



Fiery FS100/FS100 Pro

New Features Product Guide







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Introduction

The Fiery® FS100/FS100 Pro System is the most innovative, scalable and integrated server solution for print engines, ensuring customers get the highest return on their investment. The new features provide substantial gains in productivity, deliver accurate and amazing color, include impressive improvements in ease of use, and enhance integration that will help commercial and digital printers reduce costs and improve service. Some important new features include:

Fiery FS100 is available for integrated Fiery servers and Fiery FS100 Pro for external Fiery servers.

- **Fiery HyperRIP**: Central to the performance gains of Fiery FS100 Pro is HyperRIP, a unique, speed-enhancing technology that splits individual files so that they can be processed with multiple interpreters simultaneously to reach the print engine up to an additional 40% faster than current systems. (Fiery HyperRIP is available for the QX¹⁰⁰ servers only.)
- Fiery JobMaster: Integrating into the existing Fiery workflow is this new make-ready solution which allows operators to assemble complex documents efficiently. Fiery JobMaster includes visual tab insertion/conversion and design, easy-to-use page editing and numbering, page-level media assignment, the ability to import and modify scanned pages into jobs, and late-stage editing features.
- Fiery JobFlow: This innovative, browser-based workflow solution allows print operations to automate prepress checks and file creation in an intuitive and simple manner. This includes the ability to convert, preflight, edit, image enhance and impose documents directly before printing, saving time and money by automating repetitive tasks and preventing printing errors.
- Fiery Command WorkStation® 5.4: The latest update to EFI's signature Fiery user interface includes integration with Fiery Color Profiler Suite and convenient inline editing of copies, job names and workflow data. The premier in-RIP interactive image enhancement technology, Fiery Image Enhance Visual Editor, now offers refined tools to improve facial skin tone, independent of other image areas, and improved red-eye detection/correction.
- **Fiery Ticker**: Fiery Ticker provides an "at-a-glance" update on Fiery job status, presenting a large display view of key information for an operator. Information can include processing and printing speeds of the current job, pages remaining to print for the current job, error messages, and tray information. Fiery Ticker is available on a FACI enabled Fiery server.
- Industry-leading job-description format (JDF) integration: FS100 Pro includes the latest JDF standards to enable the 20,000+ print provider sites that use EFI MIS and Web-to-Print products to seamlessly integrate EFI™ and third-party products with Fiery digital front ends making Fiery products the preferred choice for commercial printers. Fiery FS100 Pro, along with Fiery Systems 9 Release 2 and 10 are the first to achieve the JDF1.3 Integrated Digital Printing Interoperability Conformance Specifications (ICS) certification by CIP4.

Target Markets

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

Target Applications

- Marketing materials: brochures, catalogs, stationery, direct mail and cards.
- Photo publishing: photo books, postcards and calendars.
- Corporate: newsletters, presentations and proposals.
- Book publishing: books and manuals.
- Packaging: boxes, envelopes and proofs.
- Variable Data Printing (VDP): direct mail, catalogs and transactional promotional material.

Market-leading Fiery servers excel in the following four categories with these new features in FS100/FS100 Pro:

Performance

Fiery Systems Maximize Productivity and Automate Workflows

Architectural improvements and the latest hardware configurations continue to ensure that Fiery servers are the fastest and most productive digital front ends (DFEs) on the market. New features such as Fiery HyperRIP enable customers to not only take advantage of the already improved performance of the FS100 Pro servers, but also to obtain an additional performance improvement of up to 40% faster –adding to the already robust, world-class tools in Fiery FS100 Pro.

Color

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

Fiery technology continues to improve the out-of-the box color experience with new default settings for Composite Overprint, Image Quality Best and PDF and PostScript caching, and is the first and only VIGC Perfect Pass Digital Front End (DFE).

For more information, please, visit the VIGC website: http://www.vigc.org/vigc-pdfx-4-audit/

Usability

Fiery Systems Deliver Ease of Use

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

A new visual interface for Mixed Media support in Perfect Binder offers additional benefits:

- · Gives operators easier ways to print complex jobs.
- Provides more control over paper catalog and mixed media.

Integration

Fiery Systems Deliver Seamless Integration

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

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

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

New Features

Performance	Color/Image Quality	Usability	Integration	
Fiery HyperRIP*	Image Enhance Visual Editor 1.1	Fiery Job Master*	APPE 2.5 Integration*	
Fiery VDP Raster Preview	PANTONE PLUS/ PANTONE Fashion + Home/336 New Colors	Fiery Command WorkStation Improvements	Integration with Fiery Color Profiler Suite 4.0	
PPML 3.0*	Out-of-the-Box Image Quality Enhancements*	User Defined Finish Size Preference	Software Licensing	
PDF/VT-2 Support	VIGC Perfect Pass and PDF/X-4*	Fiery Setup Wizard	Fiery Security	
		Paper Catalog Smart Media	Cost Accounting Integration	
		Mixed Media Viewer for Perfect Binding	Fiery System Restore*	
		Pad Printing	Hot Folders filter for PDF/VT Support *	
		Clear Server Enhancement	Fiery JDF*	
		Fiery JobFlow*		
		Fiery Ticker*		
		Fiery Remote Scan 6.0		

^{*}Features are not available on integrated Fiery servers running Fiery FS100.

