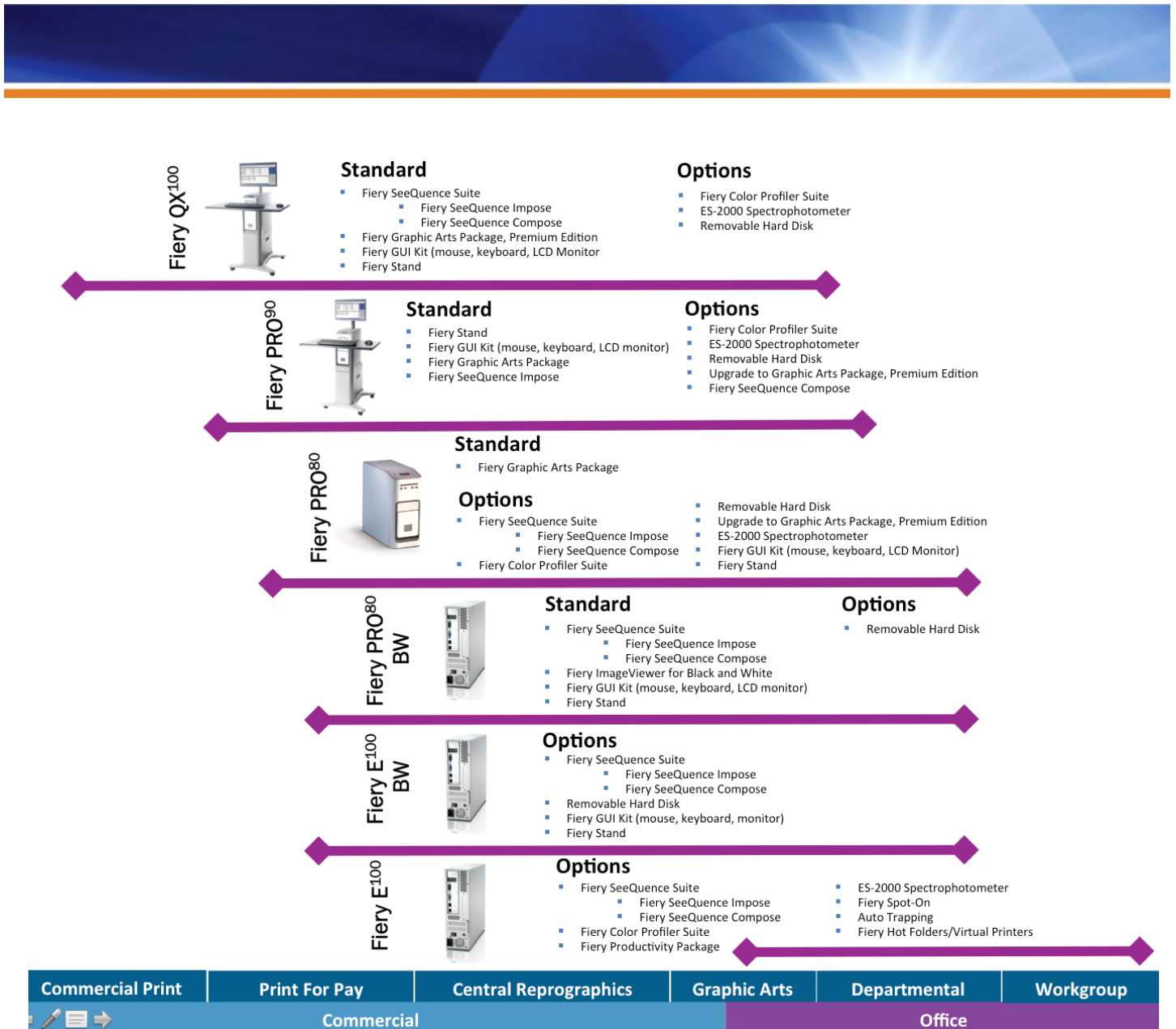| Commercial Print	Print For Pay	Central Reprographics	Graphic Arts	Departmental	Workgroup
Commercial			Office		

Figure: 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.

Fiery System 10/10e

Fiery System 10/10e is the most innovative, scalable and integrated server solution for print engines, to give print operations the highest return on their investment. Some important new features include:

- Fiery Command WorkStation 5.3 – The latest release includes many new features such as the Image Enhance Visual Editor plug-in for on-the-fly image corrections and User Defined Finished Size for increased operator control over imposition settings.

- Mixed Finishing Sets — Now available in Fiery SeeQuence Compose, this allows users to specify different finishing options among different subsets. It streamlines and automates the assembly process to produce fully finished jobs.

- New Fiery Calibrator tools and user interface — With Fiery System 10/10e, the calibration process is extremely simple with enhanced step-by-step user interface, automatic calibration management tool, job-based calibration and more.

- Variable-data printing enhancements — Fiery System 10 provides better usability for Fiery FreeForm™ and VDP Resource Manager, as well as Adobe PostScript® optimization.

- PDF/VT-1 support — Fiery System 10 now supports PDF/VT for both Adobe Configurable PostScript Interpreter (CPSI) and APPE workflows.

- Direct Mobile Printing — All Fiery System 10/10e servers provide direct mobile printing for Apple iOS devices with no additional software or drivers necessary.

Target Markets

Fiery System 10 and 10e systems work in a wide variety of print environments from production to corporate workgroups, including:

- Commercial printers.
- Digital printers.
- Quick printers.
- Print-for-pay shops.
- In-plant commercial reprographics departments (CRDs).
- Corporate offices.
- Marketing service providers (MSPs).
- Photobook printers.

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.
- VDP: direct mail, catalogs and transactional promotional material.

New and Enhanced Features Table

Performance	Usability	Color	Integration

• VDP Enhancements
   – *Enhanced FreeForm*
   – *Enhanced VDP Resource Manager*
   – *PDF/VT-1 support*
   – *PostScript optimization*
 	
• Server Job Presets
 	
• Modify Default Queues
 	
• Auto Preflight for Hot Folders and Virtual Printers
 	
• Proof Print
	• Fiery Command WorkStation 5.3
	
	• Fiery SeeQuence Suite Enhancements
	   ▪ *3D Reader View*
	   ▪ *SeeQuence PostScript preview*
	   ▪ *Undo/redo enhancements*
	
	• Fiery SeeQuence Compose Enhancements
	   ▪ *Mixed Finishing Sets (Subset?)*
	
	• Fiery SeeQuence Impose Enhancements
	   ▪ *User Defined Finish Size*
	   ▪ *Duplo support for barcode and registration marks*
	   ▪ *New Duplo imposition layout options*
	   ▪ *25x25 Gangup*
	   ▪ *Print marks on front surface only*
	
	• Pad Printing
	
	• Job Properties Print Actions
	
	• Serviceability Improvements
	   – *Improved server configuration sheet*
	   – *Job Error Report*
	   – *Backup and Restore enhancements*
	
	• Quick Access Tab Reminder
	
	• Improved International Support
	
	• Custom Job Log Export
	
	• Save Password and Auto Login
		• Image Enhance Visual Editor
		
		• New Calibrator Features
		
		• Fiery Color Profiler Suite Integration
		
		• Fiery Spot-On Enhancements
		
		• PANTONE® PLUS SERIES libraries
		
		• Optimize RGB Transparency
		
		• Paper Simulation with ES-1000
		
		• Fiery Graphic Arts Package Standard with Server
		
		• ImageViewer for Black and White
			• Microsoft® Windows® 7 Professional FES
			
			• Paper Catalog Enhancements
			
			• Sequential Printing
			
			• Set Page Device Support
			
			• Direct Mobile Printing
			
			• PrintMe Cloud Printing
			
			• Fiery JDF 1.1

Performance

Fiery delivers 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, plus productivity tools that simplify tasks and create adaptable workflows for users.

The Fiery System 10/10e operating system takes full advantage of new features, such as Server Presets, Auto Preflight and Proof Print to further automate workflows, minimize clicks and increase productivity. The new variable data printing (VDP) enhancements boost performance and increase workflow flexibility with support for the PDF/ VT-1 format.

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 vendor for the support of a specific feature.

Performance	QX100 S10	PRO90 S10	PRO80 S10	PRO80BW S10	E100BW S10	E100 S10e
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	✓	✓	✓	✓	✓	✓
Modify Default Queues	✓	✓	✓	✓	✓	⊙
Fiery FreeForm	✓	✓	✓	✓	✓	✓
PPML/PDF-VT/VPS Compatibility	✓	✓	✓	✓	✓	-
Optimize PDF and PS	✓	✓	✓	✓	✓	✓
VDP Resource Manager	✓	✓	✓	✓	✓	✓
Record and Set Level Finishing Support	✓	✓	✓	✓	✓	✓
VDP Record Range Printing	✓	✓	✓	✓	✓	✓
Set Page Device	✓	✓	✓	✓	✓	-
Sequential Printing	✓	✓	✓	✓	✓	-
Hot Folders and Virtual Printers	✓	✓	✓	✓	✓	⊙
Fiery Productivity Package	-	-	-	-	-	⊙

✓ Standard   ⊙Option   - Not Available   SFM See Feature Matrix

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 are unified as the Spool-RIP-Print Simultaneously feature. So users can 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 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 with 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's Technology

Fiery SmartRIP is a new 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 Smart RIP technology yields dramatically faster page processing by recognizing file characteristics and using adaptive processing to accelerate color, compression and rendering processes.

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

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

- The enhanced image processing lets operators print composite overprints of CMYK and Fiery Spot-On™ colors. This key feature enables Fiery System 10 to pass the Altona Test Suite.
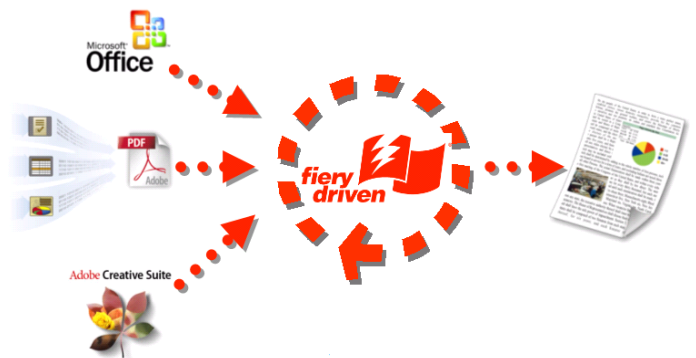
- The Fiery system achieves higher performance and more efficient use of multiple processors, while accelerating color compression and rendering.

- 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 Roman faces with delicate thin elements.*

Optimized PDF

PDF XObjects are a way of describing objects such as text, images and vectors within 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.

By enabling Optimized PDF 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 by using 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.*

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

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 allows the user to:

- 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 re-submit 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 Force Prints 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.*

Print/Process Next

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

Benefits:

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

Rush Print

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

Benefits:

♦ *Increases the flexibility to re-prioritize and introduce last minute changes in the processing and print stages.*

♦ *Eliminates the need to stop and restart production when one job needs to be printed right away.*

♦ *Prevents waste by allowing a job to be paused during printing to be resumed and finished, instead of having to cancel and discard the previously printed portion of the job.*

Quick Doc Merge

Quick Doc Merge allows the operator to quickly merge documents by combining them together in a new job. The documents can be on the Fiery server or be imported from a browsable directory, separate from the Fiery server 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 the source document is 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 together 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, letting them 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. The operator can initiate a sample print from Command WorkStation while a job is printing 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.

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 where the operator creates an archive of printed sheets documenting the print quality at regular intervals.

Figure: 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 ahead of time.*

◆ *Facilitates balancing the workload and prioritizing print production throughout the day in order 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 System 10/10e Job Preset enhancements include:

- Server Job Presets.
- Import and export Job Presets.

Server Job Presets

Previously, users could create local Job Presets, which were only available for use on the user's workstation. Now administrators can create and share Server Job Presets to automate selecting Job Properties for commonly used applications, 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 – simply provide a name and description, then select the applicable. Other users can access the centrally stored presets through workflows such as Virtual Printers, Hot Folders, Job Properties and Print Drivers.
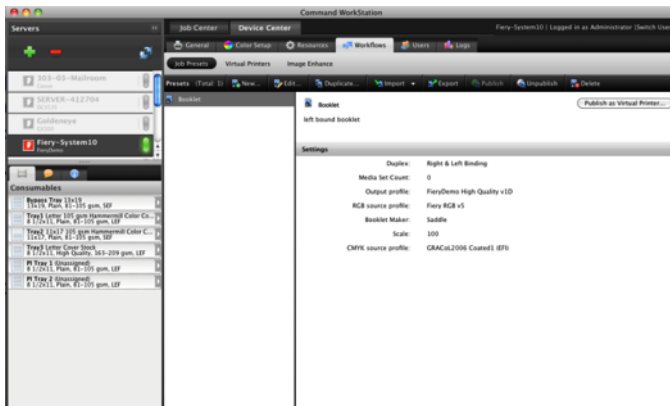

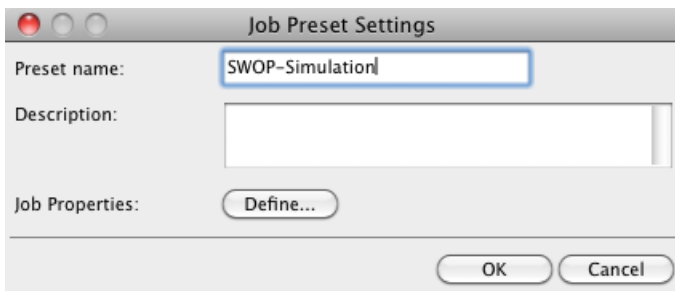Figure: Save, edit, publish and delete Server Presets from the Command WorkStation Device Center

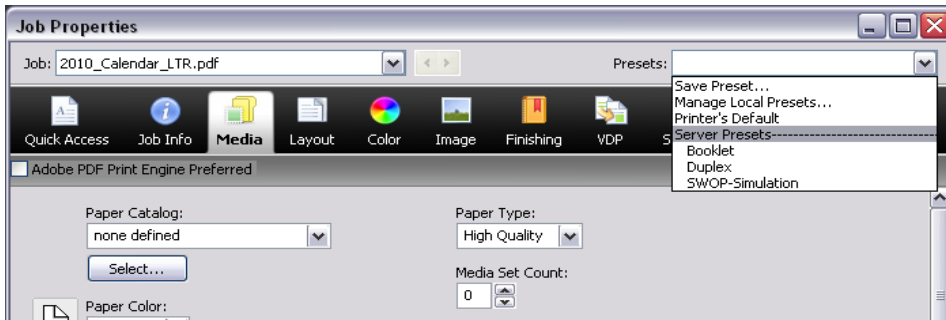Figure: It's easy to create server Job Presets by providing a name and description.

Figure 10: Select Job Preset 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

Another new feature is 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.
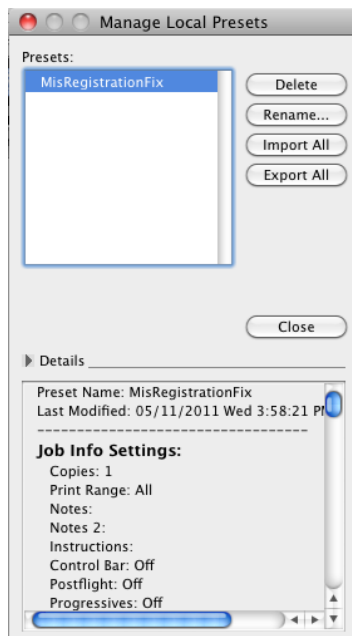

Figure: Users can export and import Server Job Presets

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.
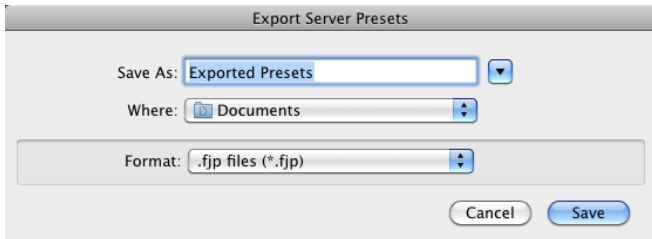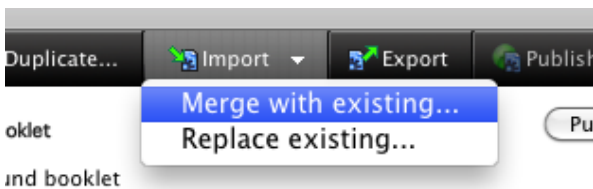
18

Figure: Exporting Server Job Presets

Figure: Merge or overwrite existing presets

Benefits:

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

- *Easily and quickly make Server Job Presets available on multiple Fiery servers and throughout a Fiery workflow.*

- *Create automated workflows for any repetitive task and reduce the number of times a job needs to be touched during printing.*

Modify Default Queues

Operators frequently ask for a way to customize the default Job Properties of the Fiery server so they can set options like duplex as always on. Fiery System 10/10e provides 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.
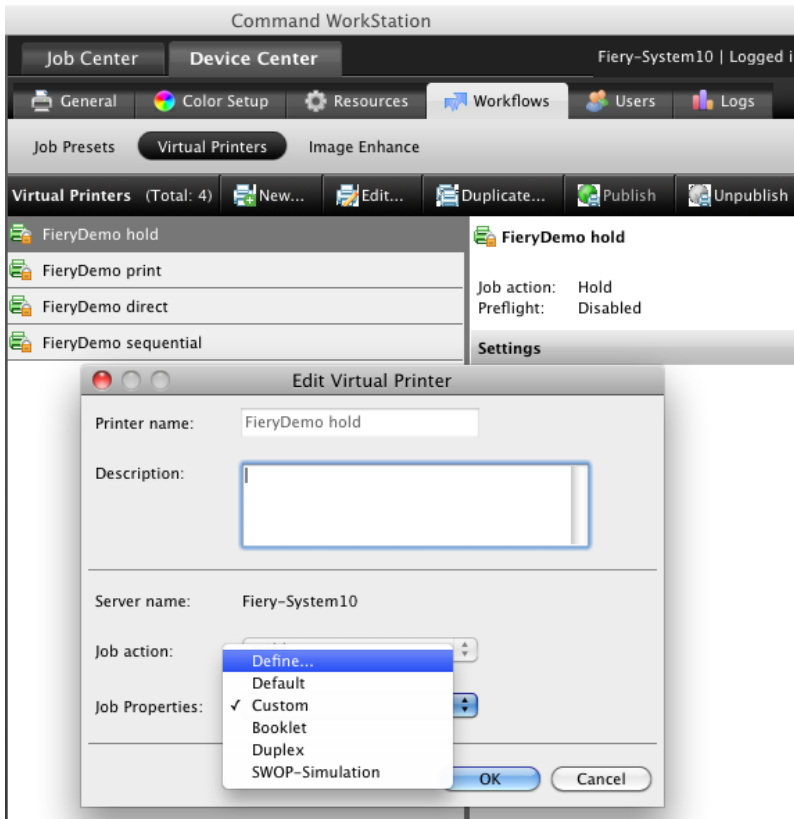
Figure: Change the default Job Properties of the Print and Hold Queues through the Edit function in the Virtual Printers panel

Benefits:

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

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 in order to print a copy for proofing.
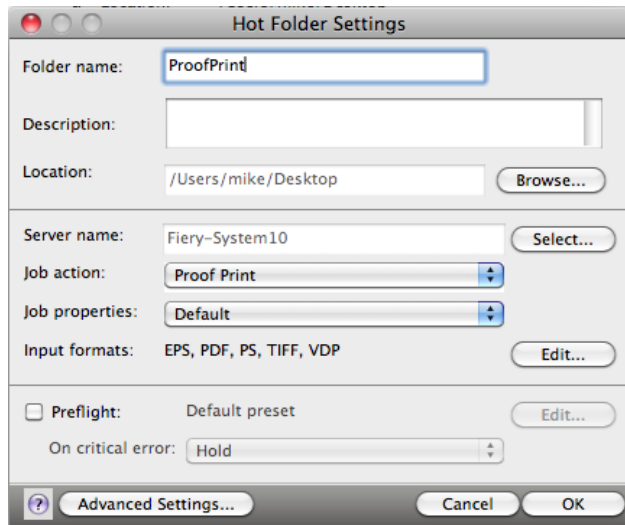
Figure: Request Proof Print from Hot Folders

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.
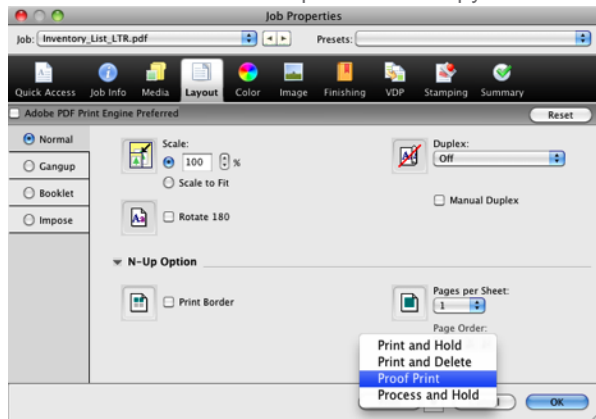

Figure: Request Proof Print from Job Properties

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.

Benefits:

◆ *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.*
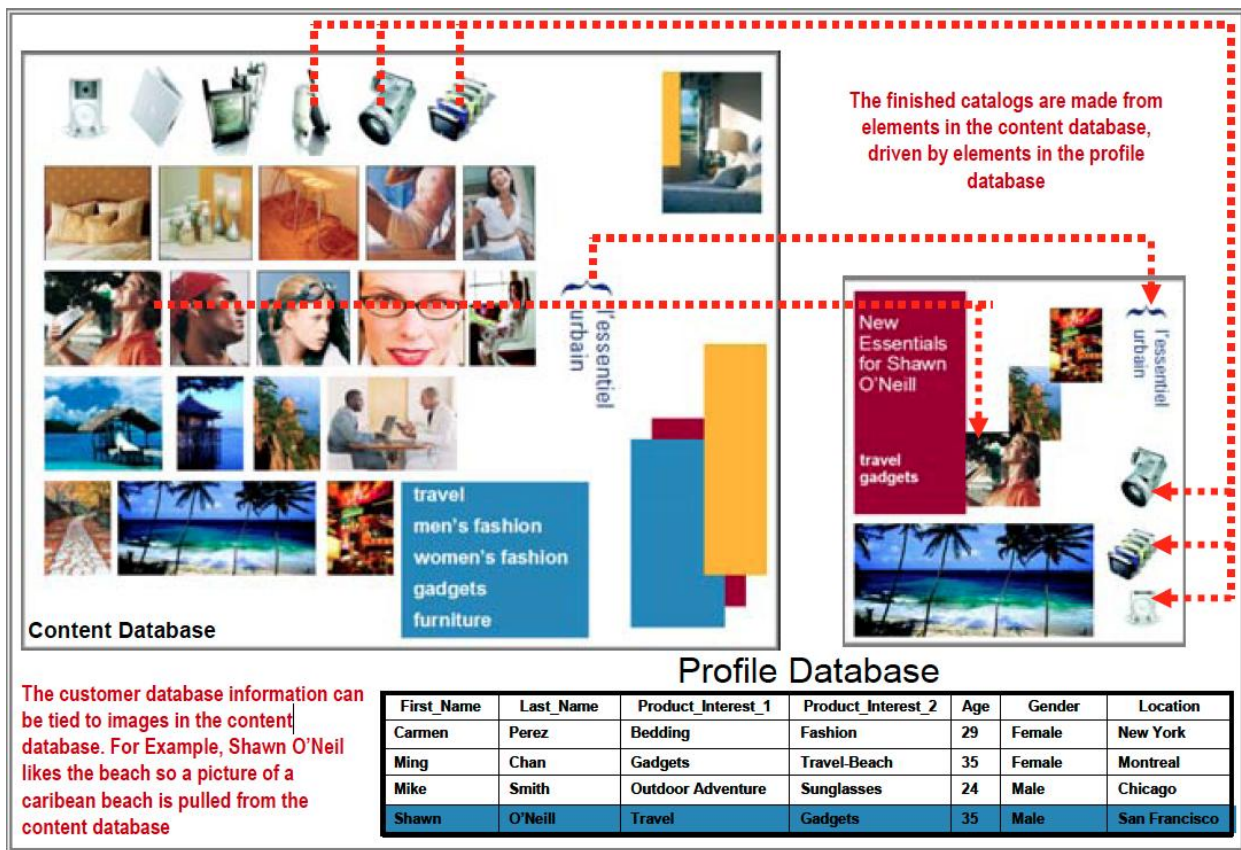
Variable Data Printing

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 custom 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 build onto their systems as they grow.

EFI's Fiery technology delivers fast, industry-leading, adaptable variable data printing capabilities and allows users to choose any authoring tool to create static and variable elements with flexible and open, end-to end variable data printing 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 finished catalogs are made from elements in the content database, driven by elements in the profile database

Content Database

travel
men's fashion
women's fashion
gadgets
furniture

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

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.

