

Fiery Command WorkStation

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Fiery Command WorkStation

Command WorkStation is the print job management interface for Fiery servers.

With Command WorkStation, you can connect to multiple Fiery servers and then manage jobs from a single location. The intuitive interface makes complex tasks simple for Operators and Administrators, regardless of the number or types of jobs you process.

Job Center and Device Center are integrated features of Command WorkStation that include tools to search for jobs, preview jobs, assign workflows, and manage digital and offset print jobs.

You can use Command WorkStation tools to do the following tasks:

- Modify and merge jobs
- View information about jobs and Fiery servers
- · View, select, and modify custom print options
- · View and modify custom workflows
- Manage prepress job workflows
- Use Fiery applications such as Fiery Impose for other tasks and resource management

A number of optional features are available on Fiery servers, and all are documented in this Help system. However, optional features only display in Command WorkStation if they are supported by the connected Fiery server, for example, HyperRIP mode.

You can see the Fiery system version installed on the Fiery server in **Device Center** > **General Info**. (See The Command WorkStation workspace on page 17).

For more information about Command WorkStation features, see *Utilities*, which is part of the user documentation set.

The Command WorkStation workspace

The main window provides a summary of activity that is occurring either on all of the connected Fiery servers or on a selected server and provides access to features.

To get started with adding a Fiery server to Command WorkStation, see Adding and connecting a Fiery server on page 24.

Note: The content displayed can vary, depending on the Fiery server. For more information, see the **Help** menu.

The Command WorkStation main window includes the following areas:

- Main menus provides access to commands.
- Sidebar displays button navigation for the following screens below the Fiery logo:
 - **Home** view a high-level status overview of your connected Fiery servers and a snapshot of print production statistics over the last week.
 - **Job Center** view and manage jobs sent to the connected Fiery server.
 - **Servers** displays a list of job queues or job status. Some Fiery servers display available media and consumables. The display for each Fiery server can be collapsed to view additional servers.
 - **Job Status** displays the status of jobs that are currently processing and printing. To manage these jobs, click the **Processing** or **Printing** queue in the **Servers** list.
 - **Preview** displays the job content (thumbnail) of a processed job. On a Fiery server with Fiery system software FS300/300 Pro or later, thumbnails are displayed for spooled jobs as well as processed jobs.
 - **Summary** provides job information for the selected job, including the job name or title, number of pages or sheets, and number of copies. Other information, such as the time of spooling or processing, media used, preflight, or job verification, is displayed according to the selected Fiery server. You can edit some of the job property fields by clicking the pencil icon.
 - **History** displays information about actions from a job's history, including when the job was created, processed, printed, or canceled. It also shows the time and date of any processing or printing error or when processing was canceled. For the printed and print canceled actions, job characteristics, such as the number of copies and pages, are displayed.
 - Job List displays the list of jobs and a toolbar of available job actions. Right-click a job to show a complete list of job actions.
 - Apps and Resources provides access to all installed Fiery applications with a single click and displays other applications and resources for the Fiery server. You can also access free software trials and downloads, as supported for the selected Fiery server.

Note: An internet connection is required to view the list of available **Apps and Resources**.

- **Getting Started Assistant** (assistant icon) provides information to help you discover the power of Command WorkStation and to improve your print workflow.
- **Fiery IQ** (cloud icon) access your Fiery Account where you can back up your Command WorkStation settings to the cloud, share settings with other users, and monitor print performance.
- **Fiery Account** (round user icon) create a new account or log in to your existing account. A green dot on the icon signifies that you are logged in.
- Fiery Smart Search search the Fiery knowledge base to learn more about Command WorkStation and Fiery features.

Getting Started Assistant

Fiery Command WorkStation Getting Started Assistant allows you to learn how to manage, preview, and control print jobs efficiently for an optimized workflow.

Discover the power of Fiery Command WorkStation to improve your print workflow with features for managing, preparing, and printing jobs efficiently.

You can search or navigate through tutorials to learn about Fiery Command WorkStation.

You can access the Getting Started Assistant from the Fiery Command WorkStation sidebar and the Help menu.

Fiery Smart Search

Fiery Smart Search can search for information and training resources to learn more about Command WorkStation and Fiery features.

With Fiery Smart Search, you can search the following resources in the Fiery knowledge base:

- Help documentation
- Fiery Communities
- How-to guides
- Fiery product guides
- 1 In Job Center, click the Fiery Smart Search icon (magnifying glass) in the bottom-left of the Fiery sidebar.

Fiery Smart Search is always available in the bottom-left of the sidebar as long as another window is not open on top of Job Center.

2 In the **Search for Fiery information** area, type the search term and press **Enter**.

The list is scrollable by using the mouse or scroll bar.

The search window displays 10 results at a time.

3 Click a search result.

The information opens in your default web browser.

Job Center

The Command WorkStation Job Center is a centralized location where you can view and manage jobs sent to the connected Fiery server. Job Center includes the Printing and Processing queues and the Held, Printed, Archived, and Completed views.

You can use Job Center to do the following:

- Search for jobs, view job properties, and preview jobs in each Fiery server that you search. A toolbar allows users to see detailed information about their jobs.
- Assign workflows and manage jobs.
- Use custom views to group jobs together for efficient job management.
- View all jobs in the **All Jobs** view, showing all jobs in all queues.
- View jobs in the Completed view, which lists all printed jobs in the Fiery server, regardless of the location of the
 job.
- View the status of all Fiery servers.
- View information on printer, consumables and media, and job requirements.
- Preview jobs.

- View thumbnail icons of jobs.
- · View nonprinting activity.
- Edit the number of copies, job title, and workflow from the Job Summary pane.
- View actions from a job's history in the **History** pane.
- Drag and drop jobs from the desktop to Command WorkStation.

Status of processing and printing jobs

At the top of Job Center, the **Processing** pane and **Printing** pane (blue rectangles) show the progress of jobs that are processing and printing, respectively.

You can drag and drop jobs to the **Processing** and **Printing** panes.

If your Fiery server supports HyperRIP mode, additional status is available. When a job is being processed in page parallel mode (single job mode), the progress bar in the **Processing** pane of **Job Center** is divided into sections, representing the progress of each processor currently in use. For job parallel mode (multiple jobs mode), the **Processing** queue under the job status column additionally displays inline progress bars for each currently processing job.

Commands for managing jobs in a queue

You can access commands for a job that is displayed in the Held, Printed, or Archived queues in Job Center. Right-click a job in a queue to display the list of commands or select one from the Actions menu.

Optional features are displayed only if they are supported by the connected Fiery server.

Apply JobExpert Applies recommended job property settings for individual PDF jobs. For

more information, see Fiery JobExpert on page 75.

Apply Workflow Displays a list of server presets and virtual printers that can be applied to

the selected job.

Archive Archives a selected job.

Calibrate job Links to Calibrator.

Cancel Cancels the selected jobs. Only applicable to jobs that are still showing in

the Printing or Processing queues.

Clear JobExpert Removes recommended job property settings set by JobExpert from the

selected job. For more information, see Fiery JobExpert on page 75.

Compose (option) Opens Fiery Compose (if supported), where you can define the chapter

divisions of a job, print ranges of pages on varying types of media, insert blank media between pages, and insert tab media containing text labels (if

the printer supports tab printing).

Copy ToCopies a job to the queue of another Fiery server. The destination Fiery

server must be connected to Command WorkStation; otherwise, the server

is not displayed in the list.

Create Job Group Opens the Job Group window, which allows you to specify the settings for a

job group. For more information, see Job Groups on page 87.

Delete Deletes a selected job.

Duplicate Creates a copy of the selected job.

Fiery Verify (option) Opens Fiery Verify, part of Fiery Color Profiler Suite.

Hold Imports the selected files to the Held list.

Image Enhance Visual Editor

(option)

Opens Image Enhance Visual Editor (IEVE), an image-enhancing

application that provides a visual workspace for adjusting individual images

in PDF or PostScript jobs submitted to Fiery servers (including jobs

submitted through Fiery JDF workflows).

ImageViewer (if supported) displaying the first page of a single

job (displays the first selected job if multiple jobs are selected). For more

information, see Fiery ImageViewer on page 352.

Impose (option) Opens Fiery Impose, which applies imposition layouts to jobs for custom

printing, binding, and trimming. Fiery Impose also applies impositions to

variable data jobs and saves imposed jobs as PDF files.

JobMaster (option) Opens Fiery JobMaster, which provides advanced PDF-based job

preparation tools for scanning, tab creation and insertion, page numbering,

chapter creation, and late-stage editing.

Move To If your Fiery server has Fiery system software FS350/350 Pro or later, you

can move a job to another Fiery server. The destination Fiery server can have any supported version of system software but must be connected to Command WorkStation; otherwise, the server is not displayed in the list.

Move Up/Move Down Reorders the selected jobs. Only applicable to jobs that are still showing in

the Printing or Processing queues.

Preflight Opens the Preflight Settings window with a single selected job displayed

(displays the first selected job if multiple jobs are selected) and checks the most common areas of output error to ensure that files print successfully.

For more information, see Preflight on page 349.

Preflight ProDisplays the list of presets that can be applied to the selected PDF or

PDF/VT jobs. This option is available only for PDF or PDF/VT jobs on Windows-based Fiery servers with Fiery system software FS500 Pro or later. Fiery Preflight Pro requires the Fiery Graphic Arts Pro Package. For more

information, see Fiery Preflight Pro on page 351.

Preview Opens the **Preview** window, where you can view thumbnail images of pages

in the job.

Print Prints a selected job.

Print and Delete Prints and then deletes a selected job.

Print and Hold If a selected job is processed, sends the job to the Printing queue. If a

selected job is not processed, sends the job to the Processing queue. After the job prints, a raster of the job is kept when it is returned to the Held list.

Print Next Sends a selected job to the top of the Printing queue without interrupting

the job that is currently printing. Has the same result as dragging the job to

the top of the Printing queue.

Process and Hold Sends a selected job from the Held, Printed, or Archived lists to the

Processing queue.