Note: Features vary per project; please refer to the individual product Feature Matrix to find out exactly which features are available.

Fiery HyperRIP

Fiery HyperRIP is a proprietary EFI rendering technology that dramatically improves performance by splitting a job into logical parts for parallel RIPping. The HyperRIP feature splits a single job into multiple sections to be RIPed in parallel by multiple processors for improved performance. This splitting of a single job for faster processing is critical to production efficiency as file sizes continue to grow. HyperRIP prevents any single file from becoming a bottleneck for printing.

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

Minimum requirements

- 8 CPU cores
- 8 GB of RAM memory
- FS100 Pro codebase

Fiery HyperRIP is only available for Fiery QX¹⁰⁰ servers.

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

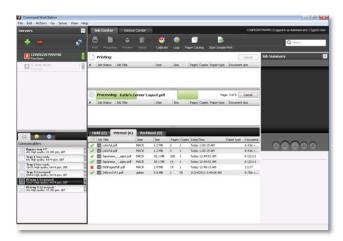


Figure 1: A job split by HyperRIP to RIP on both processors.

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

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

Customer Benefits

- Dramatic performance improvements by processing multiple pages of the job simultaneously.
- Progress bars show multiple processors in action.
- Faster throughput means less waiting for operators and more clicks.

Fiery VDP Raster Preview

The Fiery VDP Raster Preview enables users to view the content of the job, organized by records or finished sets, and to navigate by either records/finished sets or by pages/surfaces. The job is displayed in actual size, and the user may use the scroll bars to see the whole image. With the Fiery VDP Raster Preview, users can now verify if the record boundaries for imposed or non-imposed jobs are correct before printing the job. The new feature is available when connecting to System 10/10e with Command WorkStation 5.4 or later, or to FS100 Pro /FS100 products.

- Enables users to verify record boundaries for imposed or non-imposed jobs within the raster preview without the need to print the job, reducing potential errors and waste.
- Displays records for non-imposed VDP and finished sets for imposed VDP jobs.



Figure 2: Non-imposed job.



Figure 3: Imposed VDP job.

PPML 3.0

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

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



Figure 4: Examples of a print job with transparencies.

PDF/VT-2 Support

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

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

- Supports the latest VDP standard so they can confidently print any standard VDP stream.
- · Adds flexibility to customer workflows.

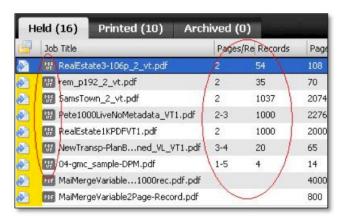


Figure 5: PDF/VT is displayed as file type in Command Workstation.



Figure 6: PDF/VT file format under VDP Resources

Image Enhance Visual Editor 1.1

Image Enhance Visual Editor 1.1 is located in the Image tab in Job Properties and can be launched from Command WorkStation (highlight job, right-click).

New improvements

- Enhance images more effectively by boosting saturation of image elements independently and automatically without over saturating flesh tones;
 - improve red-eye detection and correction;
 - allow tonal characteristics on a local basis using definition control just for skin tone, to independently saturate skin tone and non-skin tone regions to achieve the highest quality.

Image Enhance Visual Editor requires Fiery FS100 Pro or Fiery Productivity Package for integrated Fiery servers. Users can also get these updates in Release Package 4.0.1 available for download on efi.com/CWS5.

Customer Benefits

• On-the-fly correction for individual images gives higher-quality product in less time without the need to go back to the original design files



Figure 7: Fiery Image Enhance Visual Editor new "definition" and "saturation" controls.

PANTONE PLUS/ PANTONE Fashion + Home

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

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

Customer Benefits

- Meet the expectations of demanding color customers.
- Properly match the latest PANTONE colors, including new colorimetric definitions.

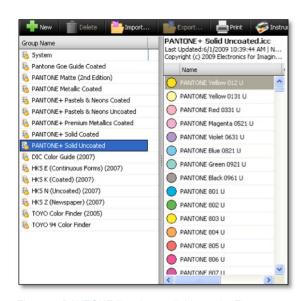


Figure 8: PANTONE libraries available on the Fiery server.

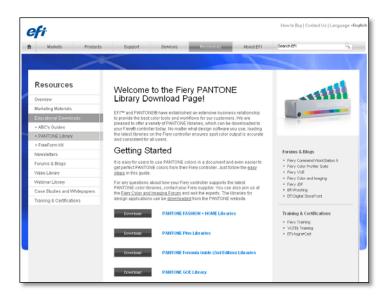


Figure 9: The latest PANTONE libraries are always available for download from efi.com.