Variable Data Printing Enhancements with Fiery System 10/10e

- Enhanced FreeForm.

- Enhanced VDP Resource Manager.

- PDF/VT support (System 10 only)

- PostScript optimization.

Variable Data File Format Support

- **PPML**(System 10 only)**:**
  PPML was designed to support efficient job resource re-use. 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** (System 10 only)**:**
  A fundamental principle inside 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 — Xerox only)** (System 10 only)**.**
  An open language from Xerox that enables highest-performance output of variable data PostScript documents.

- **PDF/VT v1.0** (System 10 only)**:**
  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. Operators can use FreeForm 2 and Fiery SeeQuence for impose 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.*

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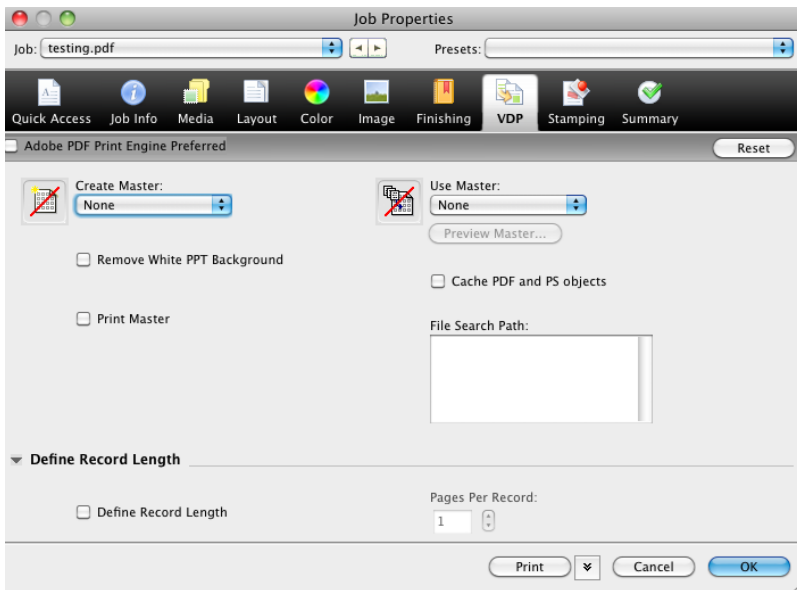
The page length of the FreeForm master document defines each record in a FreeForm job. FreeForm maps the pages from the variable document to the record length defined by the FreeForm master until all the variable document pages are used.

FreeForm Multi-page Previews – With bi-directional communication enabled, the EFI Fiery Mac Driver provides the user multi-page previews of FreeForm masters. This allows visual confirmation of selected FreeForm masters whose static content span across 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 make sure mapping was handled properly.

As an example, imagine a company needs to distribute a personalized newsletter to their 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.

FreeForm Master

Variable Document

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

In System 10/10e, FreeForm has been enhanced to give the user the flexibility to control 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, Hot Folders, plus Windows and Mac drivers.

Users can choose Enhanced FreeForm from the Job Properties VDP tab by selecting a master document from the Use Master dropdown menu.
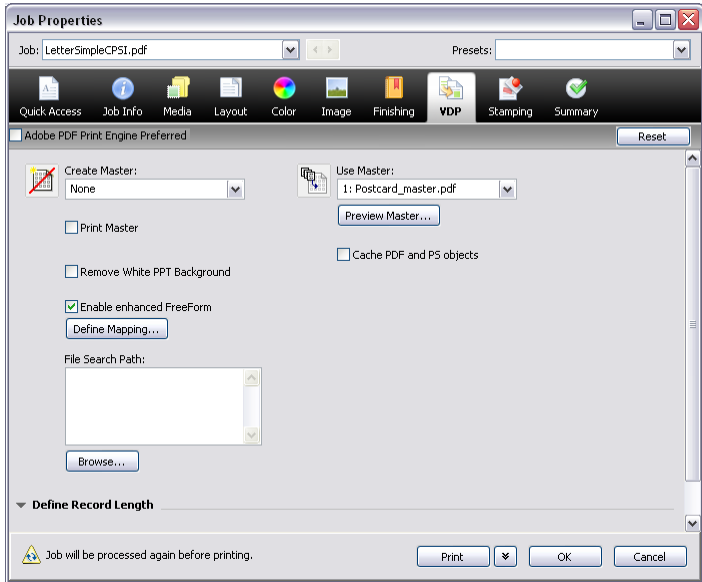
Figure: Users can choose Enhanced FreeForm from the Job Properties VDP tab
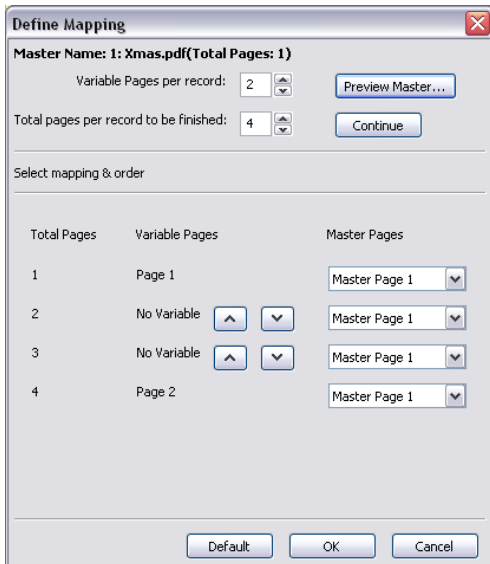

Figure: Using the Define Mapping table, users can associate the variable pages with the corresponding page of the master document

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 get everything they need to create successful variable data printing (VDP) jobs quickly. The FreeForm technology already exists in their Fiery 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

VDP Resource Manager is a utility for PCs and Macs that is designed to allow users to manage global VDP resource objects stored on the Fiery server. Global objects are installed on the system with compatible VDP client applications, including Pageflex™ Persona™ — Fiery version — and can also be installed through the printer driver in Command WorkStation using FreeForm masters.

Users can view a list of global objects and FreeForm masters located at connected Fiery servers. They also can archive or delete dated or redundant files. A single view of all VDP resources on all of the Fiery servers in the production environment reduces mismanaged files and production bottlenecks.

Key Functions and Features:

- Easy to navigate with its intuitive user interface.

- Views name, size, creation date of object, and its origination environment

- Available for Mac OS X.

Benefits:

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

VDP Resource Manager Enhancements

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 of the Device Center Resource tab, under each format supported by VDP. Previously, stored objects appeared only as a list, making it difficult to determine what the resources were simply based on the name.

The VDP Resource Manager provides the following enhancements:

- A choice of a list or thumbnail view. The thumbnail view provides a visual illustration of resources.
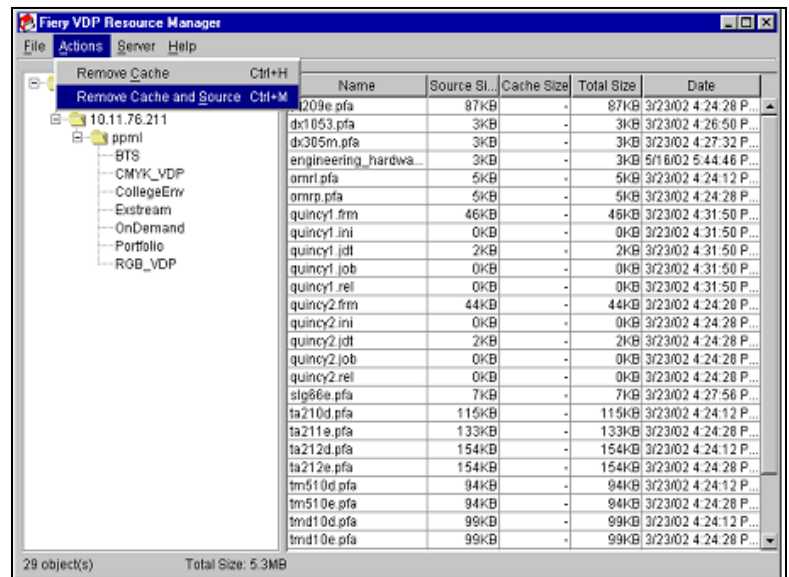
- The option to view a list of jobs in the Hold Queue that are associated with a selected resource.

- An option to delete all the resources in that environment.

- An option to back up resources.

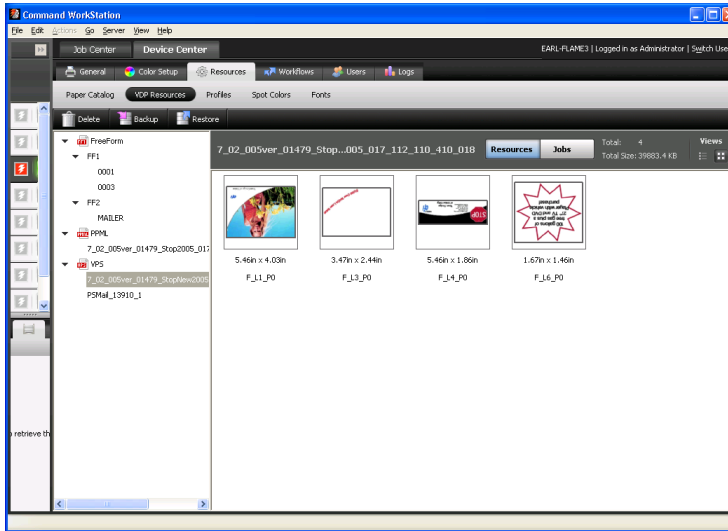- Automatic refresh of stored VDP resources when a new VDP file is processed.

Figure: VDP Resource Manager listing a thumbnail view of VDP resources

Benefits:

- *Simplifies use with a visual illustration of cached, reusable elements and easy identification of VDP jobs.*

PDF/VT Support

Efficiently driving complex VDP jobs in digital print requires support for multiple standards to ensure interoperability. Fiery System 10/10e 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.

Figure: The format icon, as well as the quantity of records and pages per record, identifies PDF/VT jobs in 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 user's existing workflow.

Processing Optimization for PDF and PostScript VDP Files

Some customers are still using PDF or PostScript formats for creating VDP jobs. PDF uses XObjects, and PostScript uses Forms to convey information about repeatable elements. 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.

Benefits:

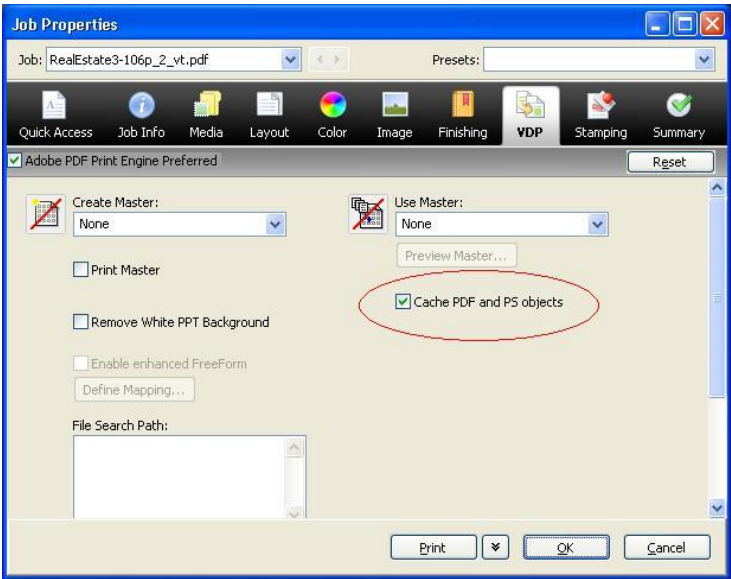- *Increases speed and performance when processing PDF and PostScript format files in VDP applications.*

Figure 1Figure: "Cache PDF and PS objects" box in the VDP tab of Job Properties

Define Record Length

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

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

Define Record Length allows a user to define the fixed record length for a VDP job when provided in PostScript and PDF format. This Define Record Length setting can be found at the Fiery Driver and the 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 to allow 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 mark and the end mark.

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.

Benefits:

♦ *Increases automation of the output process and reduces the number of manual off-line steps in production.*

VDP Record Range Printing

The user can 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 non-imposed and imposed VDP jobs in FreeForm v1 (record-based) and FreeForm v2, PDF/VT, PPML, VI Compose (VIPP/VPC — Xerox only).and Creo VPS formats. This ensures continuity whether or not VDP is being used in the wider deployment of technology and solutions.

Benefits:

♦ *Simplifies record re-printing. For example, if an error occurs at the print engine and requires recovery, there is no need to return to the source file.*

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

Transitional 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 things like paper attributes, finishing options and the 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 specific trays 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, or defined 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.
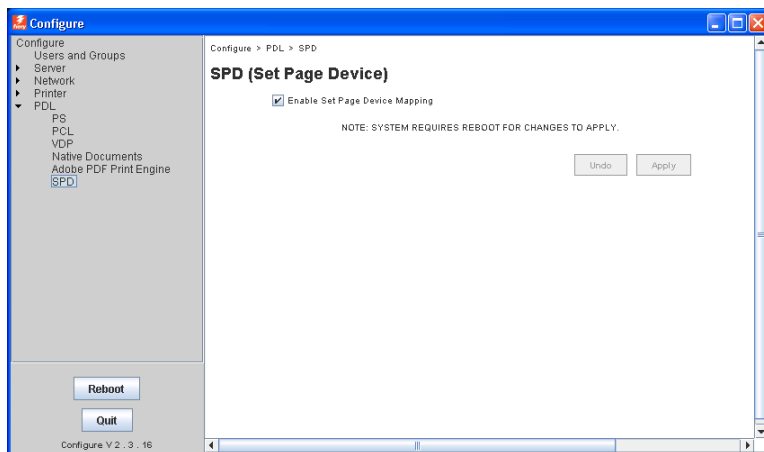

Figure: Enabling SPD in Configure

Once SPD Media Mapping is activated, operators need to define the actual Media Mapping and Finishing Mapping in Job Properties.

Figure: 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 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 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.
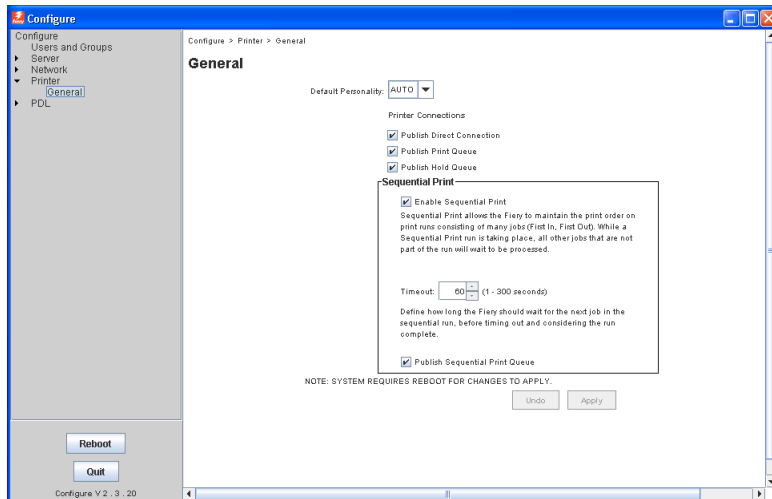

Figure: Enable the Sequential Print Queue in the Configure Tool

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.
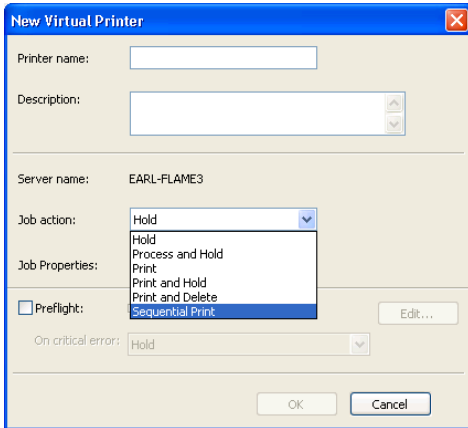
Figure: A new default print queue called Sequential Print is published

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

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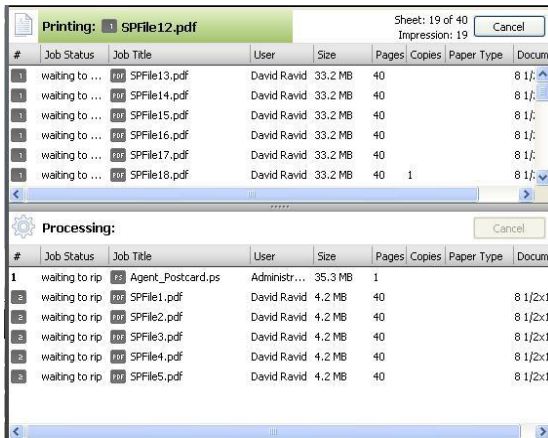

Figure: Identification of Sequential Print jobs in Command WorkStation

When 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.

Benefits:

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

Fiery Hot Folders 3

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, then route them to a Fiery server with a job ticket attached, or merge files from same folder. Job

ticket settings include 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 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 may be routed to a print server with predetermined settings attached including PPD overrides, imposition attributes, and file format conversions.

Benefits:

- *Saves time and shortens the steps for file submission.*
- *Includes an intuitive interface, which simplifies use and increases users' adoption of Hot Folders, consequently increasing productivity by automating the print submission process.*

Fiery Virtual Printers

Automating complex tasks and leveraging all available resources is critical 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 non-technical 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 on their desktop. 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 within them.
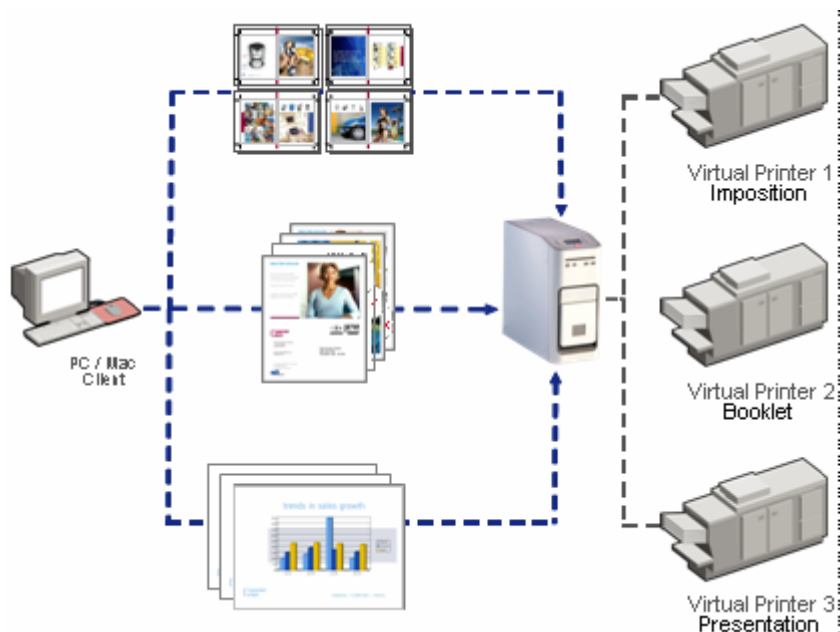
The administrator has rights to the following functions:

- 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 print process and company standards are maintained, since relevant settings can be preserved as Admin-lockable.*

Auto Preflight for Hot Folders and Virtual Printers

Prior to System 10, operators were able to Preflight 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, System 10 can automatically apply Preflight to any jobs that use Hot Folders and Virtual Printers, and 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 increases productivity by rerouting incorrect files before printing. Auto Preflight enhances the Preflight feature of the Fiery Graphic Arts Package, Premium Edition by making it automatic 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, they can be moved to the Hold Queue — preventing them from printing and wasting materials.
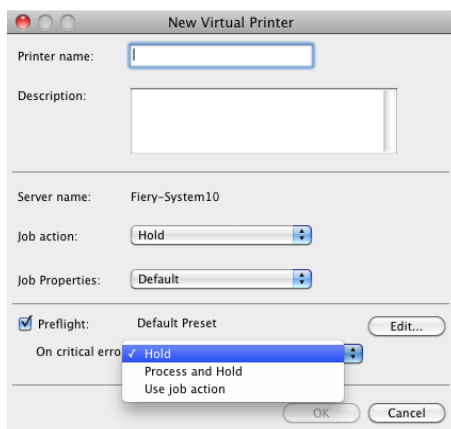
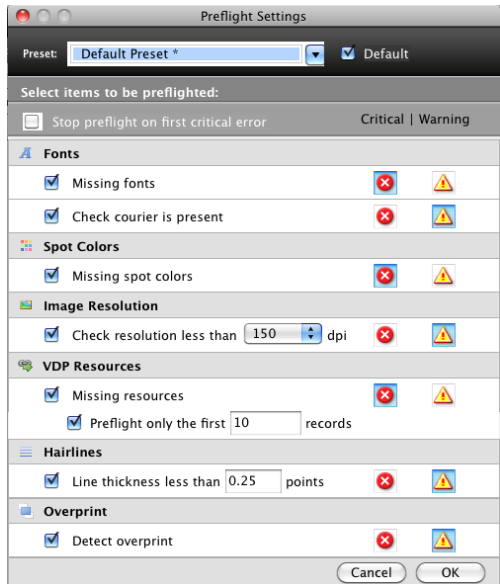Figure: Enable Auto Preflight when setting up Hot Folders and Virtual Printers

Figure: Customize the warning error tolerances in Preflight Settings

Benefits:

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

Fiery Productivity Package

The Fiery Productivity Package option for Fiery embedded servers helps meet tight turnaround times and produce top-notch color documents the first time, automating processes to maximize productivity.

For more information on supported Fiery embedded systems go to www.efi.com/productivitypackage.

Productivity Package Features:

- **Fiery Spot-On:** Manage CMYK, RGB and named colors including all PANTONE, HKS, Toyo and DIC names. In addition, operators can custom-create 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, 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 misregistration 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, PUB.

- **Virtual Printers:** Streamlines job set-up 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 one print job as urgent, so it can be processed and printed immediately. It even interrupts a job that is currently printing.

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

- **Reorder Held jobs:** Offers the ability to reorder the queue to group jobs that have similar print options, which leverages resources and reduces waste.

- **Secure Erase:** Deletes ALL traces of job data from the Fiery system, eliminating the possibility of restoring the data to intelligible form.

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 set-up times and decrease print errors.*
- *Guarantees a high level of document confidentiality.*

Usability

Fiery Systems Deliver Ease of Use

The Fiery System 10/10e adapts 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 SeeQuence Suite.

For example, Mixed Finishing Sets automate document production with multiple finishing requirements in a set. Fiery SeeQuence 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 vendor for the support of a specific feature .

Usability	QX100 S10	PRO90 S10	PRO80 S10	PRO80BW S10	E100BW S10	E100 S10e
Fiery Command WorkStation 5	✓	✓	✓	✓	✓	✓
Fiery Driver	✓	✓	✓	✓	✓	✓
Fiery Job Properties	✓	✓	✓	✓	✓	✓
Backup and Restore	✓	✓	✓	✓	✓	✓
Mixed Media Attributes Settings	✓	✓	✓	✓	✓	✓
Tab Shift	✓	✓	✓	✓	✓	✓
Insert Tab	✓	✓	✓	✓	✓	-
Media Defined Profiles	✓	✓	✓	-	-	✓
Define Covers	✓	✓	✓	✓	✓	✓
Booklet Maker	✓	✓	✓	✓	✓	✓
Paper Catalog	✓	✓	✓	✓	✓	✓
Pad Printing	✓	✓	✓	✓	✓	-
Fiery VUE	SFM	SFM	SFM	SFM	SFM	SFM
Fiery WebTools	✓	✓	✓	✓	✓	✓
Fiery Integrated WorkStation	✓	✓	⊙	✓	⊙	-
Fiery SeeQuence Suite	✓	⊙	⊙	✓	⊙	⊙
Fiery SeeQuence Impose	✓	✓	⊙	⊙	⊙	⊙
Fiery SeeQuence Compose	✓	⊙	⊙	⊙	⊙	⊙
Fiery Clone Tool	✓	✓	✓	✓	SFM	⊙

✓ Standard   ⊙ Option   - Not Available   SFM See Feature Matrix

Fiery Command WorkStation 5

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 users get the same quality results as when they use a local connection to a Fiery server. The backward-compatible Fiery Command WorkStation also allows print providers to 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 set-up controls. Command WorkStation 5 workspace has drag & drop capabilities for fewer clicks, a customizable tool bar, provides instant status of all Fiery servers, and job grouping for efficiency. The workspace also provides instant information on the engines, consumables, media, and job requirements, it 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 with:

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

- SeeQuence Preview shows how content will lay on pages and helps navigate through the entire document with ease.

- Preview of processed jobs allows you to drag and drop pages from other projects to easily add, delete, re-order 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 set-up functions in a single workspace, including fonts, virtual printers and more:
- 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 flow works.
- Filter job login formation by date and export so you can preview and manipulate the data in other applications like Microsoft® Excel®. Including customizing the date range and columns to export.
- Variabledataprintingresourcesintegrateandmanageallelementsbyjob, including Fiery FreeForm™ master templates.