Process Next Sends a selected job to top of the Processing queue without interrupting the

job that is currently printing. Has the same result as dragging the job to the

top of the Processing queue.

Proof Print Prints a proof (a copy) of a selected job without changing the job's original

copy count. For more information, see Proof Print on page 82.

Properties Opens the **Job Properties** window, which displays information about a

selected job, such as print settings. If multiple jobs are selected, properties

that are not shared by the selected jobs are blank.

Remove Raster Removes the raster of a selected job from the Held or Archived lists.

Rename Renames a selected job.

Rush Print Sends a selected job to the top of the Printing queue and immediately prints

the job, interrupting the job that is currently printing.

Schedule Print Opens the Fiery Print Scheduler window, which allows you to schedule

when a job prints. For more information, see Fiery Print Scheduler on page

97.

View JobExpert Report Opens a JobExpert report. The reports are available only for jobs with Fiery

JobExpert applied. For more information, see Fiery JobExpert on page 75.

View Preflight Report Opens a Preflight report. The reports are available only for preflighted jobs.

For more information, see Preflight on page 349.

The Fiery Preflight Pro report is available only for preflighted PDF or PDF/VT jobs on Windows-based Fiery servers with Fiery system software

FS500 Pro or later.

Device Center

Command WorkStation shows system information in a single workspace. You can use Device Center to configure the connected Fiery server and access various print management tools.

To access Device Center, click the More icon (three dots) and select **Device Center**, or double-click the Fiery server name in the **Servers** list.

You can use Device Center to do the following tasks:

- View information about the connected Fiery server, including information about consumables on the associated printer.
- Set color defaults.
- View and modify Paper Catalog or Media Catalog, variable data printing (VDP), color profiles, spot color tables, and font settings.
- View and create available virtual printers and server presets, and automate image correction with Image Enhance settings.
- View a detailed log of all processed and printed jobs.

Device Center includes the following settings:

- **General** shows information about the connected Fiery server, including the IP address, capacity (amount of hard disk drive space available), and a list of installed options and packages. The **General** section includes the following features: **General Info**, **Server Configuration**, and **Tools**.
- Color Setup includes Color Management and may include Control Bar, Trapping, and Halftone Simulation, if these features are supported by the connected Fiery server.
- Resources allows you to view and modify Paper Catalog or Media Catalog, variable data printing (VDP), color
 profiles, spot color tables, and font settings. The Resources section includes VDP Resources, Profiles, and Fonts
 and may include the Paper Catalog or Media Catalog, Specialty Colors, and Spot Pro if these features are
 supported by the connected Fiery server.
- Workflows allows you to view a list of available virtual printers and server presets and automate the correction
 of images with Image Enhance settings. The Workflows section includes the following: Job Presets, Virtual
 Printers, and Image Enhance.
- Logs displays a detailed log of all processed and printed jobs. The Logs tab includes the Job Log tab.
- Fiery Updates allows you to view and install the available updates and patches for your Fiery server and view
 the history of completed updates and patches. The Fiery Updates section includes Updates, Patches, and
 History.

Adding and connecting a Fiery server

Access levels to connect to a Fiery server

You can log on as Administrator, Operator, or any user to whom the Administrator has given access. Administrators can set passwords for each type of user.

- Administrator Has full access to all Command WorkStation and Fiery server control panel functions. An Administrator password is required.
- **Operator** Has access to all Job Center functions. In Device Center, an Operator cannot access Configure or Backup and Restore, change passwords, or delete the Job Log. An Operator can view the Paper Catalog or Media Catalog, virtual printers, and color management functions but cannot edit them. Only an Administrator can edit these items.
- User name The Administrator creates users, assigns them to groups, and assigns privileges to the groups, such as guest privileges or creating server presets.

For more information about setting access levels, see *Configure Help* and *Configuration and Setup*, which is part of the user documentation set.

Connecting to a Fiery server

To use Command WorkStation, you must connect to a Fiery server.

The **Servers** list of Command WorkStation manages access to any available Fiery server. You can add, connect to, remove, and disconnect from a Fiery server.

You can search for a Fiery server by entering the server name or IP address in the **Add Fiery Server** window. After the server connection is made and authenticated, the IP address switches to the Fiery server name in the **Servers** list. Command WorkStation can connect to more than one Fiery server at a time.

If the connection to the Fiery server is disconnected, Command WorkStation attempts to reconnect automatically. For more information about Autoreconnect, see Set Command WorkStation preferences on page 29.

If any of the Command WorkStation plugin windows are open at the time of losing the connection to the Fiery server, Fiery Impose, Fiery Compose, or Fiery JobMaster will display a message to the user and provide an option to save the job as a flattened PDF.

For more information about saving as a flattened PDF, see the Fiery JobMaster-Fiery Impose-Fiery Compose Help.

Add and connect to a Fiery server

You can add, connect to, and reconnect to a Fiery server.

Before you add a Fiery server, you need its server name or IP address.

If you do not have the server name or the IP address, you can use search to find any available Fiery server on the network. See Search for an available Fiery server on page 25.

- 1 Click the plus sign in the **Servers** list or in the **Home** screen. Type the IP address or server name for the Fiery server and then click **Add**.
- 2 Select the user from the **User** list and type the appropriate password.

 In addition to the default user names of **Administrator** and **Operator**, users can log in with their user names if the network administrator has assigned them as a member of one of the groups.
- 3 Click Login.
- **4** If you previously connected to a Fiery server in the **Servers** list, select the Fiery server and click **Connect**.

Search for an available Fiery server

If you do not know the server name or IP address of a Fiery server, you can search in your local area network for a Fiery server. You can search within the subnet containing the local computer or within a specific subnet or IP address range.

- 1 Click the plus sign in the **Servers** list.
- **2** If the **Add Fiery Server** window does not display the results of an automatic search of the local subnet, or if you do not have a server name or IP address, click **Advanced Search**.
- **3** Do one of the following:
 - To search for Fiery servers within a specific IP address range, select IP Range from the Search menu.
 - Enter the start of the IP address range in **From**. To include the beginning of an octet, enter 0. For example, 10.100.10.0.
 - Enter the end of the IP address range in **To**. To include through the end of an octet, enter 255. For example, 10.100.10.255.
 - To search for Fiery servers within a specific subnet range, select **Subnet** from the **Search** menu.
 - Enter the **Subnet Address** to indicate the subnet range to include. Enter 0 in the octets where any number is acceptable. For example, 10.100.10.0 will find 10.100.10.1 through 10.100.10.255.
 - Enter the **Subnet Mask** to indicate any subnet ranges to exclude. Enter 0 in the octets where you do not want to exclude anything. For example, 255.255.255.0 will exclude everything but the indicated subnet address in the first three octets and allow anything in the fourth octet, such as 10.100.10.30.
- 4 Click Go.

The search results display any available Fiery Server that matches the criteria. You can filter the search result list by typing a keyword into the **Filter by keyword** field.

5 Select the Fiery server from the results list, click **OK**, and then click **Add** to add it to the **Servers** list.

Log off the Fiery server

Logging off the Fiery server terminates the connection between the Fiery server and Command WorkStation.

- 1 Select a Fiery server from the **Servers** list.
- **2** Click the More icon beside the name of the Fiery server and log out.

View another Fiery server

You can switch the view from one connected Fiery server to another in Command WorkStation.

• Click any Fiery server in the **Servers** list to switch views from one connected Fiery server to another.

The Servers list

The **Servers** list shows information about Fiery servers that are connected, or were connected, even if they are currently disconnected.

To view the IP address of the Fiery server in the **Servers** list, move the pointer over its name.

You can drag files to the queues in the **Servers** list. The **Servers** list displays information about connected printers immediately below the name of the Fiery server. You can expand an individual Fiery server by clicking the plus sign to the left of its name. Exiting Command WorkStation does not clear the **Servers** list.

Consumables

Consumables are limited resources such as paper, toner or ink, and staples that the printer uses to print jobs.

Information about consumables is available in:

- The Servers list, below the names of the queues for the Fiery server.
- Device Center > General > General Info > Consumables.

The Consumables section in both the Servers list and Device Center includes information about available paper trays, paper levels, and current toner or ink levels. From Device Center, you can also find additional information about waste toner, fuser oil, and staples. To view information about a tray, you can:

- Double-click the tray.
- Select the tray and click the arrow.

If the Fiery server supports tray association, you can assign media entries in Paper Catalog or Media Catalog to specific printer trays.

Server information

To view a detailed list of Fiery server information, choose **Device Center > General > General Info**.

Paper mismatch errors

If a job is submitted to print and does not match the paper or paper tray attributes, it generates an error. The job remains in the Print queue or is blocked, canceled or suspended based on Fiery server settings.

The Fiery server has the following mismatch error modes:

- Suspend on Mismatch
- Cancel on Mismatch

Suspend on Mismatch jobs remain in the Print queue for an interval of time defined in Setup. During this time, a mismatch error message and a timer appear. The timer indicates how long you have to correct the error before the job is released from the Print queue and canceled. Load the correct paper in the tray before the timeout period ends to avoid job cancellation; meanwhile, the next job prints. If the next job prints before the timeout period ends, the Fiery server resubmits the Suspend on Mismatch job to the Print queue.

For more information about processing jobs with missing media, see Configure Help.

Uninstall Command WorkStation

Use Fiery Software Manager to uninstall Command WorkStation and related applications. Uninstalling an application is helpful if you no longer need it on your computer or if you want to perform a fresh installation to troubleshoot an issue. Because Command WorkStation is part of a package, uninstalling the package will uninstall the related applications, including Fiery Software Manager.

- 1 Start Fiery Software Manager.
 You can find Fiery Software Manager in the **Fiery** group of installed applications, or in the system tray in the lower-right corner of your computer desktop.
- 2 Place your cursor over Fiery Command WorkStation Package and click the Remove icon (trashcan).
- **3** Follow the onscreen instructions.
- **4** Alternatively, you can uninstall applications from **Control Panel** > **Programs and Features** on Windows and from Fiery Software Uninstaller on macOS.