The full variety of PANTONE[®] libraries can also be downloaded from efi.com to your Fiery server today. Customers can meet their unique color needs by downloading the latest PANTONE libraries by adding the 336 New Colors from PANTONE to their Spot Color library.

Out-of-the-Box Image Quality Enhancements

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

Image Smoothing has been extended to enable 12-bit smooth shading for the best quality printing of gradients. Composite Overprint and Best Image Quality, now enabled by default, deliver prints that better match the design on the first print, even if techniques such as overprinting have been applied by the designer. Caching re-usable objects improves performance and 12-bit smooth shades give better quality on gradients, right out of the box. These imaging improvements can be seen in the Job Properties > Image tab.

VDP caching improvements are located in the Job Properties tab > VDP, and Composite Overprint is located in the Job Properties > Color tab.

- Provides the highest level of performance with superior output quality, even on complex jobs with transparencies.
- Reduces potential for error and eliminates the need to re-process or re-print jobs.
- Speeds job set up.
- Adds an enhanced path for printing gradients and blends.

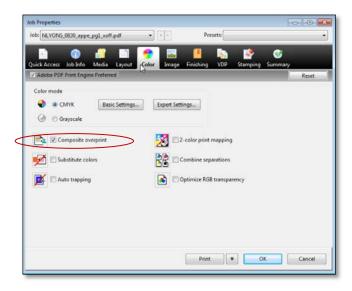


Figure 10: New Composite Overprint default setting.



Figure 11: New Image Quality Best default setting.

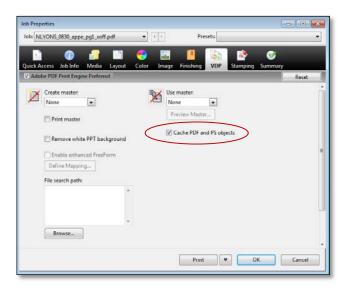


Figure 12: New VDP Caching default setting.

VIGC Perfect Pass and PDF/X-4

The Fiery FS100 Pro server is the first and only system to earn a "Perfect" score on the Flemish Innovation Center for Graphic Communication (VIGC) PDF RIP Audit, making it the most compelling choice for your customers. With this accreditation, print providers using a Fiery FS100 Pro digital front end can have confidence that their print jobs will correctly reflect the true intent of the graphic designer using tools like Adobe[®] Creative Suite. They can therefore avoid costly reprints, delivery delays and dissatisfied print buyers.

VIGC's Auditing Process

VIGC is a member-based, international organization that follows recent developments and innovations in the technology of the graphics industry. One of their primary purposes is to provide assessments of available products in order to strengthen the competitiveness of companies. They developed the PDF RIP Audit to determine which systems can render print jobs correctly and consistently.

As their test set, VIGC used a specific set of files designed to test PDF/X-4 compliance from three different organizations — European Color Initiative (ECI), Ghent Workgroup (GWG), and VIGC — and ran them through an undisclosed number of systems. The organization does not publicize the names of systems that do not fare well in the assessment, but of those tested only seven received a "Pass" certification. The FS100 Pro is the only system in the test to render every print job exactly as expected, earning the honor of a "Perfect" label.

Inspire Confidence in Your Customers

The "Perfect" rating means that FS100 Pro is able to produce proper output even when RGB blending color spaces are used and that such output will be WYSIWYG with standard Adobe Creative Suite applications. And, customers can be confident in their choice of an FS100 Pro system, which will produce incredibly precise color and the exact results they expect in their print jobs the first time — all backed by VIGC's third-party certification.

Learn More

To read more about what it means to be the best system on the market, visit http://www.vigc.org/vigc-pdfx-4-audit/.

- Achieves expected, desired results on even the most complex graphics files.
- Meets and exceeds requirements of even the most demanding customers.



Figure 13: Fiery FS100 Pro servers are the only DFEs on the market to receive a PERFECT score.



Figure 14: Altona Test Suite 2.0.

Fiery JobMaster

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

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

- Provides a make-ready solution that is fully integrated with Fiery Impose into the existing Fiery workflow.
- · Offers ability to edit a job by adding scan pages, visual tabs, and removing and adding page numbers.
- Allows operators to cost-effectively produce complex jobs efficiently and in-line.
- Supports both black-and-white and color workflows.

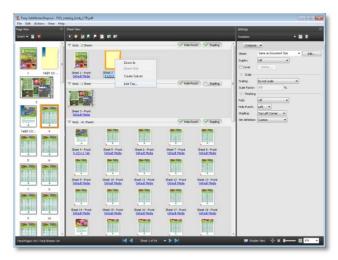


Figure 15: Fiery JobMaster visual interface.



Figure 16: Fiery JobMaster tab editor interface.

Fiery Command WorkStation 5.4 Improvements

The new version of Command WorkStation 5 is compatible with Mac OS 10.8 and Windows 8 and includes many improvements such as the following:

In-line edits within the job list — Users can now save time by editing the number of copies, and the job names directly in the job list. Simply click on the text of the job name (or copies field) and start typing.