Flexible Integration and Upgrade Path

- Full cross-platform Mac and Windows support keeps the exact same functionality, look and feel.

- Backward compatible to Fiery System 6 allows you to update Command WorkStation and provide operating usability enhancements for your current Fiery server at no additional cost.

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

The latest version of Fiery Command WorkStation v5.3 includes all new features to improve usability, image quality and imposition workflows.

New features include:

- **User Defined Finish Size:** Fiery SeeQuence Impose honors the designer's intent by automatically detecting the trim box and bleed box defined in the source document. Operators gain greater control and accomplish the job faster with fewer errors.

- **Fiery Image Enhance Visual Editor:** An easy, interactive plug-in tool for adjusting image colors in a job without the need to open the file in the originating application. This feature 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. It supports X-Object editing for PDF files, so adjustments are applied to all instances of the image in the file. Users can adjust brightness, contrast, highlights, shadows, color balance, sharpness and make red-eye corrections on any image.

- **Color Profiler Suite integration:** Users get quick access to profiling tools, directly from the Command WorkStation interface for improved the usability of the Color Profiler Suite.

- **3D Reader View:** Operators can see all media information by page — including type, weight, paper size and name. Users can also zoom and rotate 360 degrees for a better representation of the finished job.

- **Additional media information in Job Summary:** The job summary pane now shows paper type and weight information. This additional information ensures continuous production and helps the operator identify paper requirements before sending jobs to print.

- **Remove Paper Catalog association:** This function provides increased flexibility, linking media with trays by easily unpublishing the current Paper Catalog association with a right-click command.

- **Export custom view of Job Log:** Users can customize the view of the Job Log and export just the data in that current view, capturing the exact amount of data they need within the selected date range.

- **Additional print functions from Job Properties:** Operators can reduce the number of clicks to print a job and complete additional print actions, such as Print and Hold or Process and Hold, directly in Job Properties.

- **New message to customize Job Properties:** First-time Fiery users will be productive from day one by taking full advantage of productivity tools like the Quick Access tab in Job Properties.

- **Auto-login:** The Command WorkStation can now save passwords and automatically log in to multiple Fiery servers at launch.

- **Custom Job Log auto export:** Operators customize data by date, job title or user name. They can also filter data by a date range, and remove or add columns to show the information they want. Once a user creates a Custom Job Log, they have the option to export either the "Current View" or the "Complete Log."

Optional Fiery SeeQuence Suite

Fiery Command WorkStation 5.3 includes a preview of the optional SeeQuence Suite – integrated document layout applications that run within the intuitive visual interface of Command WorkStation. Users can purchase the entire Suite or the individual applications within the Suite. Each application comes with many benefits:

- Fiery SeeQuence Impose and Fiery SeeQuence Compose can work independently or in a tightly integrated workflow, allowing operators to accurately set up jobs and soft proof. Both work seamlessly together in the same window, so users can perform these functions in the same document in any order.

- SeeQuence Impose enables error-free layout at the sheet level. It includes the User-Defined Finish Size workflow* to automatically detect the trim and bleed box defined in the source document.

- SeeQuence Compose performs all document make-ready functions at the page level.

Optional Fiery Color Profiler Suite

Generate, edit, compare and inspect profiles quickly and easily without leaving the Command WorkStation user interface.

Benefits:

- *Common user interface to manage multiple servers, directly from a single Fiery server or remotely from Windows or Mac clients.*

- *Accommodates all skill levels and shortens the learning curve for new users.*
- *Accomplishes jobs with fewer keystrokes.*
- *Optimizes existing equipment with easier access to powerful Fiery features.*
- *Helps operators visualize jobs on-screen, reducing errors and waste.*

Fiery SeeQuence Suite

The optional Fiery SeeQuence Suite brings document composition and imposition together to address all document preparation needs. Fiery SeeQuence Impose and Fiery SeeQuence Compose work seamlessly together in a tightly integrated workflow, allowing users to accurately and easily set up and soft proof jobs. SeeQuence Impose enables error-free layout at a sheet level, while SeeQuence Compose performs all document make-ready functions at a page level. In addition, the two can work effortlessly together in the same window, letting users apply Compose and Impose functionality to the same document in any order, increasing customers' application possibilities two fold!

This intuitive solution saves time and maximizes profits by easily eliminating operator errors through automation and significantly cutting down on job set-up times.

A state-of-the-art in-RIP Fiery option for production environments, Fiery SeeQuence Suite automates and simplifies labor-intensive document preparation activities with an intuitive user experience that shortens job set-up times.

Flexible Job Preparation

With SeeQuence Suite, it takes fewer clicks and less switching between two separate applications, saving users precious time. With flexible SeeQuence job preparation, users no longer need to wait for thumbnails, but can immediately apply the imposition settings, while the thumbnails are created in background. In addition, users can drag and drop files from the desktop and selected pages from jobs anywhere on the network or from the Fiery job list.

Adapts to any User Environment

The flexible solution supports popular Fiery job formats such as PDF, PS and VDP. With its modular format, the solution also grows with companies' current and future requirements for several reasons.

The SeeQuence Suite user interface is tightly integrated with the standard Job Preview accessed from the Fiery Command WorkStation's Job Center. The Preview window can be scaled up to SeeQuence Suite's full functionality once the SeeQuence Impose and SeeQuence Compose dongles are activated. In addition, it offers a flexible distributed workflow since the SeeQuence Suite is launched from the Command WorkStation where it can run locally on Fiery or remotely on any client on the network.

The flexible and adaptable Suite provides full cross-platform support to a Mac or PC, so customers can enjoy the same printing experience, regardless of their environment.

In addition, the Suite offers a demo mode where users can experience the full functionality of it, including the ability to print with a watermark, before buying the solution.

For additional information on Fiery SeeQuence Suite, visit www.efi.com/sqs.

For a video demonstration of the Fiery SeeQuence Suite, visit http://w3.efi.com/Fiery/Products/Fiery-SeeQuence-Suite/Fiery-SeeQuence-Suite-Demos

With the latest version of Fiery Command WorkStation, Fiery SeeQuence Suite now comes with following enhancements:

- 3D Reader View.
- SeeQuence PostScript preview.

- Undo/redo enhancements.

Features of SeeQuence Suite:

- Unlimited Imposition Templates
  - *Creates and saves custom templates for re-use, eliminating redundant tasks and reducing errors. It includes Saddle-stiched, Perfect Bound, Cut & Stack imposition styles. Templates can be attached to Hot Folders in order to automate production.*

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

- Gang-Up Styles
  - *Has traditional Unique and Repeat and other gang-up styles available for VDP and non-VDP jobs.*

- Booklet Maker Support
  - *Supports driver-based imposition through Booklet Maker, allowing jobs to move between Impose and Booklet Maker.*

- Add, Delete and Duplicate Sheets
  - *Add, delete, or duplicate imposed images to any specific location without going back to the source document, inserting custom text for blank pages.*

- Multi-Up Support
  - *Provides simple merging of PDF pages within documents or between documents.*

- Save imposed jobs as PDF files
  - *Integrates Enfocus Pitstop and Adobe® Acrobat® for quick and easy last-minute PDF changes.*

- Non-Printable Area Indicator
  - *Detects overlap of image and non-printable area and adjusts layout before RIPping to ensure accurate printing.*

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

- VDP Workflows
  - *Removes complexity from VDP workflows by using the same workflow regardless of VDP language. Includes raster preview, sample proof printing and Control Strip for quick identification of spoiled sheets.*

- Document Navigation
  - *Simplifies document set-up and navigation in large jobs. Enables users to view entire documents 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 set-up of page ranges within documents and application of media attributes for page ranges.*

- 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 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.*

- Integration with VDP Jobs
    - *It displays wire frame previews of VDP jobs. Media settings are applied identically to all record sets at the first, body and last sheets.*

Benefits:

- ◆ *Increases productivity by automating and simplifying labor-intensive document preparation activities.*
- ◆ *Saves money by eliminating the need for third-party document preparation software.*
- ◆ *Decreases waste and errors by showing operators know exactly how documents, including VDP jobs, will look when printed.*

New Features in CWS 5.3

Job Log Auto Export

The Send Job Log feature is designed to give the Fiery administrator an option to automatically send, clear and save the job log at a scheduled time. The job log can be submitted via e-mail or saved to an SMB or FTP location.

This feature is ideal for corporate and education environments where the accounting department requires a job log report for costing purposes, but the accounting staff does not have the Command WorkStation or know how to retrieve these logs. This feature can send logs automatically to the accounting department via e-mail, or save log files to a pre-determined location on their network.

In addition to the convenience of automatic job log transmittal, automatic clearing prevents the log from becoming too large and taking up unnecessary resources on the Fiery server.
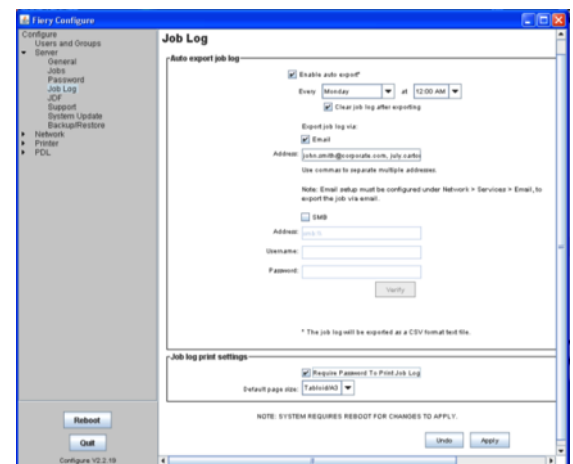
Benefits:

- ◆ *Saves time by automating report generation and submission.*
- ◆ *Improves accuracy of cost management and control by improving communication of job log reports to accounting departments.*
- ◆ *Automatic retrieval of job log guarantees access to exported data, even if Fiery software is reinstalled.*

Save Password and Auto Login

Administrators and operators can save passwords when connecting to Fiery servers by checking the Save Password box. This enables automatic login to servers from client workstations without the need to input passwords every time — saving time and increasing productivity.

Additionally, users can enable "Auto Login" in Preferences to allow the Command WorkStation to use saved passwords to automatically connect to all servers at launch.
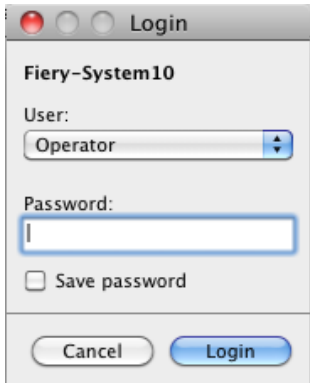
Figure: Login window
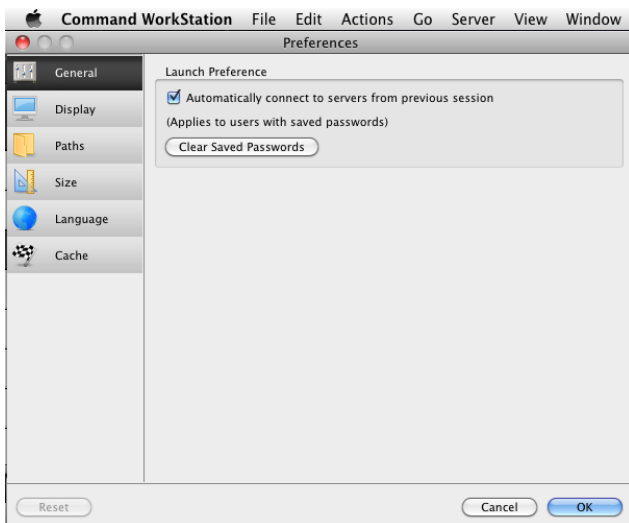

Figure: Selecting Auto Login in Command Workstation Preferences

Benefits:

◆ *Frees users from repeatedly entering passwords, providing improved usability.*

◆ *Auto Login saves time when Command WorkStation launches, by automatically connecting to all servers with saved passwords.*

3D Reader View

In Command WorkStation 5.3, the SeeQuence Impose and Compose Reader View now allows users to zoom and rotate a three-dimensional representation of the finished job 360 degrees. The 3D Reader View also displays duplexing and paper size. This 3D Reader View minimizes printing errors and waste.
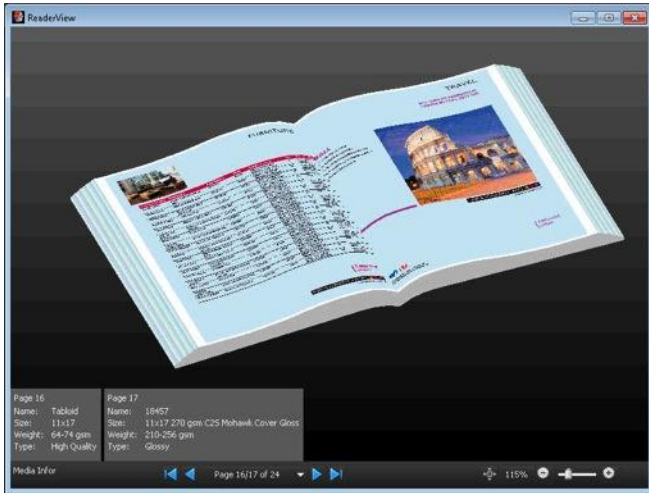
Figure: 3D Reader View

Benefits:

- ◆ *Increases usability with tools that more accurately preview finished documents.*
- ◆ *Saves money and increases productivity by minimizing printing errors and waste.*

PostScript Previews

SeeQuence Impose and Compose will create and display thumbnails for PostScript files without the need to install Acrobat Distiller on the Command WorkStation client. Allowing users to view thumbnails of PostScript files minimizes errors and waste, saving money and increasing productivity.

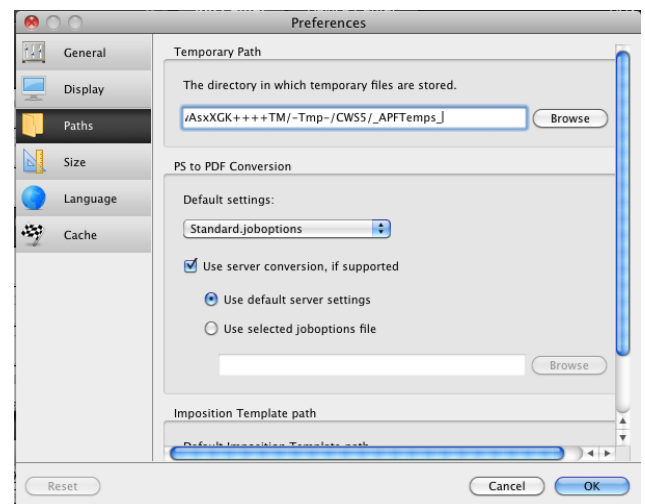This feature is enabled by default and is located in Command WorkStation Preferences Paths.

Figure: PS to PDF conversion is on by default

Benefits:

- *Saves money by eliminating the need for additional software.*
- *Allows users to view thumbnails of PostScript files, minimizing errors and waste, saving money and increasing productivity.*

Undo/Redo Enhancements

Users can now access the undo and redo capabilities in the SeeQuence Suite Settings panels, as well as in Page View. This allows them to more quickly undo and redo previous settings — even at multiple levels.
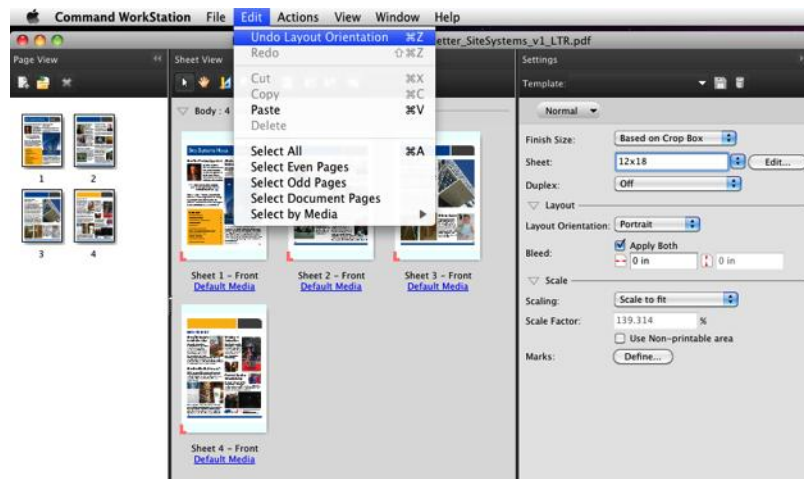
Users can enable undo/redo from the Edit menu.

Figure: Multiple levels of Undo and Redo are now available

Benefits:

- *Increases usability and productivity because of the ability to undo and redo settings multiple times.*

Fiery SeeQuence Impose

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

SeeQuence 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, adding or deleting pages, and the ability to do a preflight check for potential errors — for faster and more efficient document assembly. With SeeQuence 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 template

from Job Properties and Virtual Printers. It allows for quick and easy to view thumbnails and full-screen previews of actual page content in the imposition signature. Users are also able to manage production of imposed jobs with mixed media requirements. SeeQuence Impose offers Page and Sheet View of the imposed job.

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

Five new features have been added to Fiery SeeQuence Impose with Command WorkStation 5.3:

- User Defined Finish Size.

- Duplo support for barcode and registration marks.

- 25 x25 Gangup.

- Print marks on front surface only.

- Template browser.

Powerful Imposition Tools for Speed and Flexibility

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 re-use, 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.

- **Preflighting:** Allows pre-production error checking. 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.

- **Gang-Up Styles**: Has traditional Unique and Repeat and other gang-up styles available for VDP and non-VDP jobs.

- **Non-Printable Area Indicator:** Detects overlap of image and non-printable 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 Set-Up:** Changes pagination dynamically by inserting required blank 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 paper catalog to make media specification faster and easier.

- **Booklet Maker Support:** Supports driver-based imposition through Booklet Maker, allowing jobs to move between SeeQuence 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 multi-page document.

- **Customizable Trim and Fold Marks:** Defines the color, length, width, and 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.

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

- **Non-Printable Area Indicator:** Detects overlap of image and non-printable area and adjusts layout before RIPping to ensure accurate printing.

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

- **VDP Workflows:** Removes complexity from VDP workflows by using the same workflow regardless of VDP language. Includes raster preview, sample proof printing and Control Strip for quick identification of spoiled sheets.

For additional information on Fiery SeeQuence Impose, visit 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 real 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.*

New Features in Fiery SeeQuence Impose:

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 also 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 SeeQuence Impose bleed values to set the finish size. Additionally, operators or designers sometimes needed to modify original files and define a "custom page size" in order to define a bleed, which affected the positioning of content on the page.

With Command WorkStation 5.3, Fiery SeeQuence 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 SeeQuence 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 SeeQuence Impose or make modifications to the original file in order to impose and print the file. With the User Defined Finish Size feature, SeeQuence automatically imposes the job based on the designers' finish size definition.

Additionally, Fiery SeeQuence Impose can accurately impose and print jobs composed of several different PDF files with unique trim and bleed sizes, and page (media box) sizes.
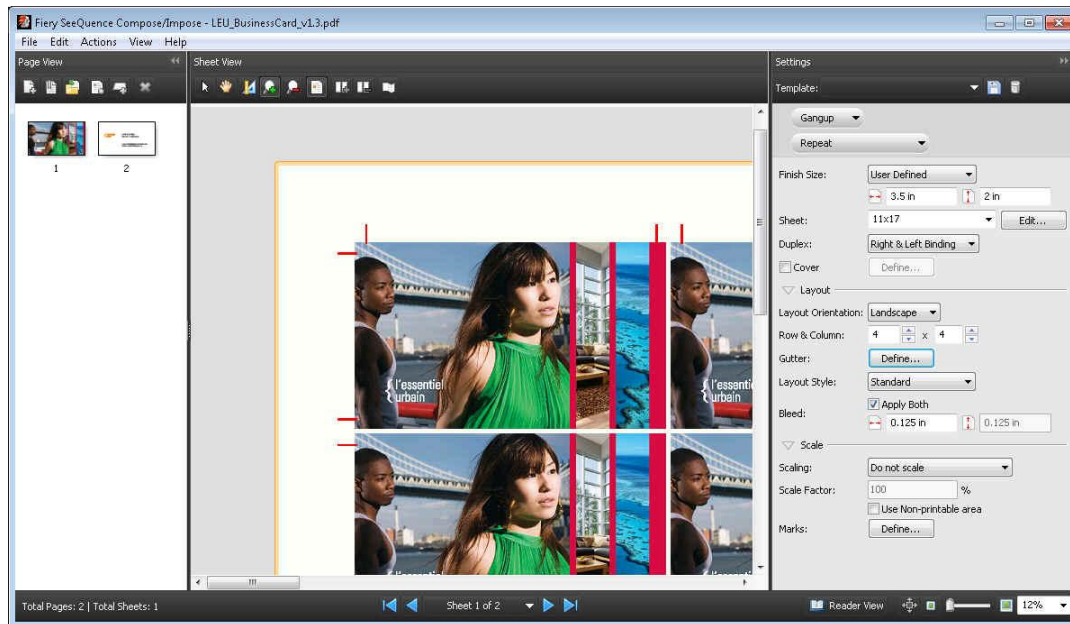
Figure: User Defined Finished Size controls

Figure: 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.*

Duplo Support for Barcode and Registration Marks

Fiery System 10/10e supports Duplo USA's DC-615, DC645 and DC745 offline finishers. Fiery servers using System 10/10e can print preconfigured barcode and registration marks in the upper right corner of a sheet. The barcodes and registration marks instruct the Duplo finisher how to position its blades, cutters and creasers in order to finish the document appropriately. This feature also allows operators to offset the sheet contents away from the Duplo registration marks to prevent trimming of job content.

Figure: A Duplo DC-645 Slitter/Cutter/Creaser

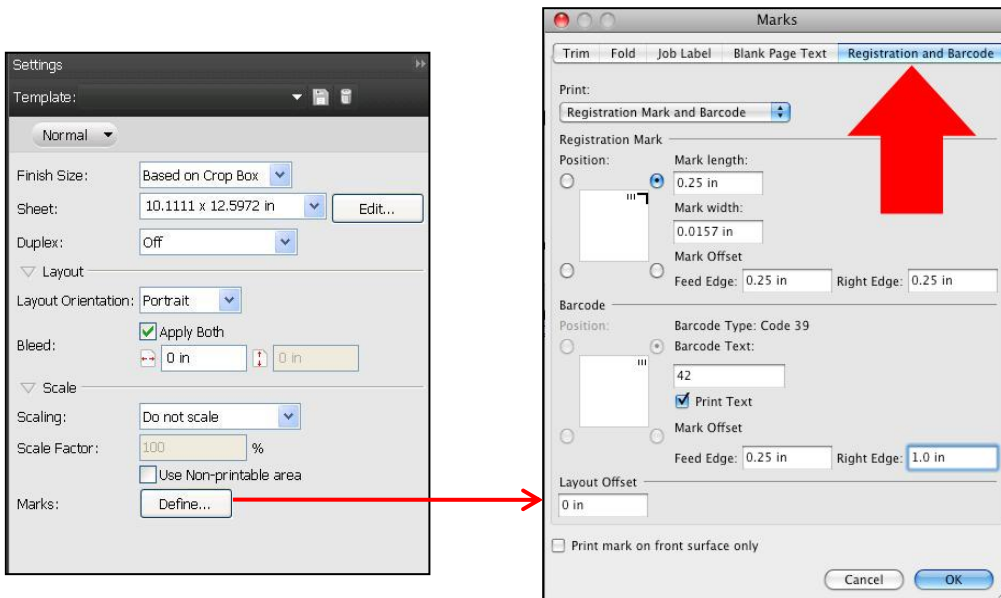Figure: Barcode reader automatically sets up pre-programmed jobs

Figure: SeeQuence Impose settings include definition of registration mark and barcode

Benefits:

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

♦ *Saves times and minimizes waste when finishers can be automatically positioned.*

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 have been limited to VDP file formats. In System 10, those layout formats are now available since research showed that the most common file type for printing to be finished with a Duplo offline finisher is in PDF format.
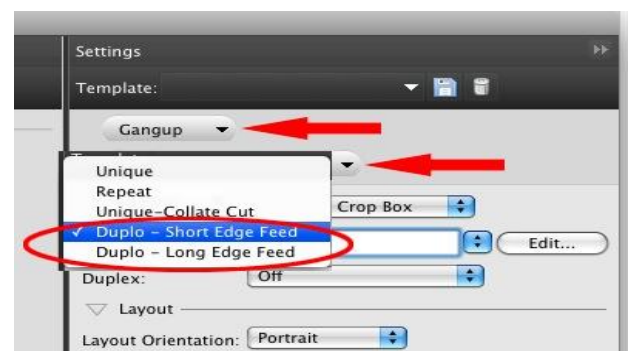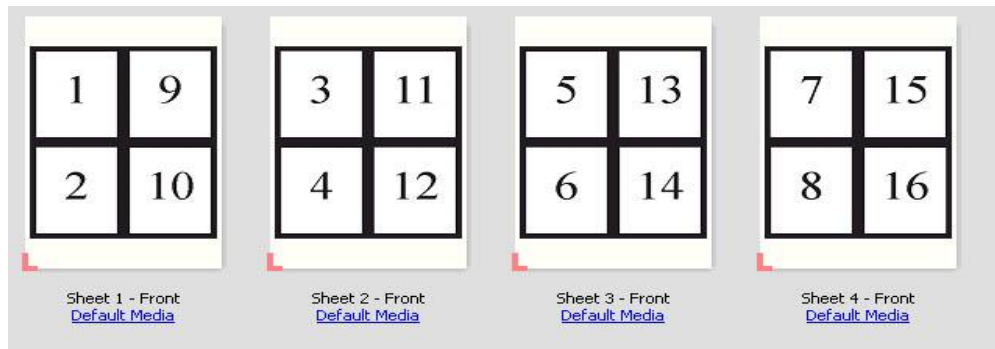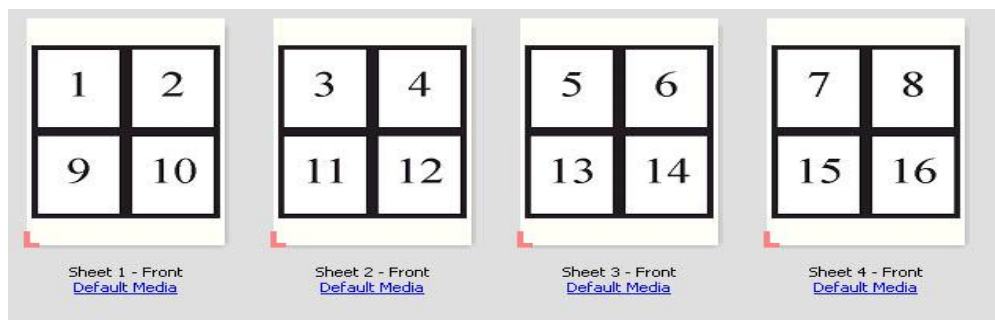

Figure: The new selections are: Duplo Long Edge and Duplo Short Edge impositions for non-VDP PDF and PS files.