Customizing Command WorkStation

Set Command WorkStation preferences

You can set preferences globally for Command WorkStation, for example, to reset the application settings to their original defaults.

- 1 To open the **Preferences** window:
 - On a Windows computer, click **Edit** > **Preferences**.
 - On a Mac computer, click **Command WorkStation** > **Preferences**.
- 2 Under General, specify any of these general setting preferences:
 - Appearance On a Mac computer, select whether to use dark mode or light mode, or select **System** to use the current operating system setting. The change will be implemented the next time you start Command WorkStation.
 - **Auto reconnect** Select **Enable Auto reconnect** to automatically reconnect to disconnected servers with saved passwords.
 - Updates Click Check now for more recent software versions.
 - Reset settings Click Reset to restore application settings to their original defaults.

Note: Fiery servers that have been added will be retained in the **Servers** list, along with their passwords.

- Clear data Click Clear data to clear all passwords saved in Command WorkStation for all users and all servers.
- Archive Manager Select whether to enable or disable Archive Manager.
- Job Tags Select whether to display tags (a maximum of 10) in the Servers list.
- Fiery Health Monitor Select Display status in Job Center to show the Fiery server health status in the topright corner of Job Center.
- Improvement program To help Fiery improve the quality, reliability, and performance of the software by sending anonymous usage data but not your name, address, or any other personally identifiable information, click the relevant check box.

- **3** Under **Region**, specify any of these regional setting preferences:
 - Language Select the language you want to use in Command WorkStation. By default, Command WorkStation uses the local operating system language, if the language is supported. If the language is not supported, Command WorkStation defaults to English.

Note: Changing the language of Command WorkStation will also apply to Fiery Hot Folders, and vice versa, if installed on the same client computer.

• **Measurement units** - Specify the units of measurement used to display attributes, such as page sizes and custom sizes. This setting does not affect predefined page-size values.

Note: If Fiery Impose is enabled, the **Measurement units** setting also applies to the values entered manually in the imposition window.

- 4 Under Export, you can share settings with another Command WorkStation client.
 - Import Click Import to import Command WorkStation settings from another computer.
 - Export Click Export to export Command WorkStation settings to a Zip file, which can be used to set up other Command WorkStation clients.
- **5** Under **Workspace**, you can back up the Command WorkStation workspace settings to the Fiery IQ cloud and share the workspace setting with other users.
 - Backup and Restore to the Fiery IQ Cloud Click Get Started to sign in to your Fiery Account or create one. After you are logged in, you can back up or restore workspace settings. For more information, see Back up the workspace settings on page 45 and Restore the workspace settings on page 45.
 - **Share workspace settings** Click **Share** to share your workspace settings or invite users to use your workspace settings. For more information, see <u>Share the workspace settings</u> on page 47.
 - Import Click Import to import Command WorkStation settings from another computer.
 - Export Click Export to export Command WorkStation settings to a Zip file, which can be used to set up other Command WorkStation clients.
- 6 Click **OK** to save and close the **Preferences** window.

Customize the Servers list

You can rearrange the order of the Fiery servers listed in the Server pane.

- 1 At the top of the Servers list, click the **Customize Server List** icon (). The icon is at the top of the Servers list, to the left of the + button (Add Server).
- **2** Select the name of the Fiery server and click **Move Up** or **Move Down** to move the Fiery server to the desired position.
- 3 Click OK.

- **4** In the **Queues** tab, select the elements to display for all Fiery servers.
 - Queues (for example, Printed, Processing, Completed)
 - Toners
 - Trays
 - Job Tags
 - Archive Manager

Note: You must select at least one queue for each connected type of Fiery server. If you hide the All Jobs queue, the following features will not be available: locating jobs from a search of all Fiery servers and creating custom views.

Manage Job Center columns

You can customize column headings for the queues. Change the order of these columns or add/delete them to present information relevant to your particular print environment.

Change the column display

You can specify sets of Job Center columns, add columns, or remove them.

- 1 Right-click in the column heading bar.
- **2** Do any of the following:
 - Select either **Standard Set**, **VDP Set**, or **JDF Set** to use a predefined column layout.
 - Hover your mouse over Add New and select a column to add specific column headers from the available categories.

Note: The added column appears to the left of the selected column. You can move the column by dragging and dropping the column name.

• Select **Remove** to remove the currently selected column.

Adjust the width of a column

You can change the width of a Job Center column.

• Drag a column border to the left or right.

Expand or collapse panes

You can expand or collapse the **Job Summary** and **Servers** panes. You can also collapse the individual servers in the **Servers** pane.

- Do one of the following:
 - Click the arrow icon in the title bar of the **Preview** pane to expand or collapse the preview.
 - Click the plus sign or minus sign next to a server in the **Servers** list.
 - To collapse the entire **Servers** pane to the left, click the arrow icon in the bottom-left bar.
 - To collapse the entire **Job Summary** pane to the right, click the arrow icon in the bottom-right bar.

Customize the toolbar

You can customize the toolbar in **Job Center**. You can also restore the default toolbar icons.

Some toolbar icons are available only if the Fiery server supports them.

- 1 Right-click anywhere on the toolbar, and select **Customize** from the menu that appears.
 - **Standard Set** is the default set of toolbar icons.
- 2 In the **Customize Toolbar** window, add or remove toolbar icons by selecting a tool and clicking either **Add** or **Remove**.

You can add the following toolbar icons to the standard set:

- Process and Hold Processes the selected job and keeps it in the Held list.
- Archive Archives the selected job.
- Suspend/Resume Printing Toggles between suspending printing of all jobs and resuming printing of all jobs.
- Impose Opens Fiery Impose for the selected job.
- **Compose** Opens Fiery Compose for the selected job.
- **JobMaster** Opens Fiery JobMaster for the selected job.

For a list of the standard set icons, see Job Center toolbar icons on page 33.

- 3 Specify the order in which the toolbar icons should be shown by selecting a tool and clicking Up or Down.
- **4** Click **Standard Set** to return to the default toolbar icons.

Job Center toolbar icons

The **Job Center** toolbar displays a standard set of icons.

Import Opens the **Import Files** window.

Print Prints the selected job.

Properties Opens the **Job Properties** window for the selected job.

Preview Opens the **Fiery Preview** window with the selected job displayed.

Schedule Opens the **Fiery Print Scheduler** window, where you can schedule the

selected job for printing.

New Job Opens the Fiery JobMaster, Fiery Impose, or Fiery Compose window,

depending on the license activated on your computer, where you can create

a brand new print job.

Delete Deletes the selected job.

Calibrate Opens the **Calibrator** window for the Fiery server.

Logs Opens the **Job Log** window.

Paper Catalog or Media Catalog Opens the Paper Catalog or Media Catalog window.

Spot Pro Opens the **Spot Pro** window.

Start Sample Print Prints a separate page or finished output set to an open output tray to verify

the output.

Note: Some tools are available only if the Fiery server supports them.

Configuring Fiery server settings

Access Configure

After you start the Fiery server for the first time, or install system software, you must set up the Fiery server. If you do not, default settings are used. Make sure that the settings are appropriate for your printing environment. If your network or printing environment changes, you may need to adjust your settings.

When you use proxy servers with the default web browser, you may not be able to start Configure from Command WorkStation. Register the Fiery server IP address as an exception in the default browser settings. Verify your default browser connection settings and adjust them accordingly.

You can set up the Fiery server from a client computer using Configure, which you can access from the following locations:

- Command WorkStation
- WebTools (with a supported Internet browser)

Access Configure from Command WorkStation

- 1 From Command WorkStation, connect to the desired Fiery server and log in as Administrator.
- **2** Do one of the following to start Configure:
 - In **Device Center**, select **General Info**, then click **Configure** in the lower-right corner.
 - In the Server menu, click Configure.
- **3** From Configure, change current Fiery server setup options.

Access Configure from WebTools

Use Configure to set up the Fiery server. Setup is required the first time the Fiery server is turned on or after system software is installed. You also use Configure to specify information about the network environment and printing preferences for jobs that users send to the Fiery server.

1 Open an Internet browser and type the IP address of the Fiery server.

If you have disabled Web services from the printer control panel, you must type https://IP address.

2 In WebTools, click the **Configure** tab.

Note: When you start Configure, the browser may display a security certificate error. You can safely proceed despite the error.

3 Log on with Administrator privileges.

Manage certificates in Configure

The Fiery server requires a secure connection between user computers and components of the Fiery server. HTTPS over TLS encrypts communications between the two end points. HTTPS is required for a connection to the Fiery server from WebTools. These communications are encrypted with TLS 1.2 and 1.3.

The Fiery server allows the Administrator to manage the certificates used during TLS communications (X.509 certificate format encoded in Base64). The Fiery server supports RSA certificates with 4096, 3072, and 2048-bit key length.

You can manage certificates in these ways:

- Create self-signed digital certificates.
- Add a certificate and its corresponding private key for the Fiery server.
- Add, browse, view, and remove certificates from a trusted certificate authority.

Note: Because self-signed certificates are not secure, you must use a certificate from a trusted Certificate Authority (CA).

After you obtain a certificate signed by a trusted Certificate Authority, you can upload the certificate to the Fiery server in Configure.

Add a certificate or private key

When you add a certificate or private key, you specify its location.

- **1** To view information about a certificate, hover the mouse over the certificate name then click the eye icon. You can also delete the certificate by clicking the trash can icon.
- **2** From Configure, choose **Security** > **Trusted Certificates**.
- 3 Click Add.
- 4 Click **Browse** to select the file and then click **Add**.

Assign a certificate to the Web server

You can assign or reassign a certificate used by the Web server.

- 1 From Configure, choose Security > Server Certificate.
- **2** Click Create Self Signed Certificate.

- **3** Specify and save your certificate information.
- **4** To change the certificate used by the Web server, select the certificate, click **Change Certificate**, and then specify the location of the certificate or private key.

Delete an assigned certificate

You can delete an assigned certificate.