Figure 17: Inline editing allows the operator to set copies and rename jobs with one click.

Apply Server Presets from the Job List — Operators can now apply server presets directly from the job list, for easy access to automated workflows without having to open Job Properties. The presets list is now sorted alphabetically, and the preset currently in use is highlighted with a check mark. The Apply Preset menu is hidden if no server presets are present on the connected Fiery server.

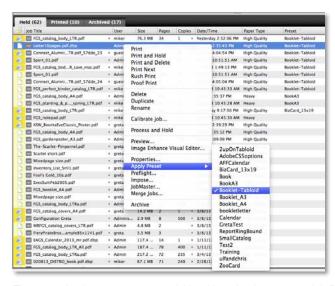


Figure 18: Apply server presets quickly without having to open Job Properties.

Paper Catalog Improvements — Users can automatically create a Paper Catalog entry, based on the characteristics of the media in the tray. Operators do not need to re-enter media data, eliminating mistakes and costly rework. At the time of loading paper, enter the media attributes on the printer LCD as normal. Command WorkStation automatically detects the settings, and displays them on the tray in Job Center.

The operator can then select 'Add New Media', and the New Media dialog is pre-populated with all the attributes already set in the tray—all that's required is to enter a name. The new tray menu also allows operators to easily view all media which can be assigned to the tray, and assign it with a single click.

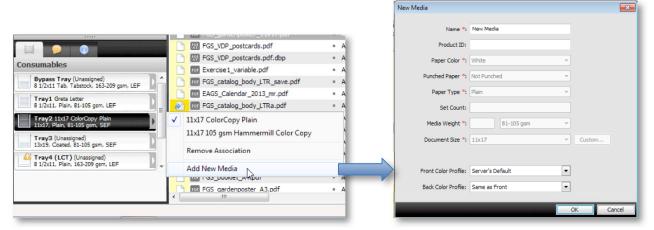
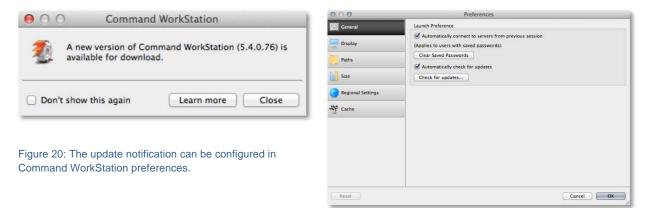


Figure 19: Add new media with only two clicks — tray attributes are automatically pre-populated to save time for the operator.

Command WorkStation Update Notification — Command WorkStation 5.4 now alerts users when a new version is available, so they no longer need to remember to manually check for updates. When an update is available, a prompt informs the user at time of Command WorkStation launch, and they can choose to click on 'Learn More' — which takes them directly to efi.com/cws5 in their web browser. Once the user reaches efi.com/cws5, they can choose to download a new release package and read release notes.



User Login — Command WorkStation 5.4.1 makes it possible for users to log in to Command WorkStation using a named user, in addition to admin or operator. Named users added to the Fiery server Administrator or Operator user groups can log in to Command WorkStation with administrator or operator privileges. Named users can either be defined locally in Configure on the Fiery print controller, or imported from a Microsoft Exchange Active Directory (when LDAP is enabled in Configure). Actions taken by the named user on a job are tracked with the job, in the Fiery Job Log, for instance, the same way the operator or admin user name is tracked with the job.

User Defined Finish Size Preference

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

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

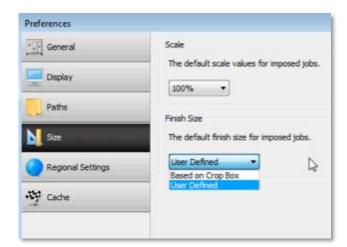


Figure 21: Choose the defaults for Fiery Impose.

- · Gain additional flexibility.
- Choose a setting in Preferences and never have to change the setting in Impose again.

Fiery Setup Wizard

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

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

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

The Fiery Setup Wizard is available from the following locations:

- Command WorkStation.
- WebTools.

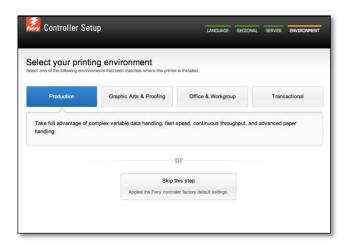


Figure 22: Settings are customized for each printing environment.