The Duplo – Short Edge Feed Imposition Layout orders pages sheet wise in line with columns or rows arranged in direction perpendicular to the shortest sheet edge. This layout optimizes page laout to fill the rows and columns on a sheet.

| Sheet 1 - Front | Sheet 2 - Front | Sheet 3 - Front | Sheet 4 - Front |
| Default Media | Default Media | Default Media | Default Media |

The Duplo – Long Edge Feed Imposition Layout orders pages sheetwise in line with columns or rows arranged in direction perpendicular to the longest sheet edge. This layout optimizes page layout to fill the rows and columns on a sheet.

| Sheet 1 - Front | Sheet 2 - Front | Sheet 3 - Front | Sheet 4 - Front |
| Default Media | Default Media | Default Media | Default Media |

Benefits:

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

25x25 Gangup

System 10/10e extends the Fiery SeeQuence Impose Gangup row and column repeat limit 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.

Benefits:

◆ *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 SeeQuence 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. Since trim marks are only necessary on one side of a page, this feature prevents unwanted marks on the second side of a duplex page.
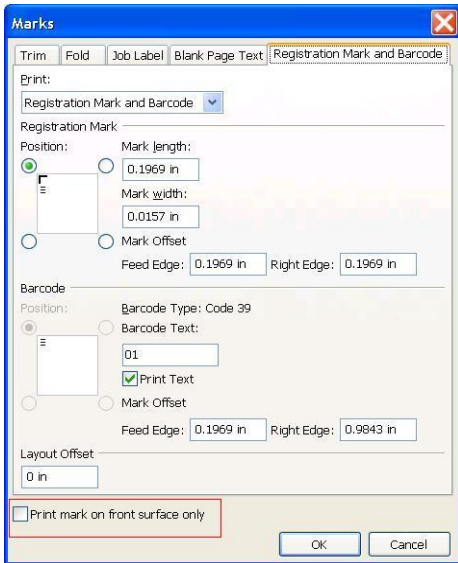
Figure: Setting up print marks for surface only

Benefits:

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

Template Browser

The Fiery SeeQuence Impose template browser represents imposition templates visually, with icons instead of only as a named list. This makes it easier for users to select a template.
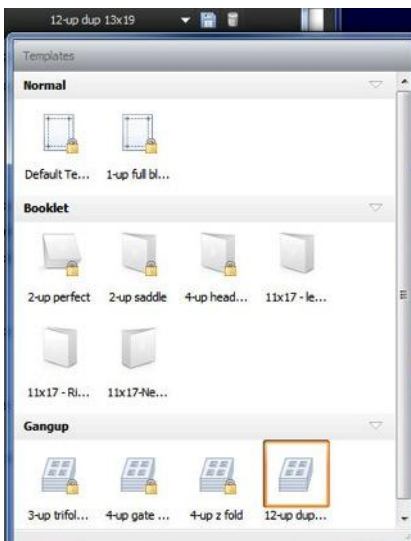


Figure: System 10/10e template browser with visual icons

Benefits:

◆ *Users can more easily select a visual imposition template.*

Fiery SeeQuence Compose

Fiery SeeQuence Compose provides centralized document assembly, WYSIWYG page-level ticketing, easy preview and powerful editing features including tab creation interface. The SeeQuence Compose software application option is designed to be the core toolset for operators to prepare documents for printing. It provides centralized document assembly, WYSIWYG page-level ticketing, preview and editing features. Since SeeQuence Compose launches from Command WorkStation 5, it's flexible enough to run on the user's desktop or locally at the Fiery server.

SeeQuence 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.
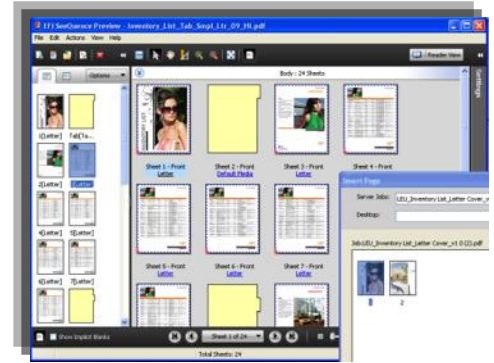
From a single, integrated window, operators manage tabs and specify mixed media, taking advantage of the fully automated digital printing process to produce finished documents with minimal operator intervention. Integration with the Paper Catalog's centralized paper warehouse database also makes it intuitive for operators to apply media specifications on a per-page or 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 SeeQuence Impose Option. With it, customers can incorporate visual and intuitive document imposition. SeeQuence Impose and SeeQuence Compose work together to simplify labor intensive document preparation activities to shorten job set up times of even the most complex jobs.

Professional Tools for Advanced Document Preparation Functions.

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

- **Page View:** Simplifies document set-up and navigation in large jobs. Enables users to view entire documents 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 set-up of page ranges within documents and application of media attributes for page ranges.

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

- **Preview Modes:** Reviews different page layout output modes and veri- fies 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 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.

- **Integration with VDPJobs:** It displays wire frame previews of VDP jobs. Media settings are applied identically to all record sets at the first, body and last sheets.

- **SeeQuence Compose supports the following Fiery job formats:**

- PDF
- PS
- VDP

For additional information on Fiery SeeQuence Compose, visit www.efi.com/sqc.

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 set-up 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.*

New Feature in Fiery SeeQuence Compose

Subset Finishing

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

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

In System 10/10e, SeeQuence Compose now 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.
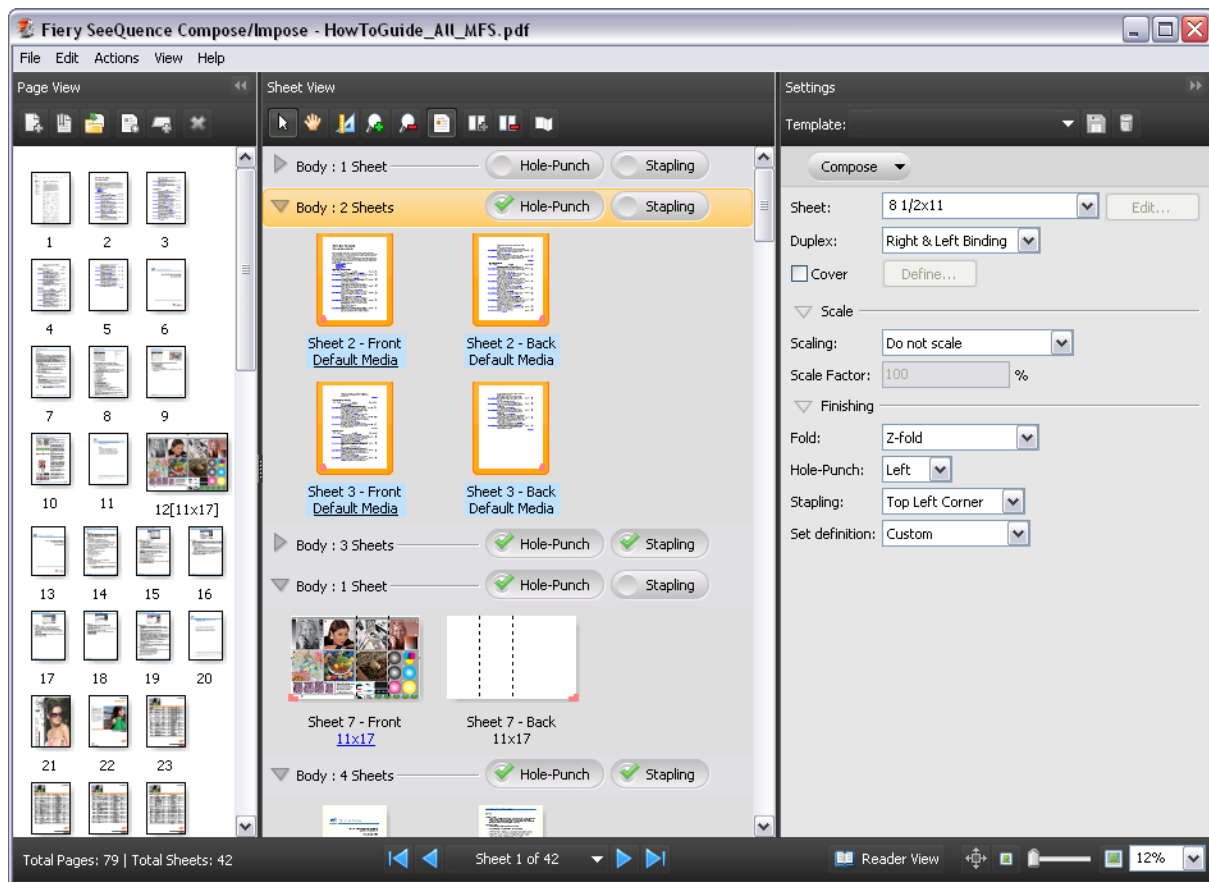
Figure: Subset Finishing in SeeQuence Compose

Benefits:

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

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 new printing interface that offers a simplified user interface that highlights 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 new Fiery Driver, features and functionality are consistent across different Windows operating systems, as well as in the Job Properties user interface.

User Interface

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.

System 10 possesses 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 the customer to determine their own 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 one time. When a category has more than eight options, a scroll bar is displayed to show all the available print options.
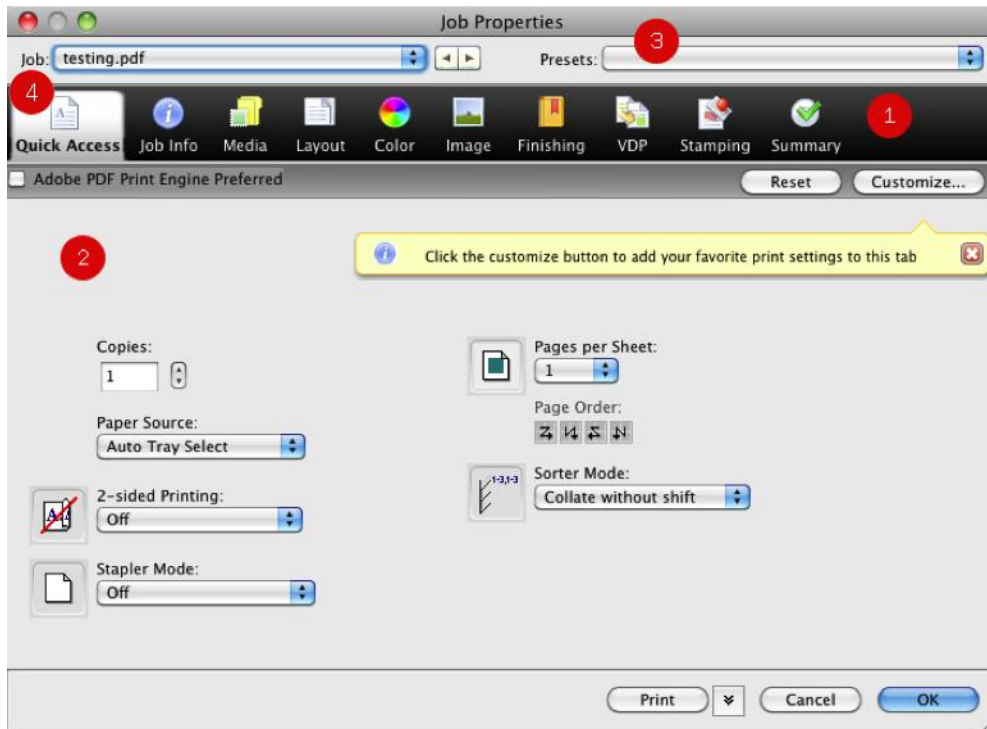
- Presets (3) allows the user to save predefined print settings as a retrievable template. The creation of several templates allows the user to define settings based their own common printing scenarios.

- **Customizable Quick Access Tab (4)** – Gives the user the ability to customize this tab to allow for 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 Sec 508 compliant. Navigation is done through 'Tab' key and selecting different tabs is thru 'Alt + number,' which is displayed as a mouse over.

(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 increases productivity.*

- *The improved end user experience speeds up the process of job set up and submission.*

- *It is simple to use 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 like 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 System 10/10e, 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 required steps with fewer clicks.
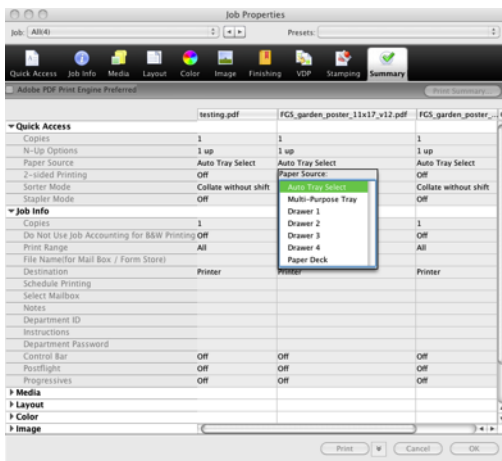

Figure: See the summary of multiple job settings and make modifications in a single user interface

58

Figure: 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 different 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 only allow 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 place and orient the text precisely 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 SeeQuence Compose.

Benefits:

◆ *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.

The user can define:

- 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, and/or paper source, or 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 whether 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, specify the same settings for covers as are available in the Page/Page Range Media dialog box, and specify (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 set up and applying automation to complex job definitions.*
- ◆ *Decreases waste by automating complex finishing settings.*

Media Defined Profiles

Fiery servers offer different 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.

By selecting a media in Fiery Paper Catalog, the feature automatically applies the right 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 4

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 new interface in Booklet Maker v4.0 is more interactive and intuitive than ever before to help users achieve the expected printed output every time.

Booklet Maker v4.0 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.
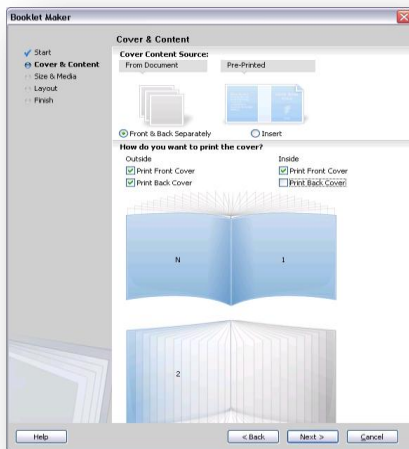
Figure: Easy to Use Booklet Maker Interface

Benefits:

◆ *Produces sophisticated results with 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 users' imposition requirements and provides an upgrade path to Fiery SeeQuence 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. This lets users do what they want with fewer clicks.

Figure 58: 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.

With Command WorkStation 5.3, 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.
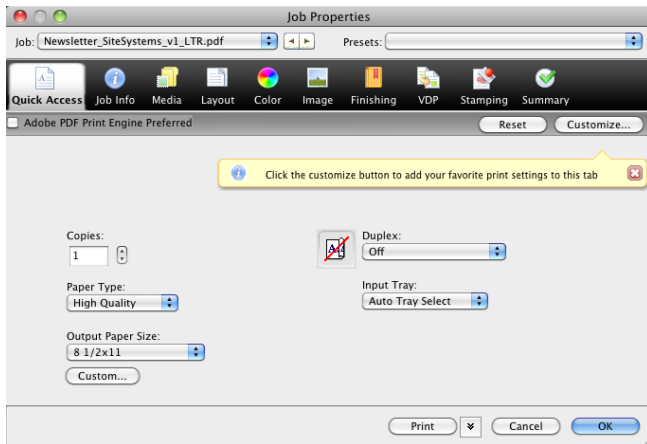
Figure: Quick Access Tab Reminder

Benefits:

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

Pad Printing

Pads or notepad applications have an unlimited number of uses including memo or message pads, forms and personalized notepads as promotional advertising material.

The Fiery server can automate the production of pads with this new feature. Pad Printing minimizes manual collation of the printed output and makes it possible to produce large and small projects with as many sheets as you wish and as many sizes. From tiny pocket notepads to large desktop calendars, Pad Printing lets you quickly and easily create pads with any number of pages.

Turn on Pad printing by checking the box in the Pad Printing section of the Finishing Tab in Job Properties. Select the number of pads you want to print by changing the "Number of pads." You will have to select "Cycles Per Pad" to set the number of times a job repeats within a pad. For example, if you have a job with a 4-page form you want to repeat 100 times. "Offset pad" will automatically offset each pad for easy assembly. "Add back cover" allows you to select a tray containing the desired media be used for the back of each pad.

Benefits

- *Print additional applications such as notepads, prescription pads, receipt books, rebate pads or entry forms to optimize the use of existing print devices.*

- *There's no need to manually calculate the number of copies by multiplying the number of pages in a job by the number of jobs per pad. The Pad Printing feature will automatically calculate that for you, saving time and preventing mistakes.*

- *Save time separating pads and manually adding back covers by using "Offset pad" and "Add back cover" to automatically offset each pad with a back cover for easy assembly and finishing*

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 eco-footprint by minimizing waste and uses Fiery VUE Green Statistics to monitor how a job can be produced to be more "green."
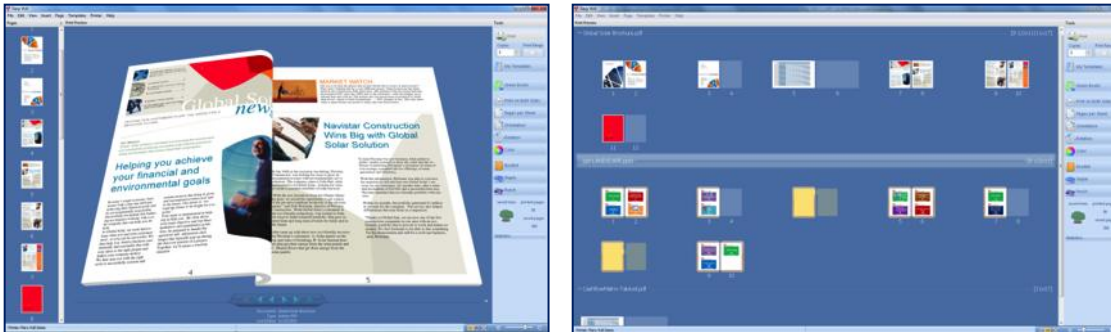
Fiery VUE is a client application that runs on users' Windows PCs and submits print data to the Fiery server. The documents developed in the Fiery VUE application can only be printed on a Fiery Driven print engine that has been Fiery VUE certified.

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 fraction of the time.*

- *Reduces eco-footprints with the interactive 3D preview mode, the Green Books auto-templates for booklets and the new Green Printing Statistics, which allows users to track paper savings by weeks and months.*

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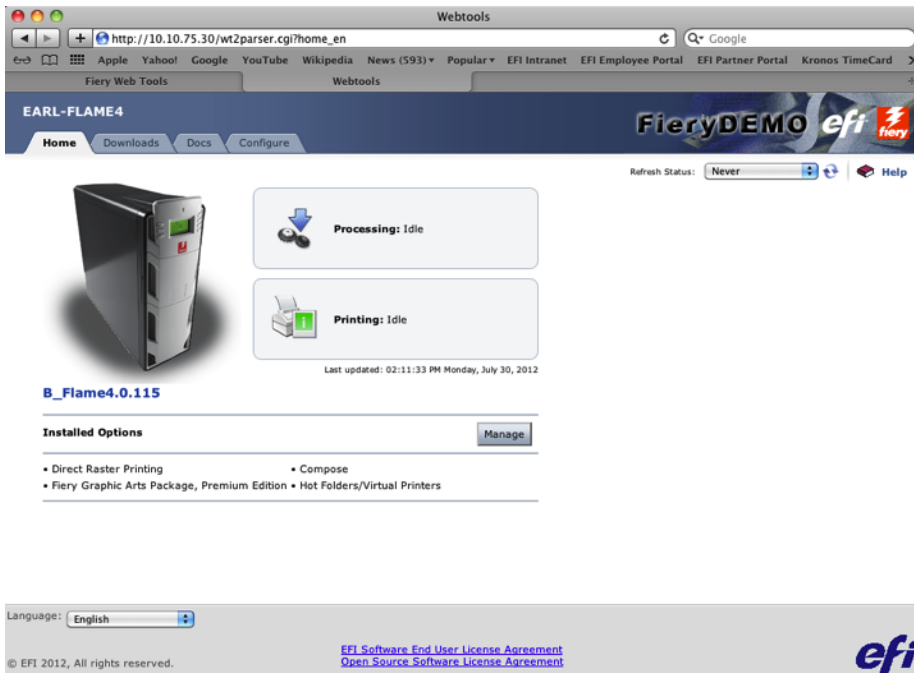
Fiery WebTools™ deliver basic Fiery functionality for users that don't need Command WorkStation sophistication. WebTools, browser-based and hosted on the Fiery server, delivers pertinent information on print and printer status at any Web-capable workstation. It also allows users to:

- Download –install client print drivers and applications.

- Docs – user-authenticated access to mailbox jobs and 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 from any client without requiring additional software installations.

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, so it's 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. Operators can then select that one media definition for each job.

Paper Catalog uses 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 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 which:

- Defines a name for each media attribute combination.

- Facilitates media selection at job submission by:
  - *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.*
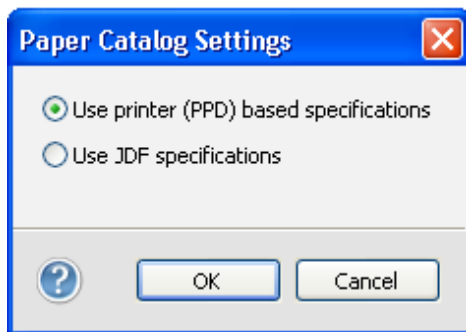
Figure: Paper Catalog Settings, use PPD-based settings

Features introduced in System 10/10e include:

- 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 and 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 using 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 Enhancements

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 System10 provides 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.
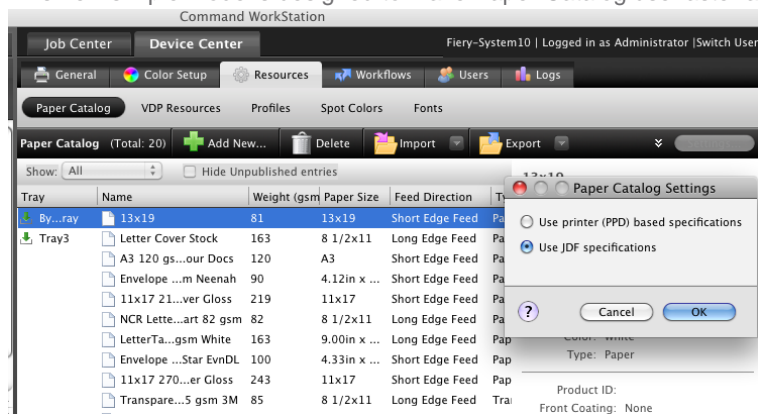

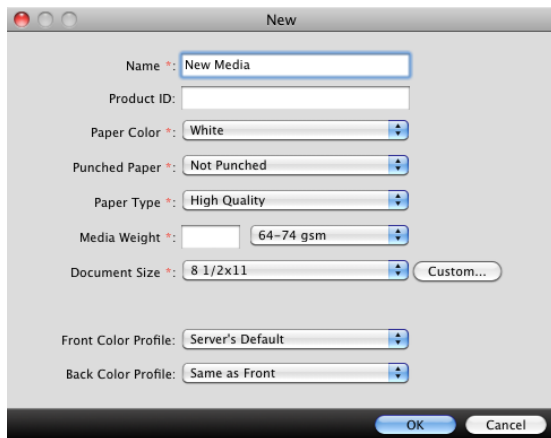Figure 71: Operators have the option to chose a simplified mode to input new entries in Paper Catalog

Figure 72: New Paper Catalog simple mode

With Fiery System 10, Paper Catalog functionality is now standard in embedded controllers 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 controllers 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.*

Fiery Industrial Design

The Fiery external server family has a new 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 to the needs of a digital printing environment, making it the highest quality and functionality ever available in a design.