- 1 From Configure, choose Security > Trusted Certificates.
- **2** Hover the cursor over the certificate you want to delete. Notice the Delete icon (trash can) is displayed.
- **3** Click the **Delete** icon.

Locate help and other information about Configure

In Configure, click the Help icon on the right side of the screen.

For information about setup options in Configure that are not discussed in this Help or *Configure Help*, see *Configuration and Setup*, which is part of the user documentation set.

Note: Some Configure options may not be supported by your Fiery server.

Exit Configure

Some changes won't take effect until you reboot the Fiery server. If a setting change requires a restart, reboot, or other action, the banner at the top of the page will display a message.

- 1 Make the appropriate changes.
 If you are making multiple setting changes that require a reboot, you can wait to reboot until you have finished making all your setting changes.
- **2** Reboot the Fiery server so that the changes take effect.

View, save, or print server settings

The Server Configuration tab in Command WorkStation lists the current Fiery server settings.

View server configuration settings

From the Server Configuration tab, you can view categories of Fiery server settings or change the Setup options.

- 1 From Command WorkStation, connect to the desired Fiery server and click **Device Center** > **General** > **Server Configuration**.
- **2** Do one of the following:
 - Click the shortcuts on the left side of the page to view settings for a particular category.
 - Click **Configure** in the bottom-right corner of the window to change current Fiery server Setup options.

Save the server configuration as a file

You can save the server configuration as a file for each Fiery server you are connected to. This is especially useful if you are managing multiple Fiery servers and want to keep track of any changes made in Fiery server Setup.

- **1** From Command WorkStation, connect to the desired Fiery server.
- **2** Click **Device Center** > **General** > **Server Configuration**.
- 3 Click Save As.
- **4** Specify the file name and location.
- **5** Select **PDF** or **Text** for the file type.
- 6 Click Save.

Print the server configuration page

After you have performed Setup, print the server configuration to confirm your settings, and post it near the Fiery server for quick reference. Users need the information on this page, such as the current printer default settings.

- 1 From Command WorkStation, connect to the desired Fiery server and do one of the following:
 - Click Device Center > General > Server Configuration.
 - Choose Server > Print > Server Configuration.
- **2** Do one of the following:
 - Click Print, select the printer to send your Server Configuration page to, and then click Define if you want to
 specify different job properties for the print job from what is currently set as default on the Fiery server. Click
 Print again to print the page.
 - Click **Server** > **Print** > **Server Configuration**. A Server Configuration page is sent to the printer you are currently connected to. The page prints with the default paper size and options of the Fiery server.

Users and groups

You can define privileges for the users who access the Fiery server by assigning them to groups. Several groups are provided by default, and you can create new groups. All users in a group have the same privileges.

Note: Command WorkStation allows only users from the existing Administrators or Operators groups to log in and not from any custom groups created by the user.

You can view detailed information about users and groups by selecting **User Accounts**.

In addition to assigning the users that you have created to a group, you can add users from your organization's global address list. To do so, you must first enable LDAP services on the Fiery server.

Create new users

If users are not in the global address list or contact list, you can create them manually. Any name that appears in the contact list can become a user that you assign to a group.

The Administrators and Operators groups have a default user named administrator or operator, respectively.

- **1** From Configure, select **User Accounts**.
- **2** Click the **Fiery Contact List** button.
- **3** In the **Fiery Contact List** dialog box, click the **Add User** button.
- **4** In the **Create User** dialog box, specify the required information. Click **Create**.
- 5 Click Close.

Create groups

When you create a group, you define its privileges. You can add new or existing users to the group when you create it, or you can create a group without adding users and then add them later.

To add users from your organization's global address list, you must first enable LDAP services on the Fiery server in Configure.

- 1 To restrict printing to only authorized users, from Configure, in **Security** > **Printing Privileges** set **Allow printing from** to **Authorized users**.
 - If **All users** is selected, anyone can print to the Fiery server, regardless of whether you define that person as a user, add users to a group, or assign privileges to the groups.
 - If **Authorized users** is selected, only users in groups for which you have enabled printing privileges can print. Also, users in the Guests group cannot print, unless you otherwise set printing privileges for the Guests group. By default, the Guests group has no printing privileges.

Note: If your printer also offers a user authentication method, you may not be able to use both the printer and the Fiery server authentication methods simultaneously.

2 In User Accounts, click Add Group.

The current list of groups is displayed, including several default groups.

- **3** In the **Add Group** dialog box, enter a group name and a description.
- **4** Select the appropriate privileges for the group.

Note: These privileges may not be supported on all Fiery servers.

- **Calibration** Allows members of this group to calibrate the Fiery server. For default groups, only Administrator and Operator groups have this privilege. For user-created groups, users have this privilege.
- **Create Server Presets** Allows members of this group to save a set of print options that users can select for their job.
- Fiery Mailbox Allows members of this group to have individual mailboxes for scanning.
- **Manage Workflows** Allows members of this group to create, edit, and delete Server Presets and virtual printers.
- Print in B&W Restricts members to print only in black and white.
- Print in Color and B&W Allows members to print in color and grayscale.

Note: If **Allow printing from** is set to **Authorized users**, the Fiery server still allows jobs to be submitted without authentication from Hot Folders.

- **5** Do one of the following:
 - To create the group without adding users, click Save.
 - To add users to the group, click Save and Add Users.

If you choose Save and Add Users, the Assign User dialog box displays.

- **6** In the **Assign User** dialog box, add or remove users from one of the following: the Fiery Contact List or Global Address List.
 - Fiery Contact List Contains users that you have already created.
 - **Global Address List** LDAP must be configured and enabled. Contains names from your organization's corporate database.

Groups created in Configure that share domain groups obtained from the corporate server via LDAP are updated dynamically. This is useful because the Fiery server automatically verifies changes (such as additional group members) in the LDAP domain groups and updates the Fiery server group.

Add users to existing groups

You can add existing users to an existing group, or you can create users and add them to the existing group. You can add users to as many groups as you want.

Creating a user account does not assign any privileges to that user until you add the user to a group.

If you allow all users to print without authentication (in **Security** > **Printing Privileges**, set **Allow printing from** to **All users**), a user that is not in a group can print, but does not have any other privileges.

- 1 From Configure, select **User Accounts**.
- 2 Select the group to which you want to add users.
- 3 Click Assign Users.
- **4** Assign the user to groups as required, using any of the following approaches:
 - To create a new user and assign them to a group, select **Create New User & Assign** from the drop-down list, type the appropriate information in the **Create User** dialog box, then click **Save**.
 - To assign an existing user account to a group, select **Add from Contact List**. In the **Assign Users** dialog, enter the account name under **Users of Fiery Contact List**, and press return, or select the account if listed and click **Add Users**.
 - To assign a SSO user account to a group, select **Add from Azure AD**. In the **Assign Users** dialog, select **SSO Users List** and log in. If the user already has an active Azure session, WebTools will fetch the list of users from Azure. If not, the user will be prompted to enter Azure login credentials. Search the SSO user from the list, select the account if listed, and click **Add Users**.
 - To assign a user from the Global Address List, select **Add from Global Address List**. If LDAP is configured and enabled, this list contains names from your organization's corporate database. If the **Configure LDAP Settings** button displays, click the button to configure the LDAP settings to work with Command WorkStation.
- **5** Click **Close** when you have finished adding user accounts to groups.

Create mailboxes for scan jobs

To create mailboxes, you add users to a group that allows the Fiery Mailbox privilege.

- **1** Add users to a group.
 - You can add users to any group, not necessarily the default Scan Users group.
- **2** Assign the group the Fiery Mailbox privilege.
 - Mailboxes are created with the same names as the user names.

Remove users from groups

You can remove a user from a group. Any jobs that the user has already sent to the Fiery server are still processed, and the Job Log retains the name of the user with relevant job information.

After you remove a user from a group, the user still remains in the Fiery Contact List.

Note: You cannot remove the default users named "Administrator" or "Operator."

- 1 From Configure, select **User Accounts**.
- **2** Select the group in which the user exists.

- **3** Move the cursor over the name of the user you want to remove from the group. Notice that the Edit and Delete icons are displayed.
- **4** Click the Delete icon.

 The user is deleted from the group, but not from the Fiery Contact List.

Change user attributes

You can change user attributes, such as the user password and email address. If the user is already logged in, your changes affect the user when the user logs out and logs in again.

To change the default Administrator and Operator passwords, you can use the following procedure or configure a new password.

- 1 From Configure, select **User Accounts**.
- **2** Click the **Fiery Contact List** button.
- **3** Move the cursor over the name of a user. Notice that the Edit icon is displayed.
- **4** Click the Edit icon. In the **Edit User** dialog box, edit user attributes and click **Save**.

Change group privileges

- 1 From Configure, select **User Accounts**.
- **2** Move the cursor over the name of a group. Notice that the Edit icon displays.
- 3 Click the Edit icon. In the Edit Group dialog box, select or clear privileges and click Save.

Note: These privileges may not be supported on all Fiery servers.

• Calibration - Allows members of a group that have this privilege to calibrate the Fiery server. For the default groups, only Administrator and Operator groups have this privilege. For user-created groups, users have this privilege.

Users in a group with the Calibration privilege also have access to the TrueBrand application.

- **Create Server Presets** Allows members of a group that have this privilege to save a set of print options that users can select for their job.
- Fiery Mailbox Allows members of a group that have this privilege to have individual mailboxes.
- **Manage Workflows** Allows members of a group that have this privilege to create, edit, and delete Server Presets and virtual printers.
- **Print in B&W** Restricts members to print only in black and white.
- Print in Color and B&W Allows members of a group that have this privilege to print in color and grayscale.
- Edit jobs Allows members of a group that have this privilege to edit jobs in the Held or Printed queues.

Delete users or groups

You can delete a user from the Fiery server completely. Any jobs that the user has already sent to the Fiery server are still processed, and the Job Log retains the name of the user with relevant job information.

Deleting a group does not delete the users in the group from the system.

Note: You cannot delete the default users named Administrator, Operator, or Guest, and you cannot delete the Administrators, Operators, or Guests group.