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

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

Recommended Settings per Environment	Production	Graphics Arts & Proofing	Office & Workgroups	Transactional
Job Log (Auto Export)	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Enable System Updates	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Enable Remote Desktop		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Enable Adobe PDF Print Engine (APPE)		$\sqrt{}$		
Enable Printed Queue	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$
Enable Job mismatch	$\sqrt{}$			$\sqrt{}$
Sample Print	$\sqrt{}$			\checkmark
Enable JDF	$\sqrt{}$			\checkmark
Cache PDF and PS Objects	$\sqrt{}$			\checkmark
Enable Set Page Device (SPD)	$\sqrt{}$			$\sqrt{}$
Enable Sequential Print	$\sqrt{}$			\checkmark
Enable RIP While Receive				$\sqrt{}$
Enable Fiery Hot Folders			$\sqrt{}$	
Enable Secure Erase			$\sqrt{}$	
Allow users to print without authentication			V	
Enable LDAP			$\sqrt{}$	
Enable USB Port			$\sqrt{}$	
Enable Scanning			V	
Enable SNMP			$\sqrt{}$	
Enable Direct Mobile Printing			$\sqrt{}$	

Paper Catalog Smart Media

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



Figure 23: Smart Media is available when Paper Catalog is using PPD based specifications.

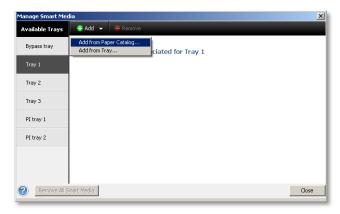


Figure 24: Add Smart Media to a tray, so it will be automatically assigned next time media with the same attributes is loaded.

- Streamlines and simplifies the process of adding new media to Paper Catalog and saves valuable time.
- No additional steps required to add a media when a favorite (smart) media is loaded in a tray.
- · Increases reliability for media-driven workflows: minimizes errors when setting up media and operator intervention.

Mixed Media Viewer for Perfect Binding

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

It allows users to specify multiple types of media for perfect-bound books. Plus, pagination is handled automatically and intuitively so that the perfect-bound jobs with different media print as expected. It shows users how a spine is included as the last page of the document.

It adds a mixed-media interface directly in the perfect-binder user interface, and a wireframe mode to the perfect binder mixed media interface — giving operators quick and easy visual feedback.

Mixed Media viewer for perfect binding is available for FS100/FS100 Pro Fiery servers, as long as the engine has a perfect binder option. Mixed Media viewer is available from Job Properties interface in Command WorkStation so the Fiery server will have the entire job available to properly specify the pagination.

- Gives the operator precise controls over pagination.
- Provides quick and easy visual feedback about the following settings:
 - o Which page in the document is used for the spine.
 - o When page level duplex settings are used, to identify the reading order of the rest of the pages of the document.
 - o The desired pages that are affected by a media definition.



Figure 25: Mixed Media viewer user interface.

Pad Printing

Pad printing gives operators control over printing multiple copies of a job without having to perform unnecessary mental calculations or requiring multiple steps. Previously the operator had to multiply the number of pages in the pad of paper times the number of pads, and manually separate the pads after printing.

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

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

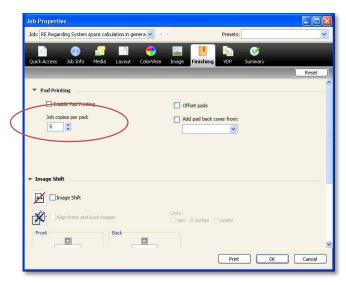


Figure 26: Users can select the number of copies per pad.

Clear Server Enhancement

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

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

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

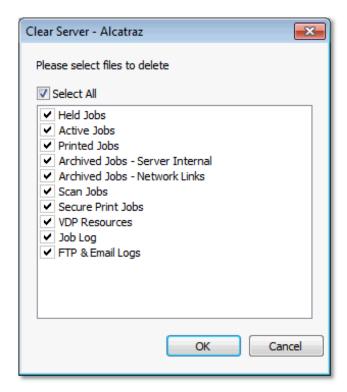


Figure 27: The expanded list provides greater control to the Administrator.

Fiery JobFlow

Fiery JobFlow delivers advanced prepress capabilities in a browser-based, cost-effective solution. Using best-in-class Fiery technology, it enables end users to define powerful workflows in an intuitive and simple way. Customers can easily configure automated job workflows including PDF conversion, preflight, correct and edit PDF files, image enhancement, document imposition and job ticketing — saving time, reducing rework and waste, and increasing customer communication.

Fiery JobFlow:

- · Provides accurate print output by printing only the jobs that pass the preflight check configured for each workflow.
- · Automatically corrects for wrong media size or page orientation and adjusts bleed and crop-box properties.
- Allows users to make critical last-minute changes and corrections without returning files to customers or going back to native
 applications.
- Lets customers set up jobs faster with preset workflows optimized for the job type.
- Uses simple and intuitive browser-based interface so it's easy to use and customers don't need to install clients.

Fiery JobFlow supports targeted external servers on System 9R2, System 10 and FS100 Pro. Fiery JobFlow replaces the Flow module for Fiery Central. For a complete list of supported printer, please go to efi.com.



Figure 28: Fiery JobFlow saves time and money by automating repetitive tasks.

- Cuts down on human errors by submitting jobs to workflows you optimize for specific job types.
- Saves time by allowing users to make critical last-minute changes and corrections without returning files to customers
 or going back to native applications.
- Saves time by proactively identifying file issues and applying corrections.
- Improves client communications and keeps customers informed by sending email notifications about their jobs.