Features of the advanced design include:

- The Fiery stand is built in to 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 and Industrial Design

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:

- 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 versus the eject command on the Fiery GUI.

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

- ES-1000 holder: A recess on the right side of the furniture top has been added to provide a secure place for the ES-1000.

- 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.

Benefits:

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

- *Improves operator productivity by better using the workspace.*

- *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.*

Serviceability

Simultaneous LCD/Keyboard Installation

This feature allows service technicians and/or analysts to use the LCD to complete the Fiery system software reinstall without connecting the monitor, keyboard and mouse, regardless of whether or not the system is enabled for the Fiery GUI kit.

Benefits:

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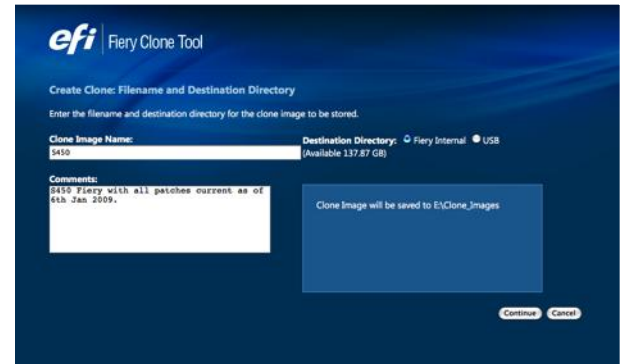
Fiery Clone Tool

The Fiery Clone Tool allows the Fiery administrator or service technician to clone or copy the entire Fiery system to an image file, allowing easy and fast recovery in case of system corruption or hard disk failure.

Previously, the only way to recover a Fiery system was to completely reload the system software, re-setting the server configuration and loading all relevant security and system patches.

The Fiery Clone Tool is designed for service technicians, analysts and IT support staff to use after a Fiery server set-up has been completed, and all patches have been loaded. The Fiery server can then be easily restored in minutes.

The Clone Tool differs from the Fiery Backup and Restore feature, which is designed to back up the Fiery-specific server settings to a small, portable file to be restored to the same or another Fiery server of the same model. Restoring a Backup and Restore file only overwrites the settings that were saved; all other settings and files are left untouched. In comparison, the Fiery Clone Tool backs up the entire Fiery system hard disk, creating a larger file of 4GB or more. The Clone Tool feature allows this file to only be restored to the same Fiery system and overwrites everything on the target Fiery hard disk with the contents of the cloned image.

The Fiery Clone Tool application can be found at http://www.efi.com/support/download-software.asp.

Benchmark results

The Fiery Clone Tool allows easy and fast image file restoration in less than a third of the time that it takes to reload system software.

	Faster platform Fiery QX^{100}	Slower platform Fiery S450
Data to be cloned	10.74 GB	10.74 GB
Backup	10 minutes	20 minutes
Restore	5 minutes	15 minutes

Supported Fiery platforms:

Fiery Clone Tool is supported on the following Fiery server families:

PRO Series	QX Series	S Series	SP Series
PRO^{80}	Q5500	S450	SP^{30}
PRO^{90}	QX^{100}	S690	SP^{60}
		S650	

Users have the flexibility to access the Fiery Clone Tool through three different user interfaces:

- Fiery LCD.
- Fiery GUI.
- Remote Web browser.

Benefits:

- *Delivers easy and fast recovery of the Fiery server, restoring the system to production mode in minutes.*
- *Offers options of cloning and restoration of Fiery servers locally or remotely in many applications for greater convenience.*
- *Maintains patched version of Fiery server installation for a quick reinstallation as necessary.*

Improved Serviceability

Fiery System 10/10e greatly improves the speed of resolving technical issues by automating the transfer of all relevant information to technical support teams. It 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 enhancements.

Improved Server Configuration Sheet

We've given the Fiery configuration sheet a makeover to improve readability and display more information.

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 version numbers installed on the server — for example, Fiery Command WorkStation 5.3.0.54 or Fiery Hot Folders 3.3.0.29. This makes it easier for technical support staff to reproduce user scenarios.

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

Figure: Improved server configuration sheet

Benefits:

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

Job Error Report

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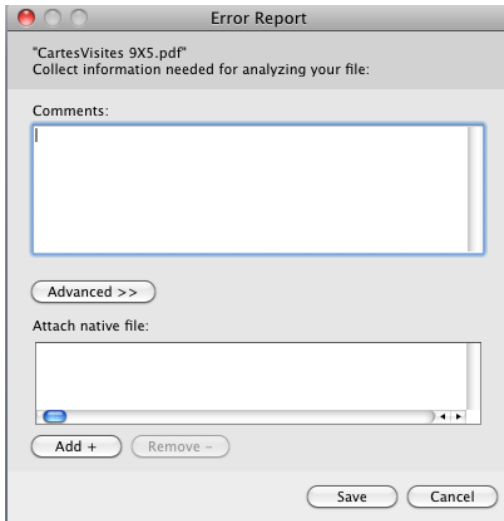
Figure: Creating a Job Error Report

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:

- 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.
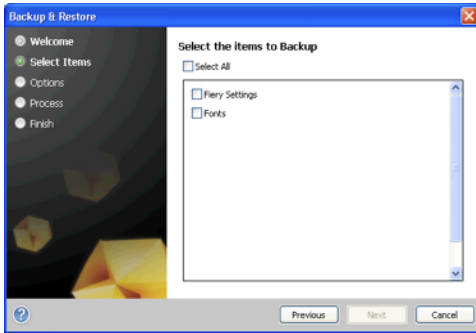
Figure: Server Backup functions before System 10/10e
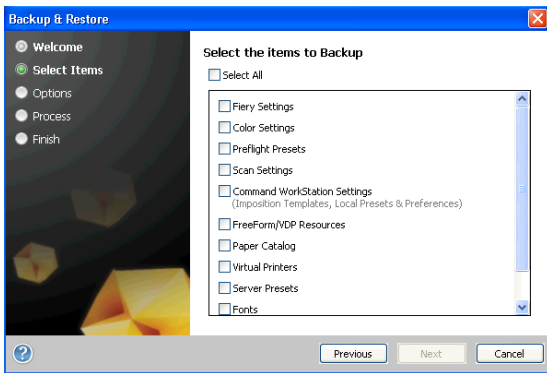
Figure 72: Increased server backup functionality in System 10/10e

Backup and Restore in System 10/10e will accept backup files from earlier system versions back to System 8 Release 2, allowing print providers to upgrade their Fiery server to System 10/10e 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,*

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, 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 install and preferences after the installation.

Benefits:

◆ *Improves productivity at installation and in the initial set up.*

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

Improved International Support

With System 10/10e, users can change the language in Command WorkStation and Hot Folders — independent of the Fiery server. Each user can run Command WorkStation on their client workstation in the language they prefer 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.
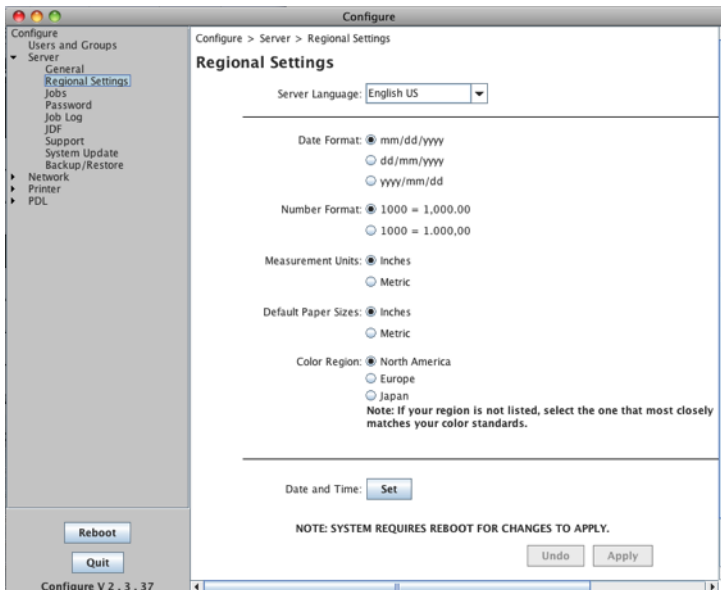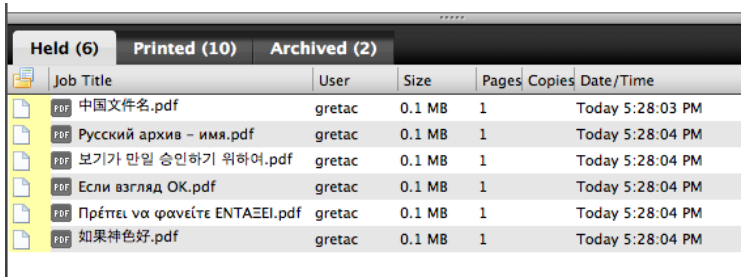

Figure: Configuring Regional Settings

Figure: Setting language preferences in Command WorkStation

System 10/10e now also recognizes 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.
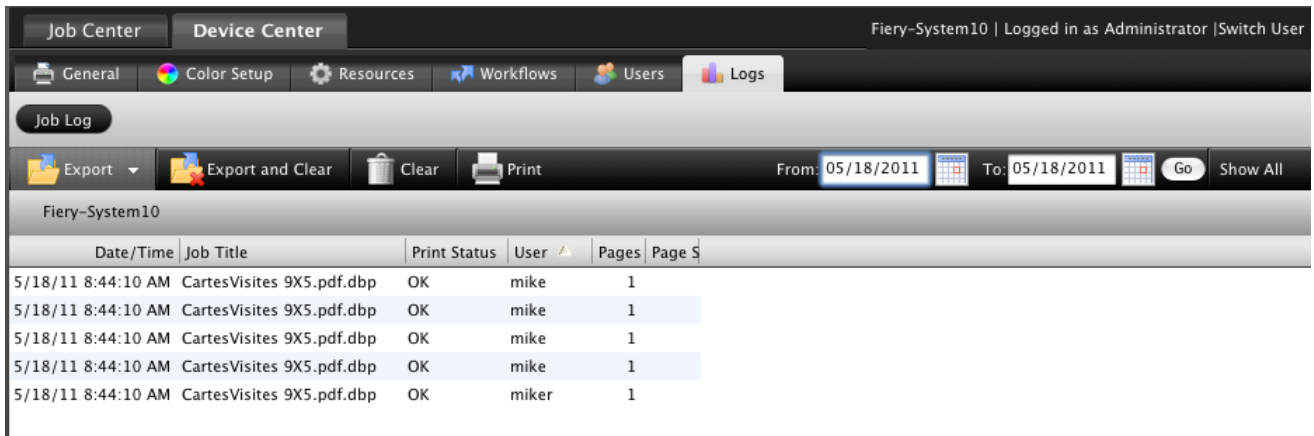

Figure: Double-byte file names on Command WorkStation

Benefits:

◆ *Displays regional paper sizes and dates for a more user-friendly experience.*

◆ *Improves productivity during first-time language set up 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.*

Custom Job Log Export

With Command WorkStation 5.3, the Fiery server gained the capability to export data from a Custom Job Log. Users can customize the data in a Job Log by sorting the data by date, job title or user name. They can also filter data by a date range, and remove or add columns to show the information they want. Once a user creates a Custom Job Log, they now have the choice to export either the "Current View" or the "Complete Log."
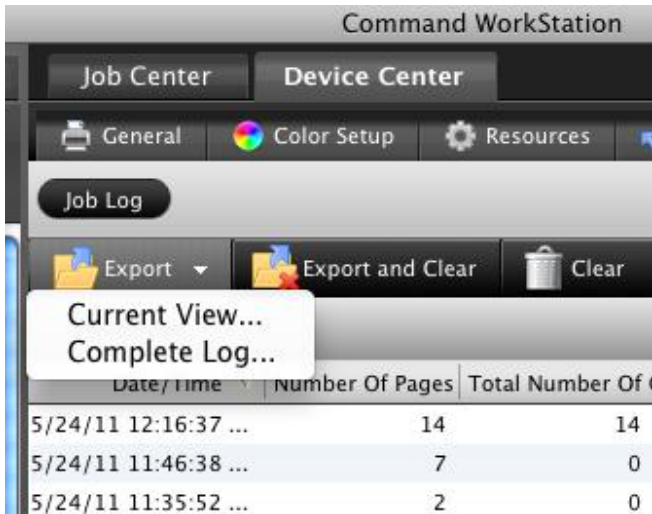

Figure 63: Custom Job Log view

Figure 64: Export current view

Benefits:

◆   *Easier and faster search for specific data in the Job Log.*

Global Units

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

This setting then influences the default units displayed for all range boxes and choices 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 presentation of 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:

*   Job Properties — all items that allow a measurement unit to be specified.

*   Image shift.

*   Custom page sizes.

*   Margins.

*   Trim.

*   Booklet Maker.

*   SeeQuence Impose.

*   SeeQuence Compose.

- Paper Catalog.
- Tray alignment.

Benefits:

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

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 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	QX100 S10	PRO90 S10	PRO80 S10	PRO80BW S10	E100BW S10	E100 S10e
Calibrator	✓	✓	✓	-	-	✓
Job Based Calibration	✓	✓	✓	-	-	✓
Profile Manager for ICC Profiles	✓	✓	✓	-	-	✓
Device Link Support	✓	✓	✓	-	-	✓
PANTONE Calibrated	✓	✓	✓	-	-	✓
HKS, DIC, Toyo Ink Named Color Profiles	✓	✓	✓	-	-	⊙
Fiery Spot-On	✓	✓	✓	-	-	⊙
PDF/X Output Intent	✓	✓	✓	-	-	-
Composite Overprint for Spot Colors	✓	✓	✓	-	-	⊙
Composite Overprint for CMYK	✓	✓	✓	-	-	✓
Optimize RGB Transparency	✓	✓	✓	-	-	✓
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)	✓	✓	✓	-	-	⊙
APPE	✓	✓	✓	✓	✓	-
Fiery Color Profiler Suite	⊙	⊙	⊙	-	-	⊙
Fiery Graphic Arts Package	✓	✓	✓	-	-	-
Fiery Graphic Arts Package, Premium Edition	✓	⊙	⊙	-	-	-

✓ Standard   ⊙ Option   - Not Available   SFM See Feature Matrix

Fiery Color Management Tools

The Fiery color management tools provide accurate color across platforms, applications and all types of media. 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, or 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 has an intuitive and easy to use graphical user interface (GUI).

Automatic, In-RIP Processing for Smoother Workflow

With Fiery servers, color processing takes place only once, in-RIP at the Fiery near the printer — not 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 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 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*.
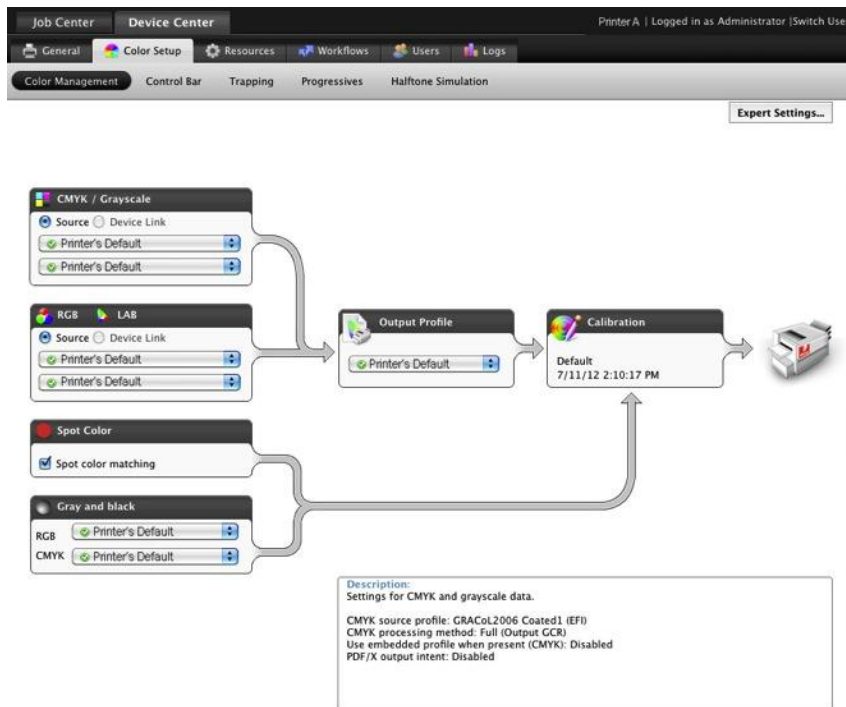

Figure: Color Setup in Command WorkStation

Color Transformations for Accurate Simulations

Fiery color management tools 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's errors with easy user interface.*
- ◆ *Provides excellent color quality for proofs, comps or 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):** Black channel from the original document is preserved. Recommended for proofing.
- **Full (Output GCR):** Black channel from the output profile is use for GCR. Recommended for production printing.
- **Pure Primaries:** Uses selected profile for RGB data.

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 controller corrects for current color behavior of the print engine.

System 10 Calibrator allows the user more visibility into a job's calibration status.
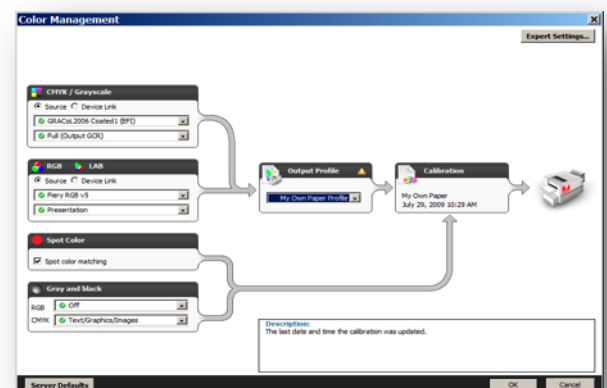
The calibration tool, located in Job Properties, allows users to see details of each calibration set including the date the set was last calibrated. Operators can see the optimal paper brand and media settings for each calibration set, so they can make more accurate choices when setting up a job to print.

Administrators can customize the definition of **calibration** sets to support any paper stock and media settings to meet the needs of the specific print environment.

Calibrator with Fiery System 10/10e

New features have been added to Fiery System 10/10e to make the calibration process more effective, more integrated and simpler to use:

- Easier to calibrate.

- Manage Calibration Sets.

- Calibration Guard.

- Job-based Calibration.

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

In color printing, accurate color is critical. But maintaining consistent color over time — printing the same color repeatedly — is just as critical. Calibration helps print providers maintain that color consistency.

The redesigned Calibrator tool helps operators get the consistent color they want. A simplified user interface makes the calibration process easier to navigate, featuring a wizard to guide users through. Contextual Help is available to explain every choice in configuring and using the System 10 fiery Calibrator

Simplified Calibrator User Interface

The Calibrator user interface is completely new and has been redesigned specifically to separate the different calibration functions in different windows:

- Calibrate — to perform the actual calibration process.

- Manage — for managing calibration sets.

- Preferences — for setup functions.

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

Figure: Calibration user interface with Fiery System 10/10e

Guided Calibration

With Fiery System 10/10e, 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 also now possible to calibrate using any paper type and size equal to or larger than letter/A4.
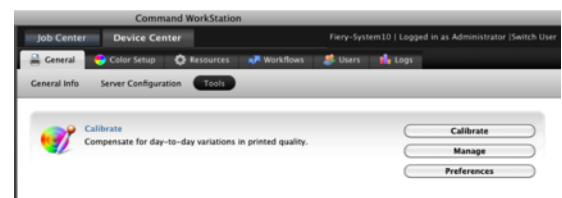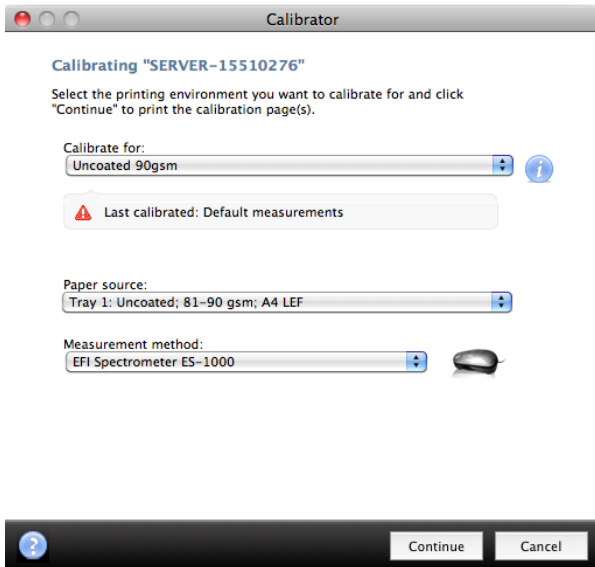
Figure: More flexibility setting up paper preferences

The Calibrate button now launches the Calibrator Wizard to guide users step by step through the calibration process, so even someone with no training can calibrate.
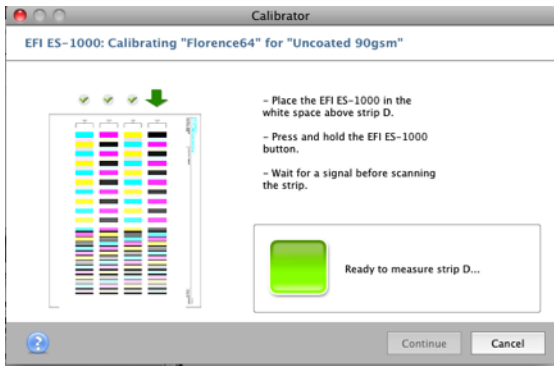

Figure: Calibrator Wizard guides operators through every step of the process

Contextual Help

System 10/10e provides comprehensive information for calibration functions. Each window displays a help icon that provides contextual help information specific to the content in that window.
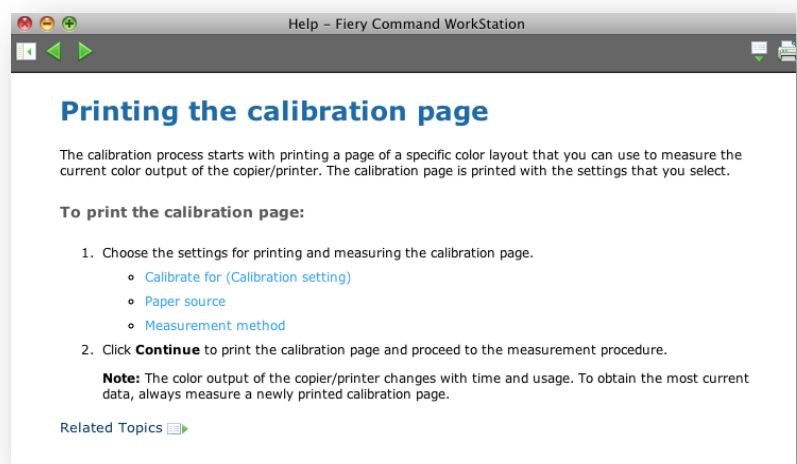

Figure: Help is specific to the content of the window

Any User Can Calibrate

Administrators can increase productivity by enabling any user to calibrate. Calibration is now so simple that operators really need no training to use 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.

Figure: 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, and the entire process is guided.*

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

- *Because Fiery System 10 calibrator is easy for operators, they 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 color response for this combination of print settings are normalized. These new calsets control all variables for how a media is calibrated ensuring consistency for re-calibration in the future.