- 1 From Configure, select User Accounts.
- **2** To delete a user from the Fiery server completely, do the following:
 - a) Click the Fiery Contact List button.
 - **b)** In the **Fiery Contact List** dialog box, move the cursor over the name of the user you want to delete. Notice that the Edit and Delete icons display.

Note: The Delete icon only displays if you are allowed to delete the user.

- **c)** Click the Delete icon.

 The user is deleted from the Fiery server completely.
- d) Click Close.
- **3** To delete a group, do the following:
 - **a)** In the **Groups** column, move the cursor over the name of the group you want to delete. Notice that the Edit and Delete icons display.

Note: The Delete icon only displays if you are allowed to delete the group.

b) Click the Delete icon.

When prompted for confirmation, click **Yes**. The group is deleted from the Fiery server completely.

Fiery IQ cloud

After you connect to Fiery IQ, you can use the Fiery IQ cloud services manager to update the Fiery server if required, back up your workspace settings, and license activation codes.

Fiery Account

With a Fiery Account, you can back up your Command WorkStation settings, access free Fiery IQ features and resources, and download the latest version of Command WorkStation.

When you associate a Fiery Account with a company, additional Fiery features and resources become available in the cloud. You can share Command WorkStation settings to create a uniform workspace between users.

Note: Administrator permission is required to join a company account.

Sign up for a Fiery Account

You must have a valid email address to create a new Fiery Account.

You can sign in to Fiery IQ with a Fiery Account to access the cloud services or create a new Fiery Account.

An existing Fiery Account must be associated with a company to access the Fiery IQ cloud application. When you sign in with an existing Fiery Account, proceed to step 7 to update your company information.

- **1** From your browser, go to https://iq.fiery.com.
- 2 Click Sign Up.
- **3** Type your information into the text fields.

Note: Text fields marked with an asterisk are required.

4 Click Continue.

Fiery IQ sends an enrollment email containing an enrollment code to your email address.

5 To verify your email address, type the enrollment code, and click **Continue**.

Note: If you did not receive the enrollment email, check your spam or junk folders.

- 6 Click Continue.
- **7** Enter your company information and click **Continue**.

Note: Text fields marked with an asterisk are required.

- **8** Do one of the following:
 - If you want to join the existing company account, click **Request to join**.

Fiery IQ sends a request to the company administrator. You can access Fiery IQ when this request is approved by the company administrator.

- If you want to create your own company account, click I will create a company account.
- **9** If required, click **Continue**.
- **10** If required, sign in to Fiery IQ using your Fiery Account credentials.
- **11** Follow the on-screen instructions to connect your printers to Fiery IQ.

Create a Fiery Account in Fiery Software Manager

You can make a Fiery Account using Fiery Software Manager to download Command WorkStation and other Fiery applications.

You must have a valid email address to create a new Fiery Account.

- 1 In Fiery Software Manager, click **Upgrade** next to Fiery Command WorkStation Package.
- 2 Click Create an Account.
- 3 Follow the on-screen instructions to create a Fiery Account and verify your email.

Connect the Fiery server to the Fiery IQ cloud

The Fiery server must be connected to the Internet.

If you are not signed in to your Fiery Account, sign in now.

- 1 Click the cloud icon in the Command WorkStation sidebar.
- 2 Provide your company details and follow the on-screen instructions.
- **3** Select the Fiery server you want to connect to Fiery IQ.

If an update is available for the Fiery server, click the toggle button to initiate it.

The Fiery server is connected to the Fiery IQ cloud and you can perform cloud-based tasks or manage your Fiery server in the Fiery IQ Dashboard.

Install or update the Cloud Connector

ECC is Cloud Connector software which enables the Fiery server to communicate with the Fiery IQ Cloud. You can install or update the Cloud Connector on your Fiery server.

- 1 To install or update the ECC from Command WorkStation, connect to the desired Fiery server and log in as Administrator.
- 2 Click Device Center > Fiery Updates > Updates.
- 3 Select ECC and click Install or Update.
- 4 Click Continue.

Open the Fiery IQ Dashboard

You can navigate to the Fiery IQ Dashboard from Command WorkStation.

- **1** Connect the Fiery server to Fiery IQ cloud.
- **2** Select the Fiery server in the **Server** pane.
- **3** Do one of the following:
 - Click the cloud icon in the Command WorkStation sidebar.
 - Select Server > Fiery IQ
- 4 Click View Fiery IQ Dashboard.

The Fiery Dashboard will open in a webpage.

Backing up and sharing using Fiery IQ cloud

You can back up these items to the Fiery IQ cloud:

- Command WorkStation workspace settings and share the workspace settings with other users
- Fiery Hot Folders
- Client and server License Activation Codes (LAC)

The workspace settings include the following:

- Fiery server list and customizations
- Job Center columns, toolbar, and saved view
- Job Properties Quick access settings and local presets
- Fiery Impose templates and Image Enhance Visual Editor presets

Backing up settings from the Command WorkStation **Preferences** window does not back up Fiery server settings. You can back up these licenses:

- Fiery Impose
- Fiery Compose
- Fiery JobMaster
- Client-based and server-based Fiery application licenses, except for Fiery Color Profiler Suite.

Back up the workspace settings

You can back up your Command WorkStation workspace settings to the Fiery IQ cloud.

- Do one of the following:
 - In the Fiery IQ cloud services manager window, under Backup your workspace settings, click the toggle button and then click Backup now.
 - Click Edit > Preferences, under Workspace, click Backup now.

Your workspace settings are backed up to the Fiery IQ cloud.

Restore the workspace settings

You can restore the Command WorkStation workspace settings from the Fiery IQ cloud to your computer.

- **1** Do one of the following:
 - In the Fiery IQ cloud services manager window, under Backup your workspace settings, click the toggle button and then click Restore from cloud backup.
 - Click Edit > Preferences, under Workspace, click Restore from cloud backup.

- **2** To select a workspace, do one of the following:
 - Select **Private** to restore private settings.
 - Select **Shared** to choose from the list of shared workspaces.

For more information, see Share the workspace settings on page 47.

By default, all the workspace settings are selected. However, you can choose the specific workspace settings that you want to restore.

3 Click **Restore** to restore the selected Command WorkStation workspace to your computer.

Command WorkStation restarts and applies the changed workspace settings. The workspace settings are merged with your current settings when you restore.

4 Click **Cancel** to close the window without saving the changes.

Back up license activation codes

You can back up your license activation codes to the Fiery IQ cloud.

- 1 Click the cloud icon to open the Fiery IQ cloud services manager window.
- **2** Under **Backup license activation codes**, click the toggle button to start the backup. Your license activation codes are backed up to the Fiery IQ cloud.
- **3** Click **View codes** to view your license activation codes.

Back up Fiery Hot Folders

You can back up your hot folders to the Fiery IQ cloud.

- 1 In the Fiery IQ cloud services manager window, under Backup Fiery Hot Folders, click Backup now.
- 2 Click Done.

Your hot folders are backed up to the Fiery IQ cloud.

Restore Fiery Hot Folders

You can restore hot folders to your computer from the Fiery IQ cloud.

- 1 In the Fiery IQ cloud services manager window, under Backup Fiery Hot Folders, click Restore from cloud backup.
- 2 Click **Browse** to select a location where you want to restore hot folders.
- **3** Select the **Use original folder structure while restoring** check box to retain the original folder names.

- **4** If a warning appears on a restore path, do one of the following:
 - Click **Delete** and click **Yes** to remove the hot folder.
 - Click **Rename** to rename the folder name.
 - Click **Browse** and follow the on-screen instructions to select a new location.
- **5** Click **Restore** to restore the selected hot folders to your computer.
- 6 Click Done.

The hot folders are restored to your computer.

Share the workspace settings

You can share your workspace settings with other users only after backing up your settings to the Fiery IQ cloud.

- 1 In the Preferences window, under Workspace, click Share.
- **2** In the **Share workspace settings** window, type the appropriate information.
- 3 Click Share.
- **4** If the sharing was successful, you can invite users to create a Fiery Account and use the workspace settings you shared.

Users with a Fiery Account can restore the shared workspace settings from the Fiery IQ cloud.

- **5** In the **Invite users** window, do the following:
 - a) Type the user's email address.
 - **b)** Choose **Admin** or **Operator** role for the user.

Role	Privileges
Operator	 Shares workspace settings with other users Cannot invite other users to use the shared workspace settings Cannot access the Admin console in Fiery IQ
Admin	 Shares workspace settings with other users Invite other users to use the shared workspace settings Has access the Admin console in Fiery IQ

c) Click Add.

An invitation is sent to the specified email address.

In the **Invite users** window, **Your team members** section shows the following:

- Status of the invitation and the user's role
- Details of the existing Fiery IQ users connected to the same printer with the administrator role
- 6 Click Done.

About backing up and restoring

You can back up either the Fiery Resources and Settings, or an entire system image of the Fiery server.

For more information about backing up the system image, see *Configuration and Setup*, which is part of the user documentation set.

Back up or restore Fiery server settings

You can back up or restore Fiery server settings from Command WorkStation. If your Fiery server has Fiery system software FS350/350 Pro or earlier, you can also back up or restore settings from Configure.

Note: The Restore Fiery Settings and Restore Default Fiery Settings options are not available for every Fiery server.

Back up Fiery server settings from Configure (FS350/350 Pro and earlier)

From Configure, you can choose which Fiery server settings you want to back up.

- 1 From Configure, choose Fiery Server > Backup.
- **2** Follow the on-screen instructions to back up your settings.

Back up Fiery server settings from Command WorkStation (FS350/350 Pro and earlier)

From Command WorkStation, you can choose which Fiery server settings you want to back up.

- 1 Connect to the Fiery server and do one of the following:
 - Click Device Center > General > Tools > Backup & Restore.
 - Select Server > Backup and Restore.
- 2 Click Backup.
- **3** Select the items you want to back up.
- 4 In the dialog box that appears, select a location to save the file and specify a name for the backup file.
- 5 (Optional) Select Add date to file name.
- 6 Click Next, and then click Finish.