Fiery Ticker

Fiery Ticker is a visual screensaver-type application for Command WorkStation. Fiery Ticker shows processing and printing speeds; pages remaining for the current job; error messages and tray information. Fiery Ticker is installed as part of the Fiery Extended Applications Package 4.0 (with Command WorkStation 5.4) onto Fiery servers running System 9 and later. The Fiery Ticker will run automatically providing at-a-glance view of the activity status of Fiery systems when an operator is not directly using the Fiery server. The operator can also initiate the Fiery Ticker view directly from inside Command WorkStation.

- Allows production monitoring from a distance, giving operator more flexibility.
- Gives the operator a quick visual look at what the Fiery server is doing, allowing him to perform other tasks at the same time and boosting productivity.



Figure 29: Fiery Ticker progress.



Figure 30: Fiery Ticker shows that printing was suspended.

Fiery Remote Scan 6.0

Fiery Remote Scan 6.0 has a new simplified interface. The new version incorporates auto discovery, making it easy to add Fiery servers. Users can save files to their local hard disk drive with a single click. Fiery Remote Scan supports all the new scan file formats which can be generated by print engines.

- Improved ease of use makes it faster for customers to take advantage of all the Fiery server's features and functions.
- Simplified workflow saves time and training.



Figure 31: Fiery Remote Scan 6 simplifies scanning.

APPE 2.5 Integration

APPE 2.5 provides support for the newest use cases of transparency from the latest design applications. Designers often invoke these features unintentionally when using effects such as drop shadows and others. APPE 2.5 enables users to print files that use the latest transparency effects. With APPE 2.5 and the FS100 Pro implementation of it, users can print all transparency effects or layers properly.

- · Customers can print even the most complex files with transparencies and drop shadows correctly.
- Get WYSIWYG from the design application to the digital print system.
- Passes the Altona Technical Suite version 2.
- Passes VIGC test suite that contains pre-release components of Ghent Working Group transparency test suites.

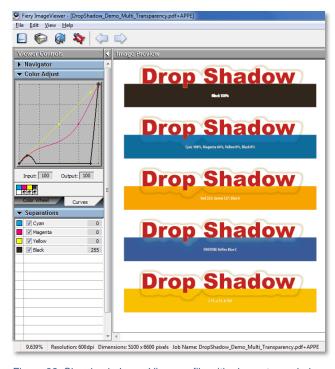


Figure 32: Showing in ImageViewer a file with elements rendering correctly only using APPE 2.5.

Integration with Fiery Color Profiler Suite 4.0

Fiery Color Profiler Suite makes world-class display and output profiles for Fiery FS100/FS100 Pro systems. Output profiles can be converted to Device Link profiles to achieve the best precision, using an iterative color measurement and device-link-optimization technology. Fiery Color Profiler Suite 4 also can optimize spot color matches using the same iterative technology. Color Profiler Suite fully supports the new EFI ES-2000 spectrophotometer in addition to X-Rite iSis and iO table, and gives users the tools they need to precisely match industry color standards such as ISO, FOGRA and GRACoL. It provides tools that any operator can use to verify colorimetric precision and the results appear in the Fiery Dashboard — a cloud-based service that captures and aggregates a wide array of performance data from one or multiple Fiery Driven™ engines. It gives users a single view into digital print productivity, including usage rates, uptime, color metrics, error rates and more. With Fiery Dashboard, plant managers are able to monitor color precision, even from a remote location.

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

- Color Profiler Suite is integrated with the Profiler user interface in Command WorkSattion, enabling users to quickly diagnose
 profiles and apply profile changes without leaving Command WorkStation. Users can also edit, inspect and compare profiles using
 the Edit and Inspect modules.
- Color Profiler Suite is integrated with Spot Color UI in Command WorkStationso that users can get a quick view of how closely a
 printer can match a spot color by comparing gamuts of an output profile to a spot-color group. Operators can also tune the spotcolor libraries and verify color precision for jobs in the queue on the DFE.
- Color Profiler Suite is integrated with the Fiery ImageViewer, allowing users to quickly check how well the monitor can represent
 the printed output on the screen, and create new monitor profiles by launching the Monitor module without leaving ImageViewer.

- Simulate industry standards more easily and more precisely.
- · Verify color match from day to day.
- Create monitor profiles for soft-proofing.

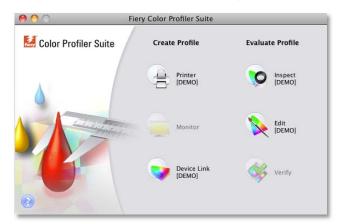


Figure 33: Color Profiler Suite launch pad.

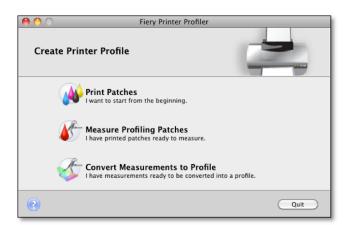


Figure 34: Color Profiler Suite Printer Profiler.