System 10/10e 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.
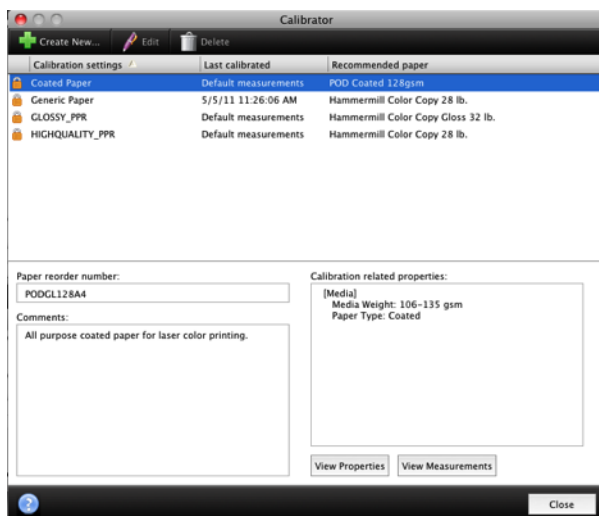

Figure: Manage Calibration Sets in Calibrator

In addition, the Color Profiler Suite is now integrated directly with System 10 Calibrator to create new ICC profiles. The calibrator wizard leads the user directly into 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 the right settings are in use in Job Properties, since the user already selected paper properties in Calibrator.
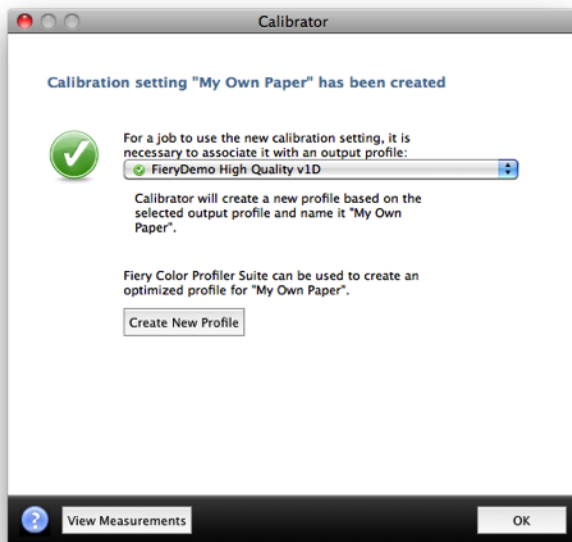
Figure: Create new profiles in Color Profiler Suite without leaving the Calibrator interface

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 System 10/10e has incorporated a "Calibration Guard" to provide calibration status, warnings and alerts to require the use of Fiery calibrations. If a calibration has expired the Calibration Guard can prevent jobs from printing ensuring color consistency in every job.

The new Calibrator Preferences include the settings to activate the 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 timeframe 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.
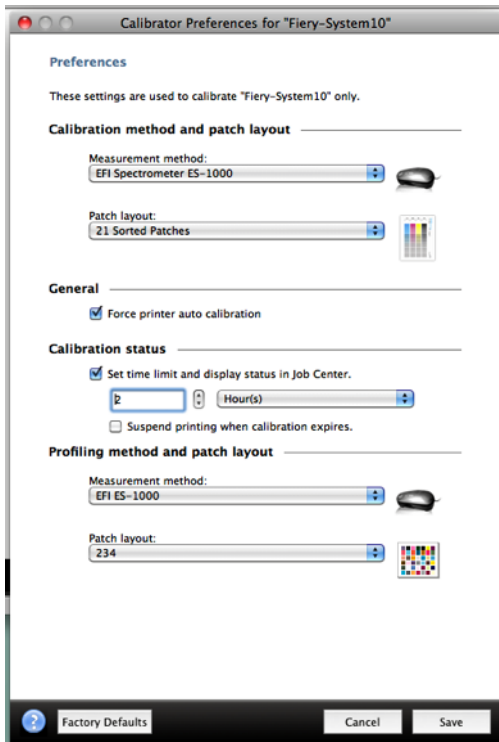
Figure: Calibrator Preferences

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 calibration is current, a yellow triangle warns the calibration time limit is near and a red triangle indicates that calibration has expired. Fiery System 10/10e makes it very easy to visually see and determine the calibration status of jobs on the Fiery server.

Integrated Color Profiler Suite Profiling Method and Patch Layout

If Fiery Color Profiler Suite 3.x or newer is installed on the machine running command Workstation, the patch set and device to used 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 they have created a new calibration set in. By doing this as one process user error is reduced since the proper calset is loaded when profiling patches are printed and then linked to the resulting ICC output profile automatically when it is loaded on the Fiery. Because the wizard configures the entire expert profiling settings in Color Profiler Suite, even entry-level users can make calsets and ICC output profiles to get top quality color on any paper.

Benefits

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

- *Greatly increases user success level since they do not have to be expert at how to load a certain calset when profiling; this is the point where most users fail with other Profiling tools that are not integrated directly with the Fiery*

- *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.*

Figure: Calibration Guard in Calibrator interface

Figure: 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 a non-standard media because most users do not routinely calibrate special media. To calibrate for a specific job, users simply select the job in the Hold Queue and select Calibrate. 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.
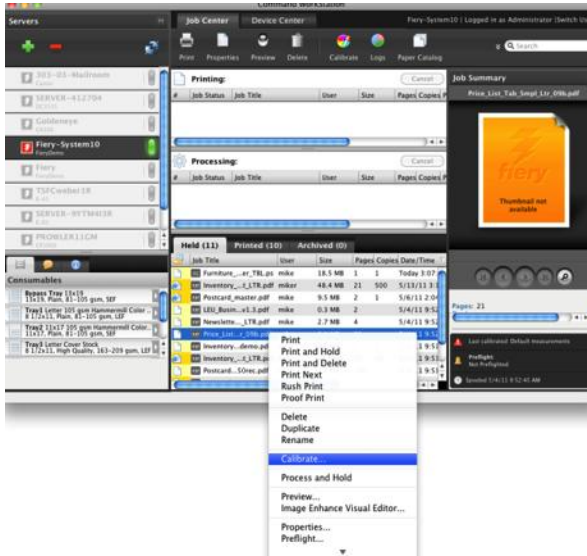

Figure: Starting job-based calibration from Job Center

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.*

PDF/X Output Intent

PDF/X standards enable graphic designers or document creators to distribute standardize PDF files that will reproduce consistently when output on different print systems. The Output Intent tag in PDF/X lets users embed the ICC profile for the final color appearance they want 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 to convert all colors to output intent standard appearance such as GRACoL, SWOP or ISO.

Fiery servers are the only color RIPs on the market that have the ability to honor embedded intents in the PDF/X files.
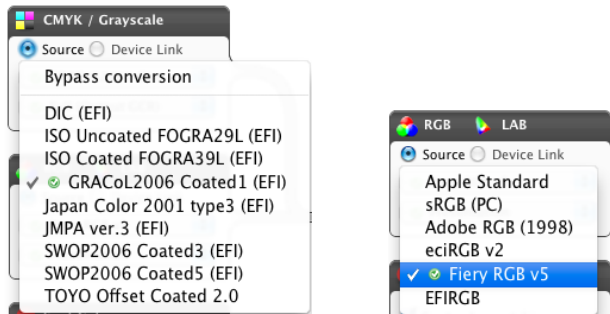
Figure: CMYK and RGB source color spaces on the Fiery

Benefits:

◆ *Reproduces color output as the designer intended.*

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

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 check box "Use embedded profile when present" specifies whether embedded color profiles should be used or ignored if they are present for RGB and CMYK sources.
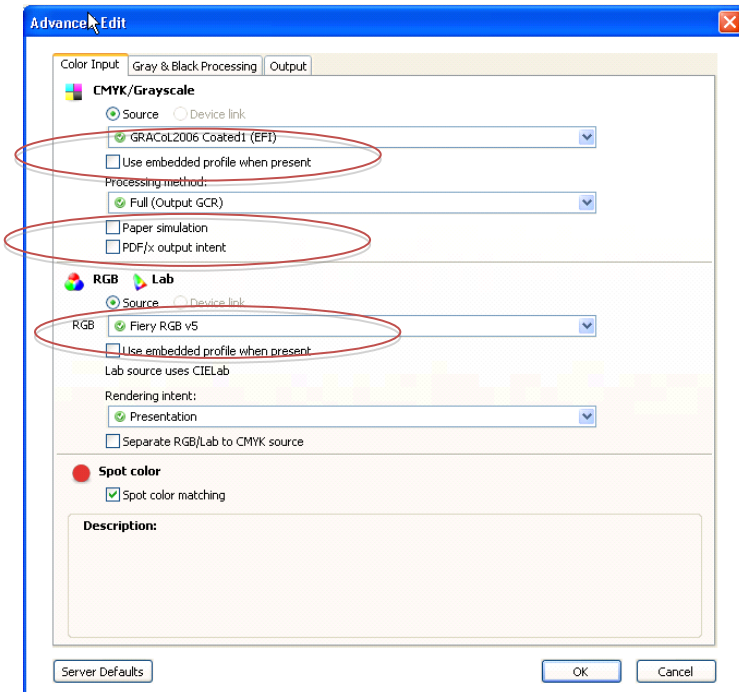

Figure: Fiery Expert Color settings for use PDF/X Output Intent and/or embedded source profiles

Benefits

- *Fiery servers give flexibility to handle 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*

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 their color conversions between a color space and the Fiery-driven printer and allows the user to dictate the exact color transformation and subsequent output quality they'd like to generate, by passing the Fiery's own color management techniques. It enables 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.
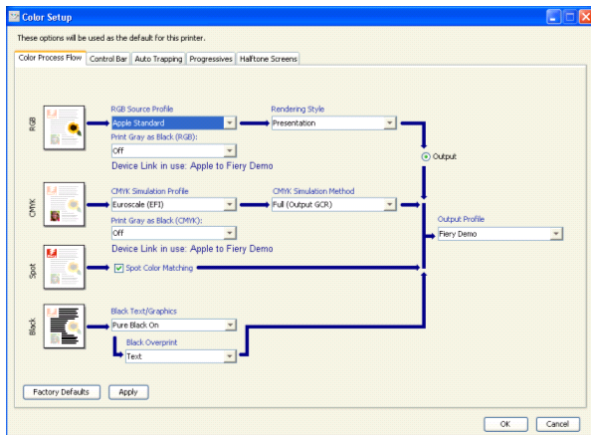
Benefits:

- *Gains complete control over color management space. Achieves a controlled and secure simulation preserving pure colors and levels of UCR and GCR.*
- *Provides toolset for users who have predetermined color output needs and do not want Fiery color management to modify it in any way.*

Pantone Calibrated

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 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-1000 spectrophotometer. For greater control over spot color matching, choose Fiery Spot-On. To guarantee 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-calibrated Fiery Servers Provide State-of-the-Art PANTONE Colors

Pantone-calibrated Fiery servers automate the color process from job submission to output. This automation eliminates guesswork and costly re-work 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 and eliminates 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 re-use 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 Color Libraries and Color Reference Charts

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

- PANTONE Coated.
- PANTONE Uncoated.
- PANTONE Matte.
- PANTONE Metallic Coated.
- PANTONE GOE.
- PANTONE Pastel Coated.
- PANTONE Pastel Uncoated.
- PANTONE PLUS.
- PANTONE FASHION + HOME.

PANTONE PLUS SERIES libraries

The new PANTONE PLUS SERIES libraries preserve all of the current PMS colors of the PANTONE MATCHING SYSTEM – which it replaces – while adding a host of contemporary colors for greater design flexibility. PANTONE FASHION + HOME series is intended for design and textile applications on a global basis and is fully supporter in Fiery System 10.

When working with PANTONE colors, it may be crucial to know what the final output color will look like from a given printer. With each Fiery server, operators can download and print a 19-page PostScript file of Pantone swatches for each installed PANTONE library. In addition, a user can print RGB, CMYK and PANTONE color charts directly from the Fiery server.

To discover more about the PLUS SERIES follow this link http://www.pantone.com/pages/pantone/pantone.aspx?pg=20873&ca=1

Fiery Spot-On

From corporate branding to high-level color matching in a commercial printing setting, 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 creating a color-management nightmare and the misuse of color naming and callouts. Any of these can lead to bottlenecks in prepress and proofing.

With Fiery Spot-On, users can achieve accurate color matching for logo colors and other spot colors in an automated, application-independent workflow. This feature allows users to manage named colors on the Fiery server, including all PANTONE, HKS, Toyo and DIC libraries. This feature converts named colors for popular color systems directly on the Fiery server. In addition, operators can custom-create named spot colors.

Fiery Spot-On helps create accurate color matching for corporate and other spot colors more easily and quickly than competing color editors.. The powerful Spot-On utility takes the guesswork out of color matching because it offers an intuitive interface that makes it faster and easier to define or modify spot colors, and it eliminates the time-consuming need to look up CMYK values.

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 having to 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:

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

- Lets users create and manage new color libraries.

- Captures spot colors using an ES-1000 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:

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

- Establish company-wide RGB color palettes for applications like 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, easier to maintain and requires less user training – while still providing the consistent, accurate color 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 in order to let users 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, users can quickly associate a color with name of 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 the user to manage custom colors in an organized fashion. Commonly used customized color names can be grouped in a list with specific list names.

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-1000 spectrophotometer is supported for measuring samples or swatches of a new spot color 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 System 10/10e 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.

Fiery Spot-On Enhancements

With Fiery System 10/10e, the Spot-On Color Search Pattern can print on any paper size. Previously, printing was limited to letter/A4 and tabloid/A3.
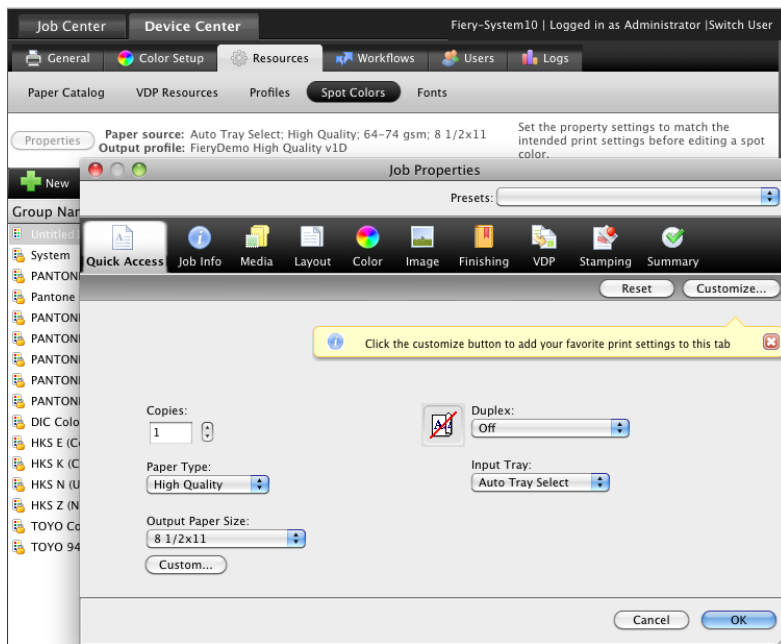

Figure: Use Job Properties to define the specific paper to use for printing the Color Search Pattern

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.*

Optimize RGB Transparency

Transparencies are part of the PDF language, but PostScript does not recognize such definitions. Therefore, when using the CPSI print path, 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, by rendering and accurately printing the resulting colors. It only applies to PDF files printed through the CPSI print path. 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.
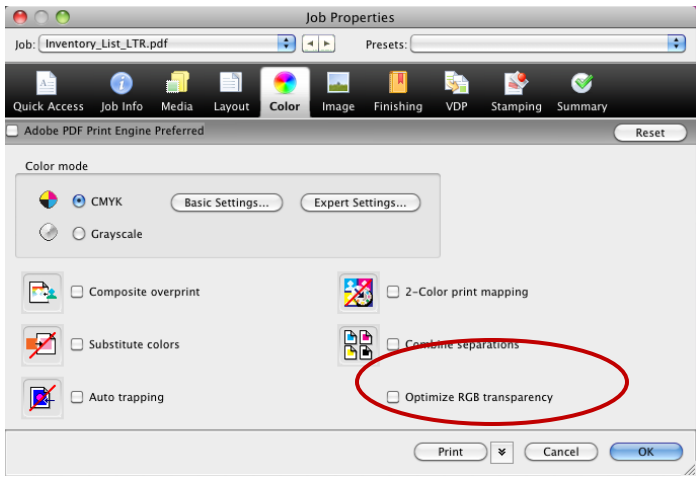

Figure 46: "Optimize RGB transparency" box in the Color Tab of Job Properties

Benefits:

◆ *Increases color accuracy when printing PDF files through CPSI processing path.*

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 either 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 this workflow the native application calculated the overprints as well as generating color separations. This creates large PostScript data streams that are network intensive file transfers as well as color managed before being printed by Fiery. This is not an optimal workflow for processing color and has challenges supporting new design features like transparency. This process produced unsatisfactory print results, was inconvenient and took four times longer than the submission of a composite file to the RIP.
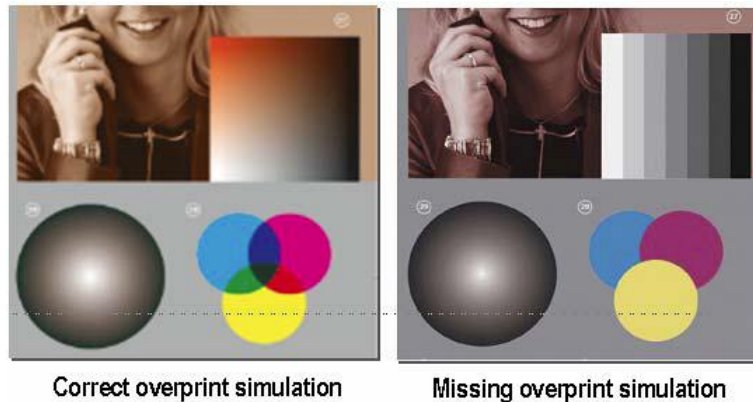
Correct overprint simulation   Missing overprint simulation

Fiery's Composite Overprint feature enables overprinting only for objects that are specified to overprint in composite PostScript and PDF files. Several important feature benefits are a smaller file size for network transfers, overprint commands specified in source applications like QuarkXpress and Adobe InDesign are honored, color is managed one time by the RIP and overprinted objects in separated data will also be overprinted in composite data for matching overprint results.

Enable this feature for the 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, K) per page when Composite Overprint is enabled. When Composite overprint is disabled, there is no practical limit. Files that print PANTONE charts exceeding 250 colors on a page will error 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 a RIP error.

System 10 supports 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 then 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 what can be previewed in Adobe design applications the customer's documents will accurately print overprinted objects as they are displayed in the native design application 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. APPE continues to apply overprint to colors exceeding 31 colors with a non-deterministic algorithm. Comparing printed results from CPSI and APPE with a test file containing 64 overprinting spot colors is expected to show differences regarding how APPE applies overprint and knockout when compared to the result from CPSI. If transparent objects are on the page then APPE will not accept a group of overprinting 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 then 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 separated files over the network.*

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

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

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 get professional-level results without extensive knowledge of trapping rules. The feature accomplishes this by automatically trapping adjacent colors to prevent the paper from showing through when the print engine's color registration is not aligned.

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 wells as trapping pixels within a single image. The Fiery Auto Trapping feature is not a simulation of trapping on other devices.
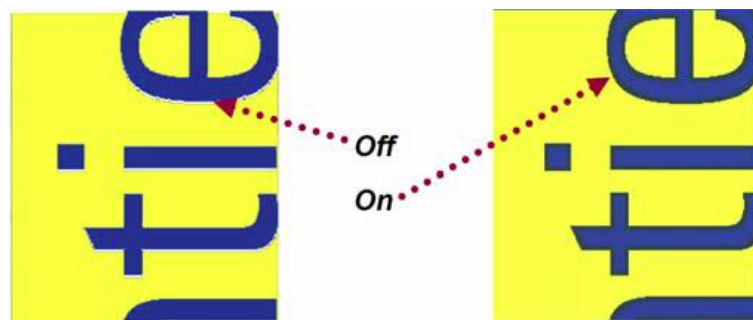
Image Settings

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.

- In addition, the following items are supported:
    - *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 to 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.
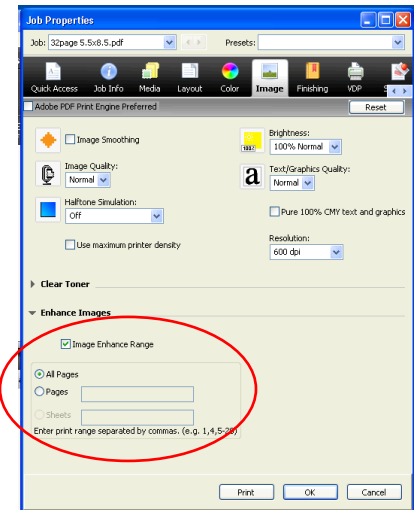
Before Image Enhance   **After Image Enhance**
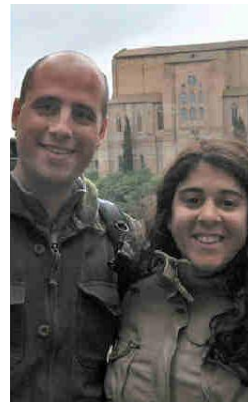
Fiery Image Enhance provides the greatest value in environments with the following scenarios:

- 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 to go back to the submitter and to get a 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 up front without wasting any production time or pages.

Benefits:

♦ *Makes quick and easy corrections for photographs and all the images in a job with no 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 a 100% color is used in the image. Since 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

Benefits:

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

Black Custom Screening

When a digital printer is used to proof for offset, it is useful to be able to simulate the screening of the job, even if only a black channel is involved. For Fiery servers connected to a black-and-white device, users now have the option for halftone screening for the black channel. Operators adjust the screen angle and line-per-inch (LPI) values for halftone screening, as well as controlling how the system applies screens when processing jobs.
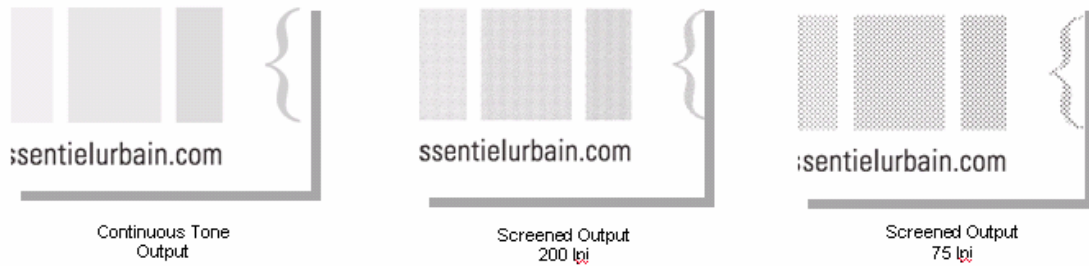
Benefits:

 ◆ *Minimizes the banding effects in some objects containing a continuous gray color.*

 ◆ *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 wells as gradient meshes. Smooth shades are device independent and drawn with the optimal blend for a given resolution and render more efficiently that simulating a blend with contours. 12-bit Smooth Shading reduces the visible appearance of steps that occur when blends cover large distances by blending with 12-bit levels (4096) instead of 8-bit (256) levels of shading. The enhanced results are easily seen in blends that cover large distances and have low contrast between beginning and ending colors.

Benefits:

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

Maximum Printer Density

The Use Maximum Printer Density feature enables printing of all the primary inks (C, M, Y, K) at an engine's maximum density. The feature allows the use of a larger available gamut, resulting in punchier colors on printers that are performing beyond the average. This feature also allows highly saturated colors to bypass calibration, so color results may vary over time, depending upon 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
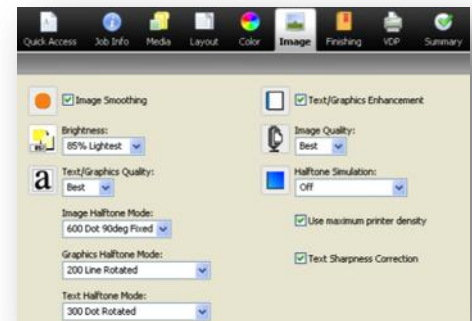
valuable for the photo-printing market because it leverages a printer's maximum gamut to produce the most vibrant colors.

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

The Use Maximum Printer Density feature reaches the same high density levels as ColorWise Off, but does not disable 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 without the need for an external profiling solution.*

Fiery Image Enhance Visual Editor

The new Image Enhance Visual Editor is an easy interactive Command WorkStation 5.3 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 enhancement, 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**

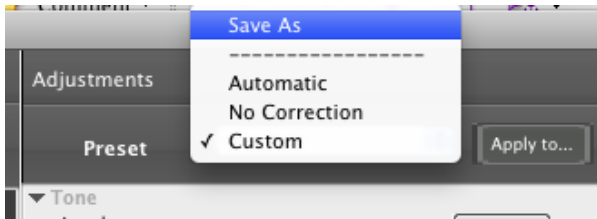Users may save manual image correction settings as a preset and apply it to other images, pages or documents.