Back up Fiery server settings from Command WorkStation (FS400/400 Pro and later)

From Command WorkStation, you can choose which Fiery server settings you want to back up.

We recommend that you save the backup file to a network server, not the Fiery server itself. Otherwise, when you reinstall system software, the backup file is deleted.

Settings can be restored to another Fiery server of the same model and version, but settings such as Server Name, IP address and Network settings are not restored; the existing settings remain untouched. This prevents problems with both Fiery servers co-existing on the same network.

- 1 Connect to the Fiery server as Administrator and do one of the following:
 - Click Device Center > General > Tools > Fiery Resources and Settings.
 - Select Server > Backup and Restore.
- **2** In the new web browser window that appears, click **Fiery Resources and Settings**.
- 3 Click Backup Now.
- **4** Select the items you want to back up and click **Continue**.
- 5 In the window that appears, specify a name for the backup file.
- 6 (Optional) Select Add date to file name.
- 7 Click Continue.
- **8** Download the file you want and specify a location for the file. You must choose an .fbf file and a .DAT file.

Restore Fiery server settings from Configure (FS350/350 Pro and earlier)

If you previously backed up Fiery server settings, you can restore them from Configure.

- 1 From Configure, choose Fiery Server > Restore.
- **2** Follow the on-screen instructions to restore your settings.

Restore Fiery server default settings from Configure (FS350/350 Pro and earlier)

After you restore default settings from Configure, the Fiery server must reboot to revert to them.

Note: The information in this topic applies only to the Integrated Fiery server.

- 1 From Configure, choose Fiery Server > Restore Default Fiery Settings.
- 2 Click the Restore Default Fiery Settings button.

Restore Fiery server settings from Command WorkStation (FS350/350 Pro and earlier)

If you previously backed up Fiery server settings, you can restore them from Command WorkStation.

- 1 Connect to the Fiery server and do one of the following:
 - Click Device Center > General > Tools > Backup & Restore.
 - Select Server > Backup and Restore.
- 2 Click Restore.
- **3** In the window that appears, browse to the location of the configuration settings you want to restore and click **Open** or select a recent backup.
- 4 Click **Next** and select the items you want to restore.
- **5** Click **Next**, and then click **Finish**.
- **6** After the restore operation is complete, reboot the Fiery server if you are prompted.

Restore Fiery server settings from Command WorkStation (FS400/400 Pro and later)

If you previously backed up Fiery server settings, you can restore them from Command WorkStation. Settings can be restored to another Fiery server of the same model and version, but settings such as Server Name, IP address and Network settings are not restored; the existing settings remain untouched. This prevents problems with both Fiery servers co-existing on the same network.

- 1 Connect to the Fiery server as Administrator and do one of the following:
 - Click Device Center > General > Tools > Fiery Resources and Settings.
 - Select Server > Backup and Restore.
- 2 In the new web browser window that appears, click Fiery Resources and Settings.
- 3 Click Restore.
- **4** In the window that appears, click **Choose File** and browse to the location of the configuration settings you want to restore and click **Open**.
 - You must choose an .fbf file and a .DAT file.
- 5 Click Continue.
- **6** Select the items you want to restore and click **Continue**.
- **7** After the restore operation is complete, reboot the Fiery server if you are prompted.

Viewing jobs

Command WorkStation provides multiple options for viewing job content.

You can view the content of spooled, unprocessed jobs in one of the following locations:

- Fiery Preview See Fiery Preview in Command WorkStation on page 51.
- **Job Summary** See Viewing jobs in the Job Summary pane on page 51.

You can view the content of processed jobs in one of the following locations:

- **Job Summary** pane See Viewing jobs in the Job Summary pane on page 51.
- Preview window See Preview a processed job on page 54.
- Fiery ImageViewer Available if supported by the Fiery server. See Fiery ImageViewer on page 352.

Fiery Preview in Command WorkStation

Fiery Preview provides a preview of both spooled and processed jobs. If you open a processed job in Fiery Preview, the job opens in raster preview mode.

If you have Fiery Graphic Arts Pro Package, Fiery ColorRight Package, Fiery Graphic Arts Package, Premium Edition, or Fiery Productivity Package installed, you can view the raster image of a processed job in Fiery ImageViewer and adjust colors and perform other soft-proofing actions. The Fiery ImageViewer icon is available in the upper-right corner of the **Fiery Preview** window.

To open a rasterized job and specify settings in Fiery Impose, Fiery Compose, or Fiery JobMaster, select the job in Command WorkStation **Job Center**.

Viewing jobs in the Job Summary pane

The Job Summary pane lists specific information for a selected job. If a job has been processed, thumbnails for all surfaces in that job are displayed. On a Fiery server with Fiery system software FS300/300 Pro or later, thumbnails are displayed for spooled jobs as well as processed jobs.

If a job is processed, you can view thumbnails of all the content in the **Preview** pane in **Job Center**. A spooled, unprocessed job can be opened in the **Fiery Preview** window. You can open a processed job in Fiery ImageViewer if Fiery Graphic Arts Pro Package, Fiery ColorRight Package, Fiery Graphic Arts Package, Premium Edition, or Fiery Productivity Package is supported on the Fiery server.

In the **Held** list, select either a spooled or processed job to display it in the **Preview** pane. If the job is processed and has multiple pages, you can use the arrow buttons to navigate through the pages. The **Job Summary** pane displays information about the job. Some categories of information are editable as indicated by the pencil icon.

The following categories of information are displayed depending on the capabilities of your Fiery server and the status of the selected job:

Job Summary pane categories	Description			
Thumbnail	An image preview of the job.			
Title	The name of the job.			
Sheets	The number of sheets in the job after it has been processed.			
Pages	The number of pages in the job.			
Copies	The number of copies you want to print.			
Media	Any media information, such as page size, media type, or media weight.			
Last calibrated	The date of the last calibration of the printer. An icon indicates the status.			
Preflight	The information related to Preflight . An icon indicates the status.			
	You can view the errors and warning in the job by clicking View Report.			
JobExpert	The Fiery JobExpert rules applied to the job. When the job is spooled, you can view the recommended job settings applied to the job by clicking View Report . You can also click Clear to remove the recommended job settings set by Fiery JobExpert.			
Last action	The last action taken on the job, such as spooled, processed, or printed, along with a date and time stamp.			
Workflow	The workflow used for the job.			
	Note: You can choose from the available virtual printers or presets.			
Spot Colors	The number of spot colors used in the job.			
Tags	The current tags applied to the job.			

Viewing job actions in the History pane

You can view actions from a job's history in the **History** pane of **Job Center**.

You can toggle between the **Summary** and **History** panes by clicking the tabs on the right side of **Job Center**.

The **History** pane displays a list of previous job actions, starting with the most recent action, up to a maximum of 100 actions.

Note: If you clear the Job Log on the Fiery server, all job history information will be deleted.

You can view the time and date a job was created, processed, printed, or canceled. The **History** pane also shows the time and date of any processing or printing errors for a job.

For the printed and print canceled actions, the **History** pane shows the following attributes:

- Number of copies
- Number of pages or sheets
- Media size, type, weight, and assigned paper catalog entry

Note: If the job uses Mixed Media, the description **Mixed** is displayed.

Preview a spooled, unprocessed job

You can view spooled jobs in the Fiery Preview window.

1 In **Job Center**, select a spooled job in the **Held** list.

Note: If the job is processed, you will see the job in raster preview mode and have access to limited functions.

- **2** Choose one of the following ways to open the **Fiery Preview** window:
 - Right-click and select Preview.
 - In the Actions menu, select Preview.
 - Click the **Preview** icon in the Command WorkStation toolbar.
 - Double-click anywhere in the image displayed in the **Preview** pane.

Toolbar icons in Fiery Preview

The following icons are available on a standard Fiery Preview toolbar:

- Select selects a sheet or page.
- Drag the preview around in the window allows you to click and drag the preview
- Show measurement of page elements displays the sheet width and height
- **Zoom In** enlarges the preview size
- **Zoom Out** reduces the preview size
- **Toggle Sheet Content** toggles between thumbnail view and the wireframe view. The wireframe view shows the pagination of records.
- Show finisher layout lines

Note: The **Show finisher layout lines** icon appears with a valid Fiery Impose license and when the **Allow Finisher Integration** check box is selected in **Preferences**.

For more information, see Fiery JobMaster-Fiery Impose-Fiery Compose Help

Preview a processed job

If a job is processed, you can view thumbnails of the content in the **Preview** pane in **Job Center**, or in the **Preview** window, where the raster image is displayed.

You can open Fiery ImageViewer if the Fiery Graphic Arts Pro Package, Fiery ColorRight Package, Fiery Graphic Arts Package, Premium Edition, or Fiery Productivity Package is supported on the Fiery server.

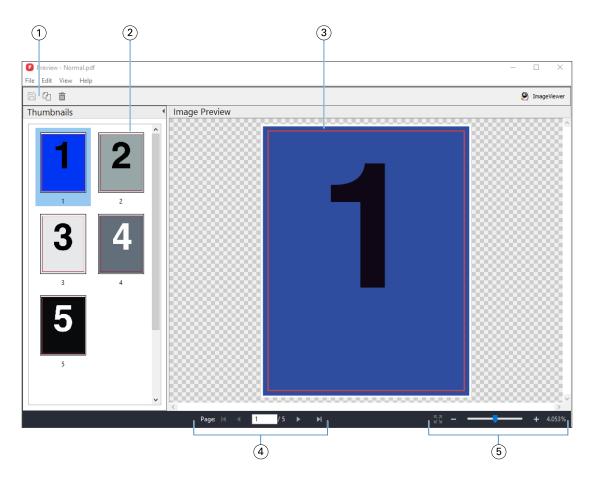
Preview will show the results of **Raster Curve Editor**. If the Fiery server supports **Pure Primaries**, **Preview** does not reflect the effect of **Pure Primaries** with raster curve edits. Fiery ImageViewer will show the selection of **Pure Primaries** with raster curve edits, and the job will print correctly.