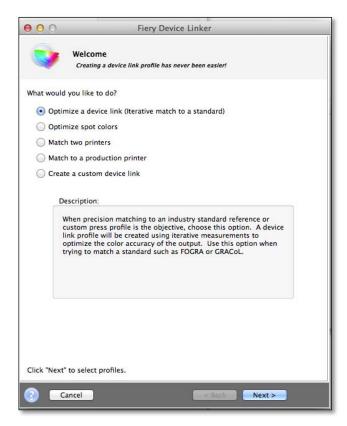


Figure 35: Color Profiler Suite Device Linker including "optimize a device and optimize spot color" links.

Software Licensing

Software licensing allows users to enable Fiery options and activate features from Fiery software without a physical dongle. Dongles can be lost, broken or even stolen. Software licenses are easier than ever to install on a Fiery server through a common interface to manage the software license activation.

- Fiery server options (such as Graphic Arts Package Premium Edition, Hot Folders and Virtual Printer, Fiery Productivity Package): can be activated from Device Center in Command WorkStation, or from WebTools, choosing the Manage button.
- · Fiery JobMaster, Impose, and Compose are activated and deactivated from the Help menu, the Manage License menu.

Note: Legacy Fiery SeeQuence dongles are still supported with newer Command WorkStation versions.

- Users never lose and can easily retrieve lost Fiery JobMaster, Impose, or Compose licenses.
- · Fiery server options are easier to install.
- Users can activate or deactivate a license without Internet connectivity (Note: Fiery server option licenses cannot be deactivated; only software licenses such as JobMaster, Impose, and Compose can be deactivated).



Figure 36: Users can easily manage software licenses.

Fiery Security

Encryption Strength Update

Fiery configuration settings on the hard disk drive are now encrypted with 168-bit encryption. This ensures that a Fiery server hard drive meets and exceeds the data encryption requirements from the National Institute of Standards and Technology (NIST). NIST requires encryption strength of >128-bit.

Secure Erase 3.0

For customers with either an embedded or server Fiery product, Secure Erase can be set to run at idle time for improved overall system performance. Additionally, for the embedded controllers there is a setting to execute Secure Erase when the controller is idle.

Customer Benefits

- Protects Fiery configuration data with higher level of encryption.
- Prevents any malicious attacks using PostScript files by implementing a mechanism where only EFI signed executables can be run
 on the Fiery server.
- Provides the benefits and confidence of securely erasing jobs without impacting performance.

Cost Accounting Integration

The Fiery server offers an integration solution that works with all major cost-accounting applications so all the jobs printed through a Fiery server are accurately captured. This means all the print jobs are correctly listed with the correct customer account information to accurately bill back the printing cost to the corresponding customers. It automatically intercepts and feeds cost accounting data into the accounting system, eliminating the need for manual data entry. The integration solution provides instructions and interfaces to third-party vendors to allow their cost-accounting software to embed key information such as account codes, into the Fiery print stream, and to pull the cost-accounting information out of Job Properties for completed print jobs.

- Enables customers to take advantage of the RIP and color capabilities on Fiery servers, while still having all the jobs accurately billed back to customer accounts.
- Saves time and prevents errors by providing accurate job accounting data for prints processed through Fiery servers.
- Works with all major cost-accounting software.
- Ensures that the print jobs from Fiery servers are accurately reflected in the cost-accounting record, and that the cost-accounting application will have a complete list of jobs processed through Fiery servers.

Fiery System Restore

Fiery System Restore is a new FS100 Pro tool, which replaces the Fiery Clone Tool. It supports the new Unified Extensible Firmware Interface (UEFI)-based Hardware platforms and offers new features such as the ability to:

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

The Fiery System Restore tool supports English, French, Italian, German, Spanish, Brazilian-Portuguese, Danish, Japanese and Simplified Chinese.



Figure 37: Fiery System Restore enables users to back-up/restore to network drives.

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

Hot Folders Filter for PDF/VT Support

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

- · Add flexibility to customer workflows.
- Automate job settings in Command WorkStation, without user intervention.

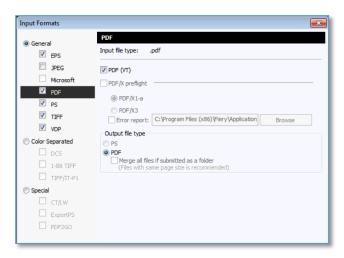


Figure 38: Users can select PDF/VT as input file type in Hot Folders settings.

Fiery JDF

JDF: Live Status Updating

The existing Fiery JDF Status Signal Updating mechanism has been improved by implementing the RepeatTime JDF command. Users can access the feature through EFI Pace[™], EFI Monarch[™], Agfa :Apogee and Heidelberg Prinect.

Customer Benefits

• Enhances status updating shown through the client user interface.