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.
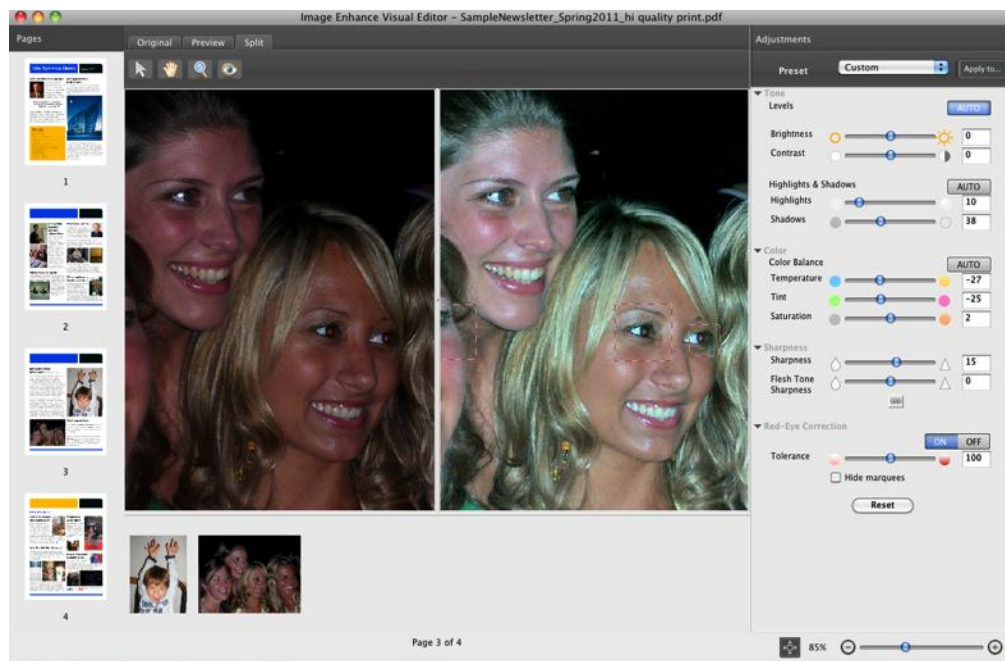

Figure 2: Users can select additional red-eye regions to correct or deselect areas that don't need correction

Once an operator saves image-correction settings from Image Enhance Visual Editor in PDF files, they 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 natural images only 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 makes it the most complete toolset of this type in today's market.

It can be used to improve image quality of many types of applications such as office documents, photobooks 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 since operators do not need to return to the originating software application to correct images.*

- *Saves money since expensive image retouching and layout software is not needed at every workstation.*

- *Correct saturated colors without harming fleshtones*

- *Definition control allows localized sharpening or smoothing*

- *Allows users to fix images late in the production process when the job is already on the Fiery Driven engine.*

- *Makes it easy for any operator to enhance images with automated tools.*

Fiery Graphic Arts Package

One core component to the success of today's graphic artists is the use of digital workflow solutions that span multiple vendors and a wide variety of production technologies. EFI solutions are based on a digital production workflow with open standards, rather than proprietary closed solutions. With Fiery Graphic Arts package comes the opportunity for EFI to offer increased quality and productivity for graphic artists and their customers.

A cornerstone of the design and professional graphics community, Fiery servers deliver exceptional control over the color printing process. The Fiery system combines unmatched color output and extensive variable data printing support, which places it at the forefront of the next generation of digital color servers. The Fiery Graphic Arts Packages serve as key value-added components to the system, and include a number of production automation and workflow management features that further support the seamless integration of digital and offset workflows.

The following features from the optional Graphic Arts Package are now built in and available as standard features in Fiery external servers based on System 10/10e:

- Soft proofing – provides color-corrected previews of RIPped jobs so users can verify all file elements before sending them to a proofing device, or to production — or even eliminate the need to produce hardcopy proofs. This capability shortens the approval process, reduces shipping costs, and ensures document integrity.

- Paper simulation – delivers more accurate proofs that better manage customer expectations by simulating the color appearance on the actual paper that will be used in production.

- Halftone simulation — offers greater control over halftone generation on halftone and continuous-tone print devices supported by Fiery technology.

- Image Enhance Visual Editor — a plug-in tool for adjusting image colors in a job without the need to open the file in the originating application. This feature provides real-time image editing with visual feedback and eliminates the need for additional image-editing software.

- TIFF/IT Hot Folder filter — allows input of TIFF/IT files to the Fiery server through a Hot Folder to seamlessly integrate into graphic arts workflows and easily transfer work from one platform to another based on proofing workflow and other production criteria.

- Unlimited Separations — combines pre-separated PostScript jobs into a composite color print. With support for unlimited separations, print providers can incorporate multiple PANTONE or custom colors into a job.
  For more information go to www.efi.com/gap.

Graphic Arts Package	Graphic Arts Package, Premium Edition

SOFT PROOFING	EFI ImageViewer
	
	Local and remote soft-proofing and color-editing capabilities for rasterized jobs.
	
	The ideal tool to be able to view effects of trapping, screen moiré patterns, color profile changes, etc.
	
	Export PDF for remote softproofing
	    – ***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 SEPERATIONS	UNLIMITED SEPARATIONS Combine up to 250 colors from a pre-separated file
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.

Graphic Arts Package	Graphic Arts Package, Premium Edition
	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 only know the spot colors at a later stage in the document approval process.
IMAGE ENHANCE VISUAL EDITOR	Image Enhance Visual Editor

Fiery Graphic Arts Package Standard with Fiery External Servers

These features from the optional Graphic Arts Package are now built in and available as standard features in Fiery external servers based on System 10.

- 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 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 pre-separated PostScript jobs into a composite color print. With support for unlimited separations, customers can incorporate multiple PANTONE® or custom colors into a job. For more information go to www.efi.com/gap.

Benefits:

- *More integrated graphic arts features provide higher color quality and increased productivity.*

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 application places a high emphasis on color excellence and precision. They also focus on control of output quality, repeatability, consistency and the ability to meet known industry standards and accurately reproduce the characteristics of other output processes. They 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. The premium edition 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:

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. 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.

In System 10/10e, Graphic Arts Package, Premium Edition also includes a number of other features useful to different types of professional print organizations:

- Fiery Image Viewer.
- Control Bar, including Fogra Media Wedge.
- Postflight.
- Preflight.
- Integrated Altona Test.
- 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 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 in 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 profile.

Key functions and features include:

- Color adjustment on a per page basis.

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

- Generate softproof PDF: Exports low-resolution raster file in PDF format for off-line 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 multi-page 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, etc.

- Use to preview jobs without wasted clicks.

Zoom at 100%

Dot level preview-Zoom at 170%

Max zoom= 3200%
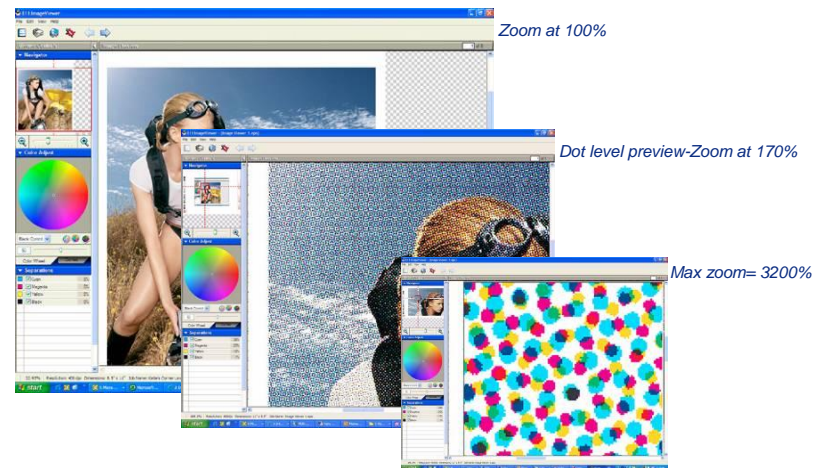
Benefits:

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

Fiery ImageViewer for Black and White

The ImageViewer for Black and White is an optional plug-in to Fiery Command WorkStation application for Fiery servers driving black and white printers. It lets operators 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 for their 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.
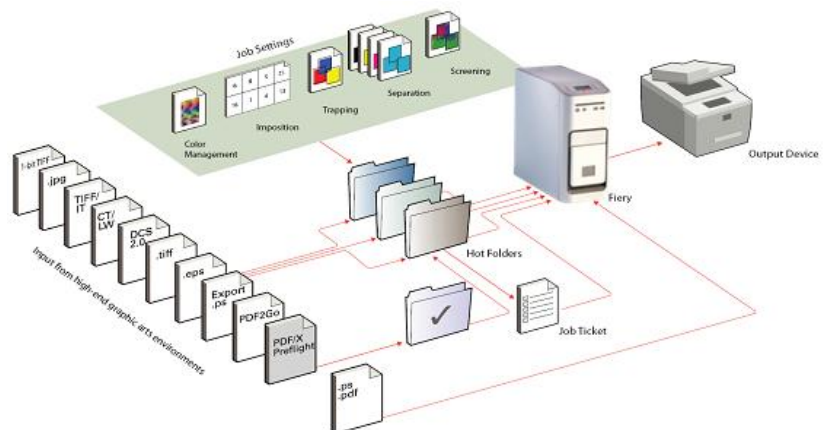
Benefits:

◆ *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 by 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:

Filter	Description
DCS2.0 TO POSTSCRIPT	Converts DCS 2.0 format to PostScript. This plug-in accepts the following DCS 2.0 formats: Single/Multiple file DCS, No composite. Single/Multiple file DCS with grayscale composite. Single/Multiple file DCS with color composite. The output is pre-separated postscript, one separation per page.
TIFF/IT TO POSTSCRIPT	Tiff/IT is a file format used in Graphic Arts environments for transfer of final print job data (often pre-screened) from one print platform to another. This filter converts TIFF-IT to pre-separated postscript, one separation per page.
TIFF TO PDF	TIFF is a flexible, platform-independent file format used in graphic arts environments and for high-end graphics applications. This filter accepts all TIFF files up to TIFF 6. The filter preferences provide the user with options for scaling and positioning of the output.
1-bit TIFF (engine specific)	1-bit Tiffs are used in certain prepress environments when there is a need for fast output and predictability. 1-bit TIFFs are considered the equivalent of digital film because they are locked, pre-screened files that contain all the information necessary for printing the file including dot size, and screen resolution. The ability to print 1-bit Tiff in a Fiery driven device provides users with the ability 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 of the output.

EXPORT PS TO PDF	The ExportPS file format is a PostScript raster output created by Creo's Brisque workflow. Hot Folders: ExportPS filter processes the ExportPS file by rendering and re-sampling 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 of 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 re-sampling 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. A color must be defined as CMYK, spot or Device Media and Trim. Art Boxes must be defined. Trapping must be indicated as on or off, and the intended printing condition, such as SWOP, must be defined via output intents operator. 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. Typically, it takes a lot more time to correct a problem once production has started. Interrupting a job to make corrections can waste valuable time and resources. These are reasons why 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 if 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 if 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:

- Fonts.

- Spot colors.

- VDP resources.

- Hi-res files.

- Hairlines below threshold.

- Overprint.

- PostScript errors.

Preflight also reports on:

- PDF Document Security.

- Page size(s) and page boxes (e.g., trim, media, crop, etc.).

- Color spaces.

- Existence of transparency.

- Flatness.

- Image compression.
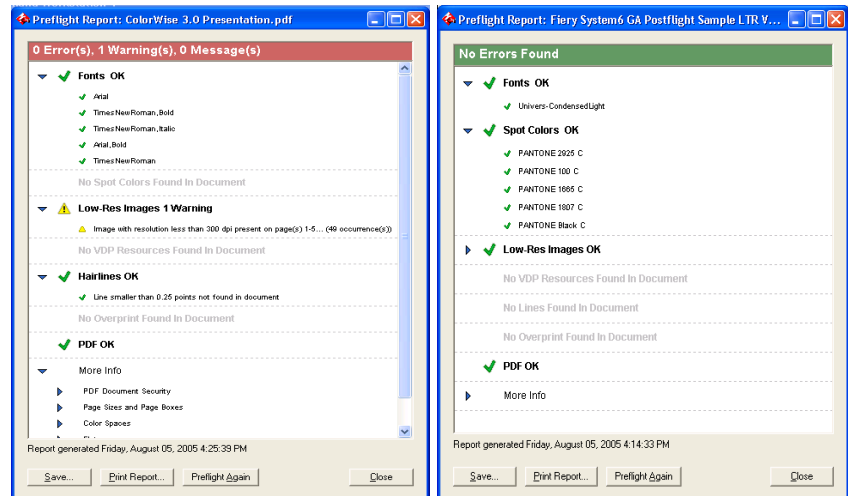
Benefits:

◆ *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 pull 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

Control Bar

A color control bar is common to 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 capability, precision and consistency 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.
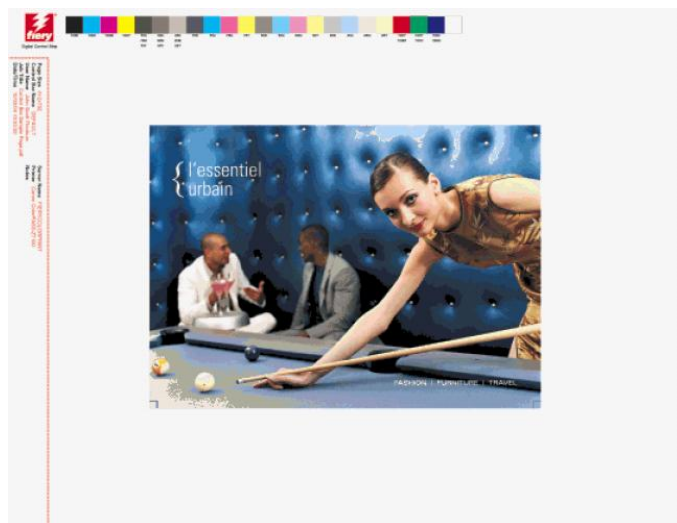
Figure: Control Bar displayed at top of page

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 he 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 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-1000 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:

- Width.

- Color reduction.

- Shape.

- Types of object 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		By selecting the checkbox, 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.

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 the final press run will have on a proof. Consider the noticeable difference between "newsprint" and "bright white" paper. The Paper Simulation with 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-1000

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 System 10/10e integrates the use of an ES-1000 spectrophotometer into the user interface of the Paper Simulation feature. The ES-1000 reads the white point value of the paper and automatically populates the L*a*b values.
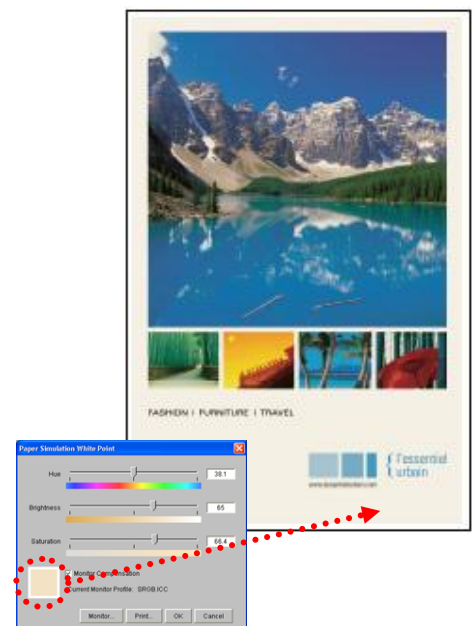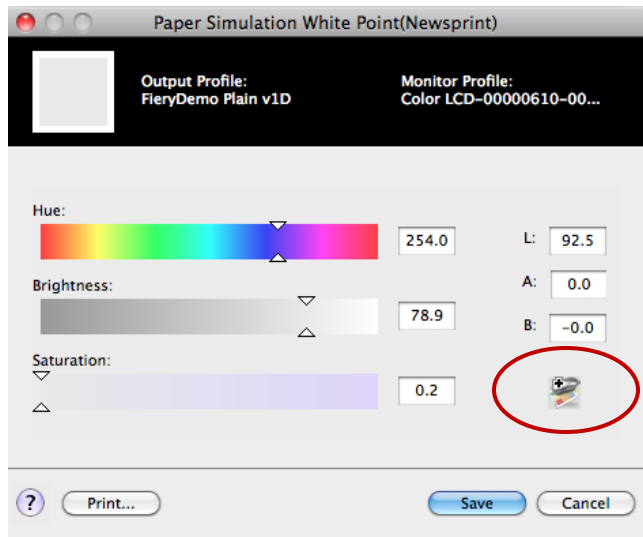
Figure: ES-1000 is used to measure the media white point

In addition, the feature:

- Lets he user 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 paper white other than 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 explains what color spaces are used in the job and what job options affect those spaces. The report also provides information about the printing environment such as calibration date and time, and calibration method. Users may also print a test page to verify the condition of the printing environment.

Operators can easily use PostFlight from the EFI Driver.

Original | Color-coded Post Flight image | Post Flight printed report
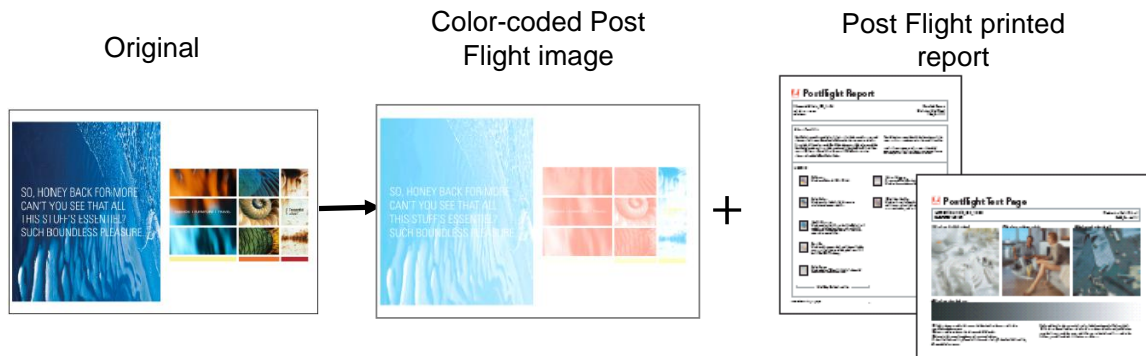
Benefits:

♦ *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.*
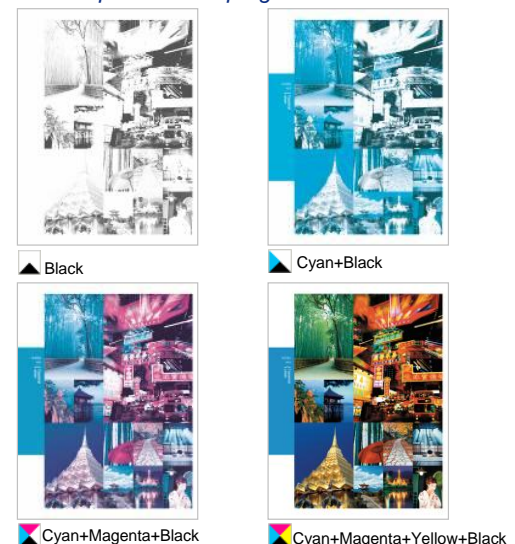
Progressives

Progressives refer to printing variations of a multi-color document, where pages are printed using anything from one to all the available color channels in a printer: C, C+M, C+M+Y, and any 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 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 plates relative to each other, and see the color-separations individually to diagnose specific imaging problems and develop solutions.
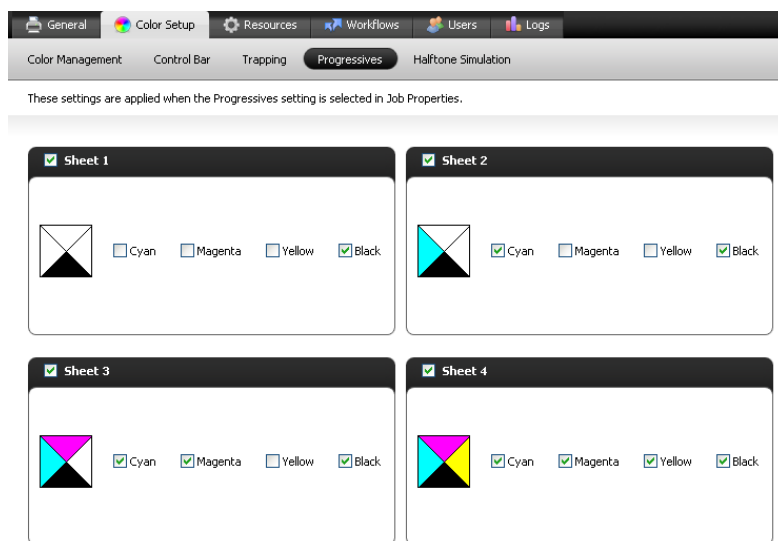
Color separations as progressives

▲ Black

▲ Cyan+Black

◆ Cyan+Magenta+Black

◆ Cyan+Magenta+Yellow+Black

Benefits:

- *Progressives are useful for non-color-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 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.
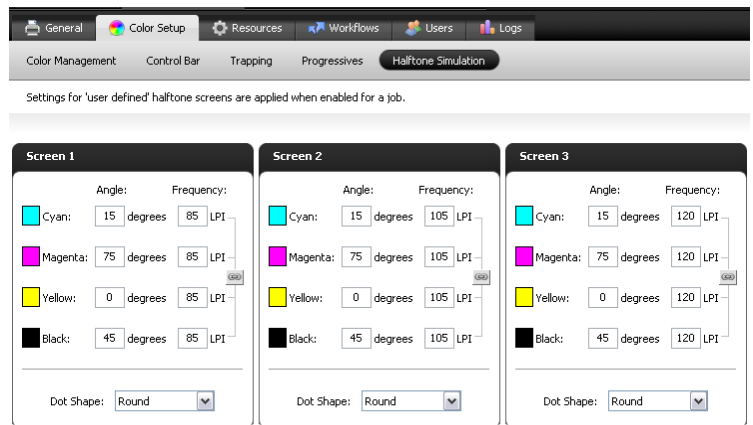
Benefits:

- *Combines with the Paper Simulation feature to allow users to more 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, while 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 where 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 needing the designer to modify the original job.
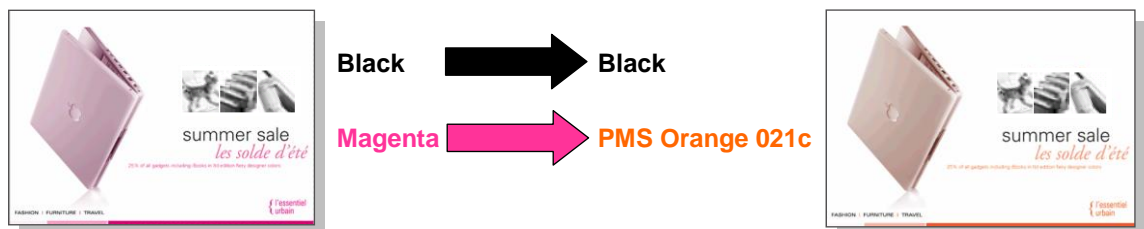
Benefits:

◆ *Ensures the best color rendering by using Fiery Spot-On when selecting the two final spot colors.*

◆ *Allows for last-minute decisions to be made about spot colors.*

Fiery Color Profiler Suite 3.1

Fiery Color Profiler Suite

Fiery Color Profile Suite is an integrated option that provides complete 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, go to www.efi.com/cps.

Fiery Color Profiler Suite 3.1 Integration

The Color Profiler Suite is now integrated into the Fiery Command WorkStation 5.3 user interface. This integration gives users quick access to profiling tools directly from the Command WorkStation interface and improves the usability of Color Profiler Suite.

Tight integration of the Command WorkStation print job management interface with Color Profiler Suite enhances productivity for color-critical users. The ability to create profiles right where they are needed in Command WorkStation saves the user time and makes it more likely they will create new profiles when they need to.