- 1 In **Job Center**, select a processed job in the **Held** list.
- **2** Choose one of the following ways to open the **Fiery Preview** window:
 - Right-click and select Preview.
 - In the **Actions** menu, select **Preview**.
 - Click the **Preview** icon in the Command WorkStation toolbar.
 - Double-click anywhere in the image displayed in the **Preview** pane.

Note: You can open multiple **Preview** windows with different processed jobs. However, when you select multiple processed jobs at a time, the **Preview** option is not available.

3 To display the non-imageable area, click **View** > **Non-Imageable Area**. You can change the color of the non-imageable area in **Edit** > **Preferences**.

The following illustration shows the raster preview of a job:



- 1 Toolbar icons for saving the job, and for duplicating and deleting the selected page(s) in the job
- 2 Thumbnails
- 3 Raster file
- 4 Navigation controls for paging through the job and displaying the sheet number
- 5 Zoom control icons for Fit Page and Zoom Ratio

Toolbar icons in raster preview

The following icons are available on a standard Fiery Preview toolbar when viewing a processed job:

- Save saves changes made to the job or to save a new file
- **Duplicate** duplicates the selected page or pages
- **Delete** deletes the selected page or pages
- ImageViewer opens the job in the Fiery ImageViewer window if the Fiery server supports either the Fiery Graphic Arts Pro Package, Fiery ColorRight Package, Fiery Graphic Arts Package, Premium Edition, or Fiery Productivity Package

Merging pages in Preview

You can open multiple **Preview** windows with different jobs, but all jobs must come from the same Fiery server. You can edit the jobs in each window separately. You can also drag pages from one window to another.

When you drag a page from one window to another, the source window (from which you dragged the job) becomes Read Only. The destination window is editable, but you must save the new job with merged pages in the destination window before the source window becomes editable again.

Note: When you have multiple **Preview** windows of different jobs open, unless you save the most recently edited job, you cannot edit other jobs.

VDP raster preview

You can preview a processed Variable Data Printing (VDP) job in the **Preview** window. Previews include any imposition settings that may have been applied to the job. The content of the job is displayed actual size, organized by records or finished sets.

In the VDP raster preview, you can do the following:

- Navigate through the job by records or finished sets and pages or surfaces. The navigation parameters displayed change dynamically, depending on whether the job is imposed or not.
- Change the size of the thumbnails.
- Expand or collapse records or thumbnails.
- Open the job in Fiery ImageViewer, if it is supported by the Fiery server.

Note: The **Save**, **Duplicate**, and **Delete** functions are not available for VDP jobs displayed in the **Preview** window.

Preview of a VDP job before imposition

When a processed VDP job is displayed before imposition in the **Preview** window, you can navigate by records and pages. You can also open the job in Fiery ImageViewer, if it is supported by the Fiery server.

Note: The **Save**, **Duplicate**, and **Delete** functions are not available for VDP jobs displayed in the **Preview** window.

Preview of a VDP job after imposition

When a processed VDP job is displayed after imposition in the **Preview** window, you can navigate by finished sets and surfaces.

If you want to impose a processed VDP job, you must impose the job, save it in .dbp format, process it, and then open it in the **Preview** window. You can also open the job in Fiery ImageViewer, if it is supported by the Fiery server.

Note: The **Save**, **Duplicate**, and **Delete** functions are not available for VDP jobs displayed in the **Preview** window.

Display of gangup VDP jobs

If a VDP job is imposed as **Gangup** using the **Cut and Stack** layout and the **Stack size** is set to **All**, the job consists of one finished set. In this workflow, you can navigate by surface only. If the **Stack size** is set to more than one, you can navigate by finished set and surface, as with any other imposed VDP job.

Printing

Import jobs for printing

You can print files by importing them directly into Fiery server queues, or import jobs that have been archived to external locations (other than the Fiery server hard disk).

Importing jobs into the print queues

Print files by importing them directly to the Fiery server. You can import multiple jobs at a time and maintain the format of the files.

Importing files to a queue is similar to printing through a printer driver or application, but jobs sent using the Print command are converted to PostScript, unlike the Import function, which maintains the file format. You can import files by dragging and dropping them to

- The connected Fiery servers in the Servers list
- The Printing or Processing queues
- The Held queue

However, for the best control over how files import, use the **Import** icon in the **Job Center** toolbar or the **Import Job** icon in the **File** menu. You are immediately taken to the browse window on your computer. When files are selected, they are displayed in the **Import Files** window. In this window, you can easily apply a workflow (server preset or virtual printer) to files at the time of import. Generally, you cannot do this when you import files by dragging and dropping (the **Servers** list is the only exception to this rule).

1 Drag and drop files or folders from the computer to the **Printing** or **Processing** queue, or the **Held** list.

The supported file types are PS, PRN (when created with a PostScript or PCL printer driver), PDF, EPS, TIFF, PCL (when created with a PCL driver), PDF/VT, PPML, ZIP, VPS, and Fiery FreeForm Plus.

Note: The PCL, PPML, ZIP, and VPS file types may not be supported for all Fiery servers.

The **Import Files** window does not display when you drag and drop files or folders to these locations. The entire contents of folders are imported.

2 Drag and drop files to a connected Fiery server in the Servers list.

The **Import Files** window appears. See step **5**.

- **3** To import files directly from your computer, do one of the following:
 - Click File > Import Job.
 - Click the **Import** toolbar icon in **Job Center**.

4 In the browse window on your computer, select the files you want to upload.

The **Import Files** window appears.

- **5** Do one of the following:
 - Select **Apply default settings** to import files with attributes defined in the files. If a setting is not defined, the default setting on the Fiery server is used.
 - Select **Use Server Preset** and then choose from a list of factory default presets or server presets that are currently published on the Fiery server.
 - Select **Use Virtual Printer** and then choose from a list of virtual printers that are currently published on the Fiery server.

The **Use Server Preset** and **Use Virtual Printer** options above only appear if server presets or virtual printers have been set up on the Fiery server.

- **6** Select a job action. For example:
 - Process and Hold (default)
 - Print
 - · Print and Hold
 - · Print and Delete

Other choices may appear based on the capabilities of the Fiery server.

Note: The last chosen action will be displayed.

Import jobs from external archives and Fiery server hard disk

Import jobs that have been archived to external locations, including the Fiery server hard disk.

- Do one of the following:
 - To manually import jobs, click **File** > **Import Archived Job**. Browse to the directory and select the folder containing the archived job. Select the job and then click **OK**.

If the folder you want does not appear in the list, click **Manage** to browse to the directory to locate and add the folder, and click **OK**.

The imported job appears in the Held queue.

• Select the file on your computer desktop and drag and drop it into the specified queue in Command WorkStation.

Setting print options

The print options for a job, accessed from the **Job Properties** window, specify such information as whether the job should print single-sided or duplex or be stapled.

After a print job reaches the Fiery server, an operator can view or change these print options in the **Job Properties** window of Command WorkStation. For example, an operator might do the following:

- View the job's print settings, including instructions to the operator
- Override settings
- Print a list of the current job properties to a local printer

View job properties

You can view or override the print options for a selected job in either the Held, Printed, or Archived queue.

If you are an operator and have not changed any settings or print options for a job in Command WorkStation, the **Job Properties** window reflects all the job settings a user entered in the PostScript printer driver before sending the job, or the default settings in the PostScript printer driver.

Jobs that are imported into Command WorkStation will show either the settings included with the job (for PostScript jobs only) or the default job settings for the Fiery server (for PDF files or jobs imported without job information).

For jobs that are currently in progress, you can view a read-only version of job properties. This includes jobs that are Processing, Waiting to process, Printing, or Waiting to print. This allows you to verify properties of active jobs without having to cancel the job.

View or override job properties

You can view or change the print options for a job.

Note: You can use inline editing in the Job Summary Pane as another way to override job properties.

- 1 Double-click a job in the Held or Printed queue, or select the job and do one of the following:
 - Right-click to select Properties.
 - Click the **Properties** icon.
 - Click Actions > Properties.

To select multiple jobs on a single Fiery server, use shift-click, ctrl-click (on Windows), or cmd-click (on macOS); then click **Properties**. After the multiple jobs have opened, specifying a value in the **Job Properties** window applies it to all jobs by default. The **Summary** tab allows a side-by-side comparison of the print options for multiple jobs.

2 Click each icon to view the print options for the job properties group.

For some options, changing the setting requires that the job be reprocessed.

3 If you want to override the print options, make the changes, and then click **OK** to save your override settings or click **Print** to save and print the job with your settings.

When you click **Print**, the **Job Properties** window closes and prints the job with the current settings.

Some settings cannot be applied instantly to jobs that are processed and held because the job needs to be reprocessed to apply the settings.

View a summary of a job's existing print properties

The Job Properties window allows you to print a summary of a job's current properties.

- 1 In the **Job Properties** window, click the **Summary** icon.
- **2** To print a list of the job's existing properties, click **Print Summary**.

Note: Some print options available in the printer driver are not displayed in the **Job Properties** window. For information about specific print options and settings and where to set them, see your Fiery server documentation.

Job actions in the Job Properties window

You can use common job actions, such as Print, and Process and Hold, within the **Job Properties** window. The default job action is Print.

Print	Causes the Fier	y server to queue the	job to	process and t	hen print. If t	the job
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is already processed, the Fiery server will queue the job to print.

Print and HoldCauses the Fiery server to queue the job to process, print, and then return

the job to the Held queue in a processed state.

Print and Delete Causes the Fiery server to queue the job to process, print, and then delete

the job. This action ensures the printed job is not saved to the Printed

queue, which is often required for secure printing.

Hold Causes the job to be spooled to the Fiery server until the operator takes

further action. Held jobs can exist in a pre-processed or processed state.

Process and HoldCauses the Fiery server to queue the job to process and then return the job

to the Held queue. You can use this job action to preview any job before

printing it.