JDF: Common Global Paths

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

- Improves existing JDF file path reference.
- Simplifies JDF integration.

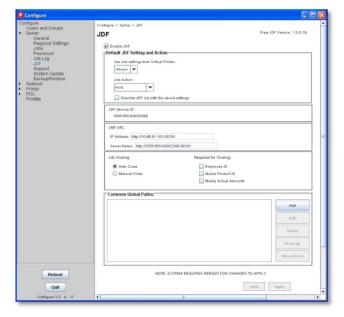




Figure 39: Common Global Paths.

JDF: Dynamic Device Capability Updating

This is an improvement to our current Device Capabilities file, which is used by a JDF submitting application to determine the available capabilities for a given Fiery server/engine combination. It is compatible with FS100 Pro JDF-capable Fiery servers. The new Device Capabilities file will be updated with JDF attributes which have been dynamically converted from Fiery values, and will then be populated/updated in the Device Capabilities file on the Fiery server.

Customer Benefits

- · Simplifies JDF integration.
- Enables applications like Agfa: Apogee to populate their UI with available finishing controls, and applications like EFI Digital StoreFront to automatically map their job attributes to Fiery job attributes.
- Designs a job option dialog that matches the installed Fiery configuration with JDF applications that read Device Capabilities.

JDF: RunList Editing

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

- Simplifies JDF integration.
- · Eliminates errors.

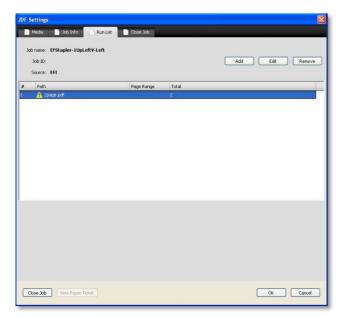




Figure 40: Runlist editing dialog.

JDF: Improved Media Mapping

The Fiery server will automatically select the correct paper catalog entry when the incoming JDF attributes uniquely identify a single media. The Fiery server clearly flags media mismatches when a single media is not uniquely identified.

Customer Benefits

- Saves operator time.
- · Simplifies JDF integration.

JDF: MIS Manual Job Close

Instead of the default Auto Close, where the printing information is returned to the submitting application on printing, this feature allows the operator to control when the job completion is reported back to the sending application. Page printed information can be validated and corrected.

- Allows operators to take control of when the job is reported as "done."
- · Validates the results.

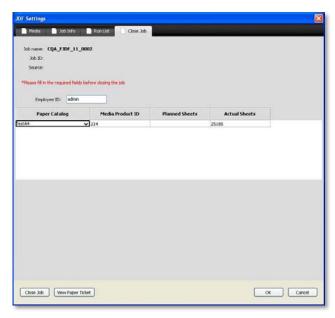


Figure 41: Manual close dialog.

JDF: Improved Job Details — User Authentication and Tracking

Additional information such as the Command WorkStation log-on credentials are automatically captured and inserted into JDF tracking audits. This functionality provides more robust reporting to MIS and thus makes the Fiery server a strong choice for MIS-integrated workflows. The information is sent between the sending application and the Fiery server.

The JDF emitting application now receives more information including:

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

Customer Benefits

· Simplifies JDF integration

JDF: View "Paper" Job Ticket

A PDF file representing the originating customer ticket (from Fiery Digital StoreFront®, Pace™ and others) can be linked to the JDF ticket and displayed in Command WorkStation, which tightens integration between components.

Customer Benefits

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

JDF: CIP4 IDP ICS JDF Certification

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

Customer Benefits

• Trusted job option handling from the first certified DFE in the industry.

JDF: QueueStatus Support

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

Customer Benefits

· Richer job control from the JDF emitting application.

JDF: Toner Level Reporting

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

Customer Benefits

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

JDF: Sample and Reprint Tracking

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

Customer Benefits

Accurate media usage tracking cost accounting.

JDF: Preset Support

Job Presets are now accessible via JDF using the familiar Known Features mechanism used with Virtual Printers.

Customer Benefits

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

JDF: NumberUp and StepRepeat Imposition

The Fiery Gangup and Gangup Repeat imposition is now available via JDF.

Customer Benefits

First phase of Fiery imposition dynamically accessed through JDF.

JDF: Subset Finishing

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

Customer Benefits

· Print mixed sets of documents without user intervention at Command WorkStation.

JDF: SlipSheet Support

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

Customer Benefits

Automatically separate job sets from the JDF emitting application.

JDF: Stamping

JDF control for the Fiery Job Properties stamping feature.

Customer Benefits

• Enable and control the Fiery stamping feature from the JDF emitting application.

JDF: Last Calibrated Time

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

Customer Benefits

• Manage the Fiery server from the JDF emitting application.

JDF: Dynamic HD Text and Graphics

Enable Dynamic High Definition Text and Graphics on Fiery servers that support this feature.

Customer Benefits

• Dynamically control leading edge Fiery features in an automated workflow.