Color Profiler Suite Integration with Profiles

Before System10/10e, users created, saved and exported profiles within Color Profiler Suite, but in order to use the profiles, they had to upload them to the Fiery server from Color Profiler Suite. Now users can create and edit profiles directly from the Command WorkStation Profiles tab.
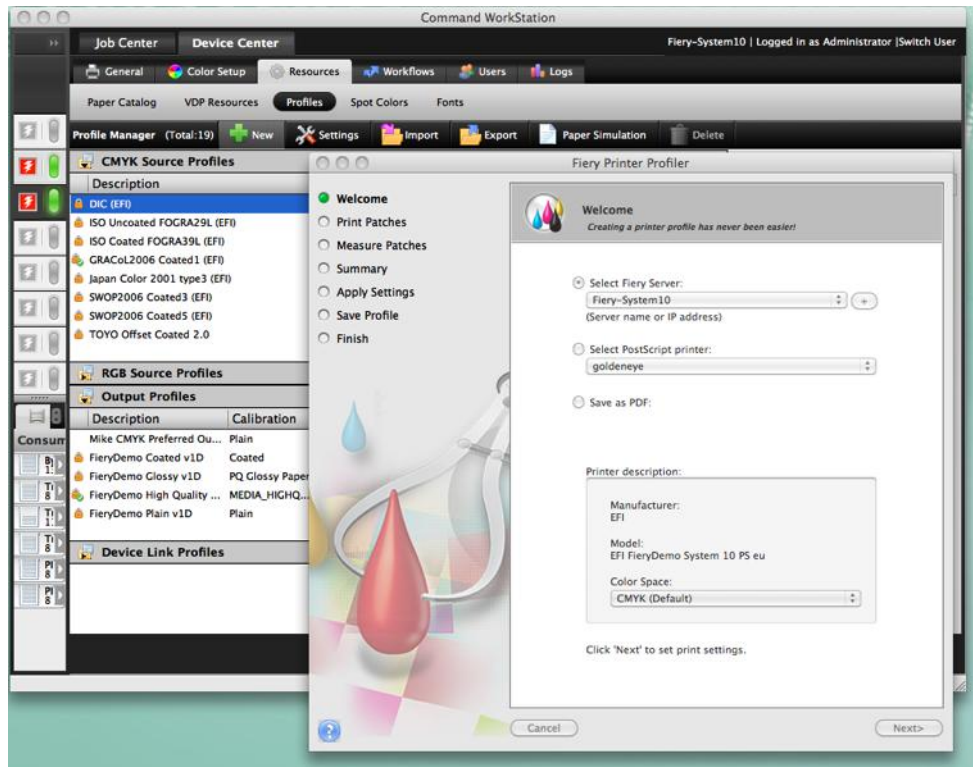
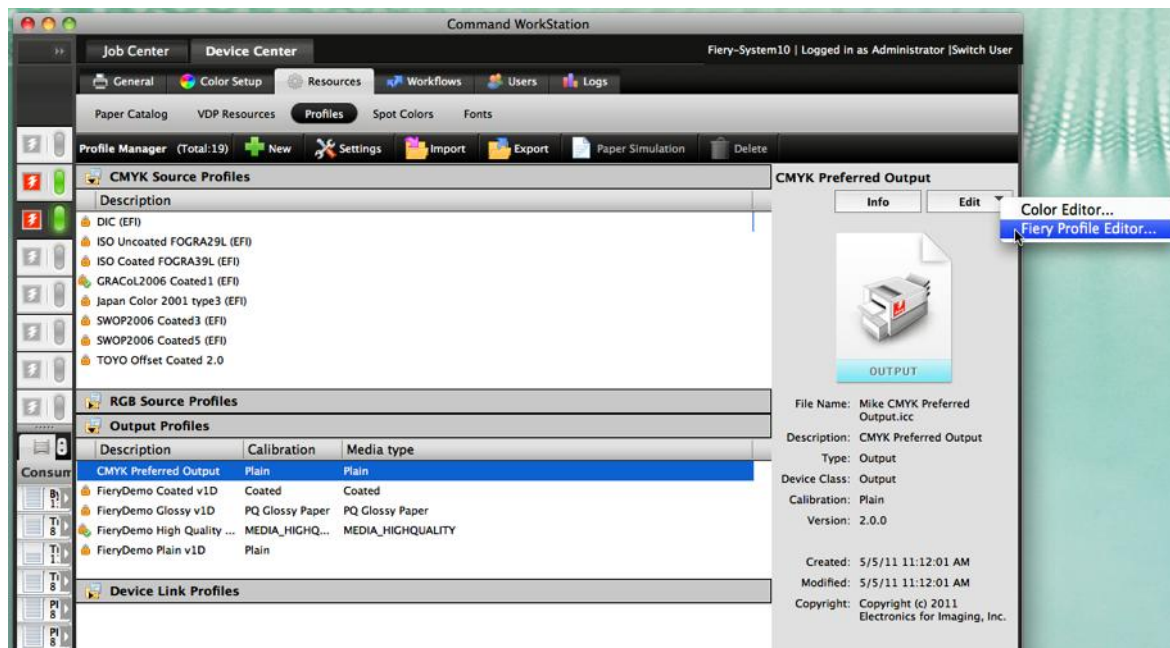Figure: Selecting "New" launches the Color Profiler Suite printer module

Figure: Selecting a profile and Fiery Profile Editor from the Edit pull down menu in the Command WorkStation Profiles tab launches the Edit module of Color Profiler Suite
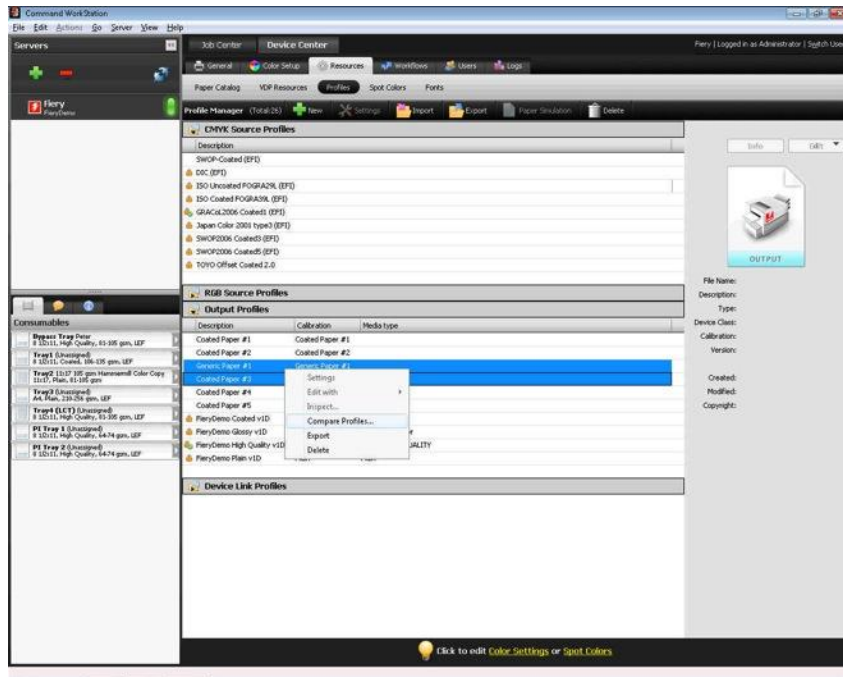
Figure: Preview and compare profiles using the Inspector module

Color Profiler Suite Integration with Calibrator

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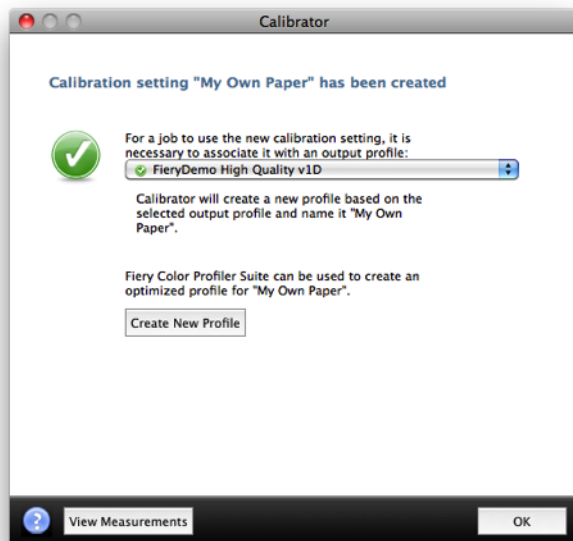
Color Profiler Suite Integration with Spot-On

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.
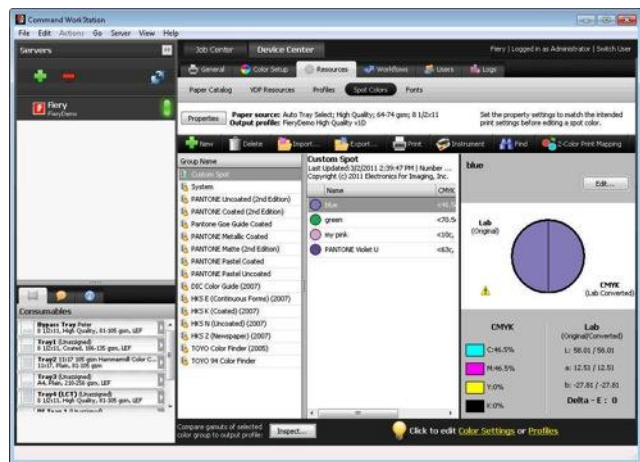
Figure: See how closely spot colors can be printed using the selected output profile

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.
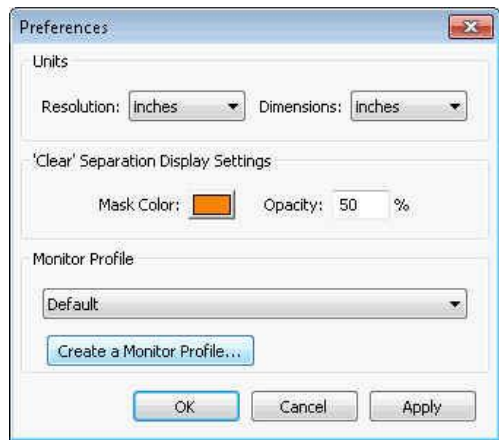
Figure: Create monitor profilers without leaving ImageViewer

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.
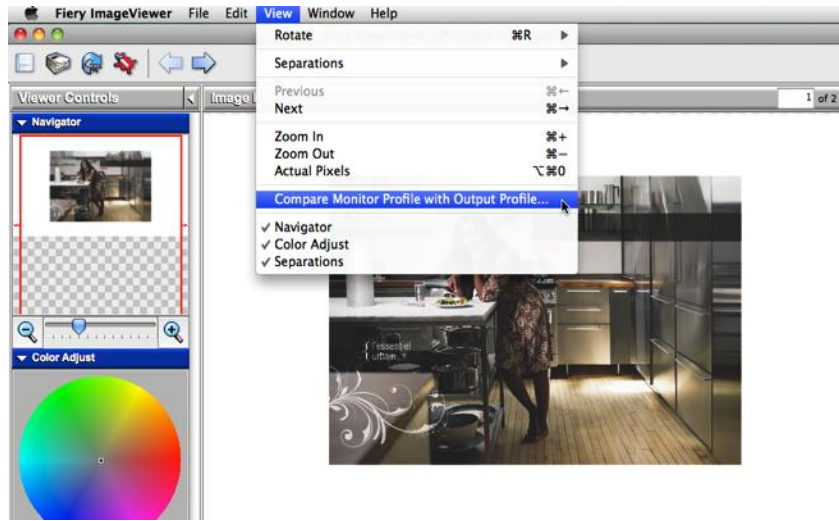
Figure: Compare monitor and output profiles

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 they are needed.*

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

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

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, so users can 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 get 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.

As for Corporate environments, EFI networking technologies allow users to print and manage Fiery servers from the most popular network environments. Fiery System 10/10e 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	QX100 S10	PRO90 S10	PRO80 S10	PRO80BW S10	E100BW S10	E100 S10e
Fiery JDF	✓	✓	✓	✓	✓	-
Adobe PDF Print Engine	✓	✓	✓	✓	✓	-
MS Windows 7 Professional FES x32/x64	✓	✓	✓	✓	✓	-
Job Submission						
Direct Mobile Printing	SFM	SFM	SFM	SFM	SFM	SFM
PrintMe Cloud Printing	SFM	SFM	SFM	SFM	SFM	SFM
Scanning						
Fiery Remote Scan	✓	✓	✓	✓	✓	✓
Fiery Bridge	✓	✓	✓	✓	✓	✓

✓ Standard   ⊙ Option   - Not Available   SFM See Feature Matrix

For Security related features refer to the Fiery Security whitepaper

Integration to Print Management Information Systems and Prepress Solutions

In high-volume businesses, every resource, minute and penny counts. Fiery job definition format (JDF) technology helps print providers use their workforce more wisely, shorten lead times and produce more work profitably by automating and integrating their business and print processes. Fiery JDF technology eliminates manual entry steps and streamlines job workflow from submission to output, letting job information flow through systems faster and more efficiently. By working more quickly and wisely, shops increase their productivity and profits and decrease overhead costs.

For more information refer to www.efi.com/fjdf.

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 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

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

See 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 the need for operators to enter job and production data repetitively, 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.
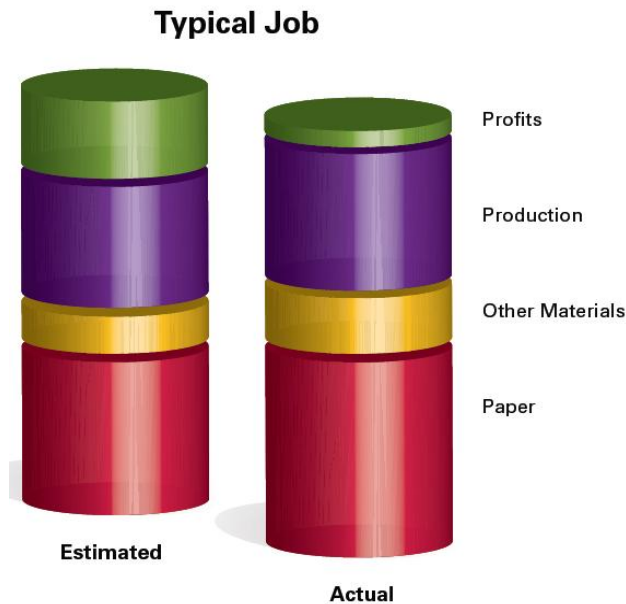

Figure: Job production component breakdown.

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 has both offset and digital printing solutions, driven by prepress systems such as Agfa Apogee and Kodak Prinergy, 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. Jobs can be managed with a common user interface for multiple devices and can be automatically routed to the most cost effective devices.
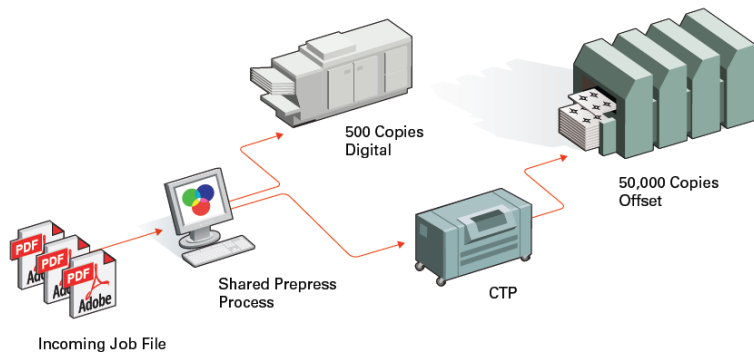
Figure: Hybrid Workflow Example.

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.

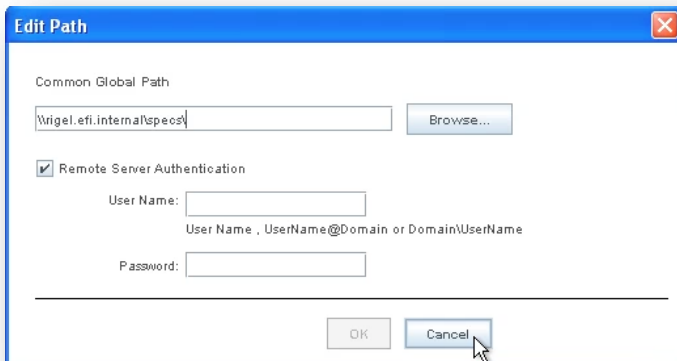## MAXIMIZES ROI THROUGH INTEGRATION AND SCALABILITY

Fiery JDF technology not only makes print production business more efficient, it also opens new doors for future expansion by working with many third-party solutions and by using JDF industry standards with non-proprietary 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 1.1

The Fiery JDF 1.1 update provides enhancements for better MIS integration. The enhancements include:

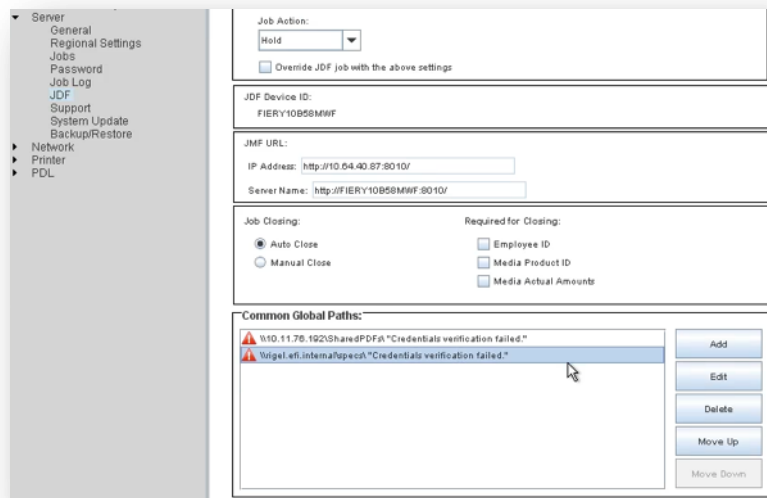- Common Global Paths – provide a simplified way to work with Windows SMB path, especially for MIS integration. When the workflow receives a JDF that has a file specification reference to a PDF or some other file living on a Windows SMB path, users now can save it with user name and password as a common global path. This functionality is similar to the global path for VDP content.
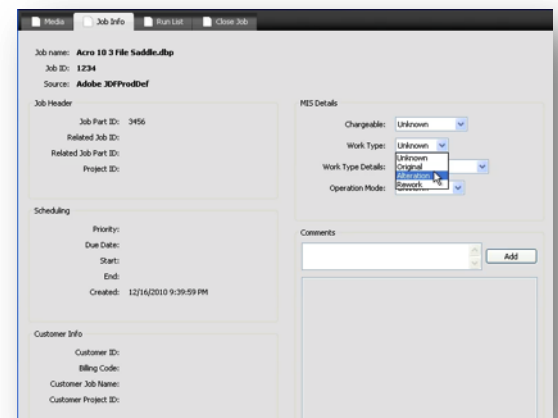
- JDF Settings (from the Command WorkStation 5.3 user interface) – new functionalities are added to each tab.
  - *Media Tab – Media selection enables the Fiery server to map the selected JDF media setting into the existing Fiery Paper Catalog.*
  - *Job Info Tab – now contains more Job information, including Job Header, Scheduling, Customer Info and MIS Details working as JDF job editor.*
  - *Content Run List Editing from Command WorkStation 5.3 – the Run List for Fiery JDF 1.0 was read only; Fiery JDF 1.1 gives the ability to edit the Run List. Users can also replace the PDF file directly from the Command WorkStation 5.3 user interface.*
  - *Close Job tab – jobs are closed immediately after the job is processed and printed. The ability to close jobs manually allows workflow such as printing one copy for proofing and coming back to reset the number copy for the actual print production. Media product*

ID information is available (optional attribute for Fiery Paper Catalog) to map into a part number specific to the print shop for better MIS integration. Employee ID information is also available and editable, especially for businesses that want to assign an

Employee ID for every job.

Areas of Fiery JDF Integration Focus

Fiery JDF integration currently focuses on three areas of integration:

Web Submission

- EFI Digital StoreFront

Prepress

- Kodak Prinergy
- Agfa Apogee

Productivity Software Solutions

- Pace
- Monarch

Benefits:

What	Fiery Advantage:	Benefits:
EFI Digital StoreFront v5.2	Direct and automated versus competition's manual workflow. EFI's most used integration;. Easy to set up, so advantages are realized sooner. Simplified media synchronization.	Produce more jobs at lower cost using easier operation with reduced touch points. Win more business because of faster job turnaround. Avoid operator error reprint costs by reducing operator touch points.
Agfa Apogee v7.0	Same user interface for litho and digital. Set Fiery Paper Catalog and finishing options in Apogee. Strong relationship with Agfa team.	Enables offering new products to print buyers – initial short run for longer jobs, small reprints, proofs, etc. Save on training costs and touch points by using single UI for litho and digital jobs.
Kodak Prinergy v5.2	Biggest potential market for new sales. Direct bi-directional integration.	Enables offering new products to print buyers – initial short run for longer jobs, small reprints, proofs, etc. Virtual Printer selection lowers costs and increases productivity by reducing touchpoints even further.
EFI Pace v25	**Digital StoreFront – Pace – Fiery integration possible.** **Virtual Printer selection unique to EFI MIS.** **Automated scheduling with EFI PrintFlow, including just-in-time job submission to Fiery servers.** **Automated scheduling updates as jobs are being printed.**	Win more profitable business using more accurate and automatically captured costing information. Virtual Printer selection lowers costs and increases productivity by reducing touchpoints even further.

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 into Fiery servers. This support offers users a choice of 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 Fiery servers shipping with Fiery Software System 9 R2 and above. This feature guarantees workflow interoperability and gives users the choice 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, 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 the workflows.

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 aren't many differences between print results from using APPE or Fiery CPSI interpreters. Despite this, there are still ideal print environments for APPE-enabled workflow, including:
- The print provider that uses a pure PDF workflow and requires PDF documents to remain device-independent throughout the entire workflow.

- Print providers that frequently print 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 who 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, PDF/VT v1.0	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
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 also enables caching of repeating elements.
JDF Print Processor	N/A	Yes The Fiery server in CPSI mode offers bi-directional 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.*
- *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 System 10/10e 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.

From controlling access to the Fiery system, to managing open network ports and securing the data resident on the system's hard drive, 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.

Microsoft Windows® 7 Professional for Embedded Systems (FES) x32/x64

Fiery System 10 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:

- *Satisfies with the latest IT and Government OS standards.*
- *Offers a more efficient administration and implementation of security patches since it supports automatic updates from Microsoft.*
- *Provides an extended support and maintenance life.*

For more information go to the Fiery Security White Paper.

Mobile Printing

Direct Mobile Printing

All System10/10e Fiery servers 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 Fiery Driven printer on the same network inside the corporate firewall. Users or IT administrators don't need to install any additional print driver or software for the iOS devices. Visitors and 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 visitors and visiting remote employees with Apple iOS devices to easily print without any additional steps.*

◆ *Allows local employees with Apple iOS devices to move locations and easily print without any additional steps.*

◆ *Increases convenience of printing from Apple iOS devices.*

PrintMe Cloud Printing

Mobile professionals have an additional printing tool available in EFI PrintMe[®]. This real-time printing solution allows users to print to any internet-enabled printer without cables, software or complex set-up. Users can email, upload a document through a PrintMe web page or use a PrintMe driver to send documents to the printer. A unique Document ID will be returned to the user, which they can enter at the PrintMe enabled printer's LCD to retrieve their document.

Benefits:

◆ *Lets users print documents anywhere, any time.*

◆ *Offers a fast, secure and confidential cloud printing solution.*

◆ *Improves productivity.*

◆ *Increases revenue with minimal IT costs.*

◆ *Provides a hassle-free printing solution for mobile professionals.*

Scanning

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. Typically, scanning technology is readily available in most commercial print shops or corporate in-plant and reprographics departments, but is not 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 the user 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 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 copier LCD scan, Fiery Remote Scan TWAIN plug-in and Fiery WebScan.*

Fiery Bridge

Fiery Bridge is an office connectivity platform that provides the only true scan-to-desktop workflow for distributing and sharing scanned documents. With push-scanning capabilities, Fiery Bridge transfers scanned documents to a user's desktop on demand from Fiery mailboxes. Fiery Bridge provides connectivity to document management and file-sharing systems.
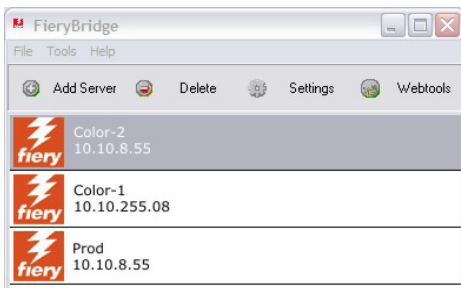
Fiery Bridge is an independent Windows PC client application designed to interact with the user's Fiery Mailbox. With Fiery Bridge, authenticated users can see and manage their mailbox at multiple Fiery servers available on the network. Fiery Bridge also provides an automated Fiery "discovery" capability that identifies Fiery servers that are available to the user.

The Fiery Mailbox folder contains all the documents in the user's mailbox. The user has full control over all the jobs in this directory and will be able to open the file in applications like Acrobat, or move the file into another folder.

Fiery Bridge integrates with EFI Desktop SE and EFI Desktop Pro, as well as Xerox Scan to PC Desktop and most desktop management applications. This integration gives users the ability to see the Fiery Mailbox activity in their existing workflow and to organize, find and share scan jobs without opening another application.

With standard applications such as Adobe Acrobat and Microsoft Office, or desktop document-management tools such as EFI Desktop SE/Pro, users can easily integrate paper into digital document workflows by simply using the "File" to "Open" feature of most applications.

Benefits:

- ◆ *Easily integrates multi-function printers into the office workflow.*

- *Creates an efficient "hub-and-spoke" capability for document distribution and management.*

- *Auto-discovers Fiery Driven devices on the network, allowing users to easily access Fiery mailboxes without having to manually configure device connectivity.*