Proof Print Allows you to print a single copy of a job to verify output. After the job

finishes printing, it is set back to the original number of copies and retains the raster that was created (or used if pre-existing) from the proof print. Proof Print is available from the right-click menu, the **Job Properties**

window, and Fiery Hot Folders.

Print option categories

The Job Properties print options are grouped into categories for quick access.

Quick Access Contains duplicate print options from the other job properties groups. It is

customizable, so any print option can be added or removed from the view. The **Quick Access** tab lets you find print options quickly without browsing

through all of the Job Properties tabs.

Job InfoAll information about the job, including user information that may be

required for user authentication, secure print properties, and job handling.

Media Attributes and sources of paper to print and insert.

Layout Defines the imposition of the print job and the booklet process on the media

or sheet, except for positioning that compensates for finishing options, for

example, Tray Alignment.

Color Color settings and additional features (when optional color features are

turned on). This tab will be hidden when connected to a black-and-white

printer.

Image All image quality settings supported by the connected Fiery server and

printer.

Finishing Print options related only to finishing equipment on the printer, and also

image shifting to compensate for finishing options.

VDP All Variable Data Printing (VDP) settings, such as FreeForm and advanced

VDP settings.

Stamping All image stamping options that add, hide, or remove any image on the job.

This also includes watermark properties that define the placement and style

of the watermark.

Note: The **Stamping** tab may not be supported for all Fiery servers.

Summary A summary of the job's existing print properties.

Set defaults for all job properties

The Set Defaults feature allows you to customize the Fiery server by modifying the default job properties settings. After the Fiery server has been configured using Set Defaults, it determines the initial settings whenever creating Fiery Hot Folders, Virtual Printers, and Server Presets. The Set Defaults apply to jobs submitted from the Fiery Driver when Two-Way Communication is turned on.

Jobs imported to the Fiery server with **Apply default settings** selected in the **Import Files** window, or dragged into the Job Center will also inherit the current default settings as configured with the Set Defaults feature. Once the jobs are in the Fiery server queues, the job properties can be overridden.

Note: If Two-Way Communication is turned off, jobs with settings selected by the user and sent from the Fiery Driver to the Fiery server will be applied. All other settings (not edited by the user) will inherit the Factory Default settings (also known as Printer's Default settings).

You can view or edit default settings for all job properties. To change the default job settings, including color settings, select **Set Defaults**. The Set Defaults feature can be accessed from the following areas:

- Device Center > Virtual Printers
- Device Center > Job Presets
- Device Center > Color Management
- Server > Set Defaults

Set Defaults opens the **Default settings** window where you can select the desired default settings for the Fiery server. These settings apply to the Print queue and Hold queue, and act as the defaults for future server presets or virtual printers.

- 1 Click the More icon (three dots) next to the name of the Fiery server, then select **Set Defaults**, or select **Server** > **Set Defaults**.
- 2 In the **Default settings** window, set options individually and choose whether to lock the option or leave it unlocked.

You can also choose to Lock All or Unlock All.

You cannot lock **Output profile** because the Fiery server always defaults to **Use job defined settings**.

Items that are locked will appear grayed out (unavailable) in the Fiery Driver for Windows only when Two-Way Communication is turned on. These settings cannot be overridden at the time of printing. When printing from the Fiery Driver with Two-Way Communication turned off or when printing through the Fiery Driver for macOS, the locked settings will not be shown as grayed out, however, the locked settings will be applied and the default settings on the Fiery server are overridden.

Note: To reset job properties to the settings before they were changed, click **Reset**.

3 Click OK.

Note: To back up the default settings, including color default settings, listed in Set Defaults, ensure you select **Virtual Printers** in Fiery System Restore. For more information, see Back up Fiery server settings from Command WorkStation (FS350/350 Pro and earlier) on page 48.

Fiery Impose templates in Job Properties

Fiery Impose provides several pre-defined imposition templates accessible from the **Layout** tab in the **Job Properties** window. If you have a Fiery Impose term-based subscription license, you can edit the templates, save them as custom templates, and save the custom templates to the Fiery IQ cloud.

Choosing a template sets all the relevant job property settings, which ensures correct output and prevents conflicting print settings. Imposition templates are available from Fiery Hot Folders and can be added to server presets and virtual printers. The default imposition templates use the **Based on Crop Box** finish setting. Custom imposition templates support the **User Defined** and **Based on Trim Box** finish size workflows, which automatically use the Acrobat PDF trim box size. **Based on Trim Box** is available for gangup jobs only. For more information, see *Fiery JobMaster-Fiery Impose-Fiery Compose Help*.

Note: User Defined and Based on Trim Box custom templates require PDF source files. PostScript files are not supported.

Access Fiery Impose from Job Properties

When you open a job in the Fiery Impose window from **Job Properties**, the job appears in wireframe view in the **Sheet View** pane. Fiery Compose settings and product intent controls in the **Settings** pane are not available.

- **1** Do one of the following:
 - Click a spooled or held job in the **Held** list.
 - For a hot folder, click the hot folder in the Fiery Hot Folders Console.
- 2 Click Actions > Properties.
- **3** Click the **Layout** tab, and then click **Impose**.
- 4 Click Edit Impose Template.

If you want to edit the Fiery Impose template to create a custom template, the Fiery server must support Fiery Impose, and you must have the appropriate license.

Imposition templates

Fiery Impose provides predefined templates. You can also create custom templates.

The predefined templates are Normal, Booklet, and Gangup:

- Normal includes Default Template and 1-up full bleed.
- Booklet includes 2-up perfect, 2-up saddle, and 4-up head to head.
- Gangup includes 3-up trifold brochure, 4-up gate fold, 4-up z Fold.

Note: The default pre-defined imposition templates use the **Based on Crop Box** finish size setting.

Note: Normal, Booklet, and Gangup templates list factory templates at the top followed by custom templates. Both factory templates and custom templates are sorted in alphanumeric ascending order.

You can create a custom template by changing the settings in a predefined template. Select the template, make changes, and save the template with a new name. (Not all settings may be available for custom templates.) The new settings are applied immediately. The Fiery server must support Fiery Impose, and you must have the appropriate license.

Note: Custom templates created with Japanese style marks can only be used within Fiery Impose.

In the **Preferences** window, you can set a path to the folder or directory where you want to store custom templates.

Custom templates can also be saved to the Fiery IQ cloud and synchronized for use on any client computer when you sign in to your Fiery Account.

Imposition templates can also be edited from Fiery Hot Folders, if you have a Fiery Impose license. The custom imposition templates now support the **User Defined** and **Based on Trim Box** finish size workflows. **User Defined** uses the PDF trim box defined in the source document as the finish size. The user can override the default value to set the trim size. **Based on Trim Box** is available for gangup imposition only. The **Based on Trim Box** workflow is an

automated workflow that dynamically creates the layout for different smaller-sized items (such as business cards, postcards, or concert tickets) on a larger-sized sheet (such as 11 x 17).

Note: The **User Defined** and **Based on Trim Box** finish size workflows require PDF source files. PostScript files are not supported.

For more information about the imposition templates, see Fiery JobMaster-Fiery Impose-Fiery Compose Help.

Modify print options after applying a Fiery Impose template

You can continue modifying print options in the **Job Properties** window after you apply a Fiery Impose template.

When working with presets, it is recommended to first add the preset to a job before modifying the print options.

- 1 Click Layout > Impose in the Job Properties window.
- **2** Select a Fiery Impose template.
- **3** Modify any print options in the **Job Properties** window.
- 4 Click **OK** to save the changes.

Preset print settings

A preset is a collection of print settings in Job Properties that you can access at a later time.

Server Presets can be accessed from Job Properties and printer drivers, and they can be applied to workflows such as Fiery Hot Folders and Virtual Printers.

Job presets are listed in the **Presets** list in Job Properties. You can select one of the job presets from the list, or create a new preset based upon the current options selected in the **Job Properties** window. If a job is not currently using a preset, then the preset field is blank; no text appears in the **Presets** field. All properties display the initial default settings. When you select a job preset, all settings are updated to reflect the saved preset. If you change any print settings, the **Presets** list reverts to blank.

There are three types of job presets:

- Local Presets Saved on the user's local computer.
 - Local Presets are available in the **Presets** list whenever you access the Fiery server. They remain on your local hard disk until you delete them.
- Server Presets Saved on the Fiery server and shared with other users of the Fiery server.
 - When you apply a Server Preset to a job, the preset settings become part of the job, and remain with the job until you modify them.
 - If the Server Preset has locked print settings, you can override the print settings in Job Properties after you select it for the job. When it is overridden, the **Presets** field becomes blank.
- Default Server Presets (available only for FS200/200 Pro or later) Installed factory presets on the Fiery server and shared with other users of the Fiery server.

Applying presets

Job presets can be applied using one of the following methods:

- Import a job into Command WorkStation using **File** > **Import Job** or the **Import** toolbar icon in Job Center. You can select **Use Server Preset** and then select a preset from the list in the **Import Files** window.
- Select a job in the **Held**, **Printed** or **Archived** list in **Job Center** and click the **Properties** toolbar icon. Select a local preset or server preset from the **Presets** list.
- Right-click a job in the **Held**, **Printed** or **Archived** list in **Job Center**, select **Apply Workflow** and then select a preset from the list.
- Select or right-click a job in the **Held**, **Printed** or **Archived** list in **Job Center**. In the **Job Summary** pane, select a server preset from the **Workflow** list.

Editing a preset

You can use inline editing in the Job Summary pane as another way to edit the preset.

Create a Local or Server Preset

If you are an Administrator, you can create, edit, rename, unpublish, publish, and delete server presets in Device Center (**Workflows** > **Job Presets**). You can only save a local preset in **Job Properties** window.

You can create a local preset or server preset by choosing the settings in the **Job Properties** window, and then save them in the **Presets** list.

Administrators can save a preset as a local preset or server preset. Operators can only save a local preset.

Create a local preset

Administrators and Operators can save settings in the **Job Properties** window as local presets.

- 1 Double-click a job in the **Held** or **Printed** queue, or select the job and do one of the following:
 - Right-click to select **Properties**.
 - Click the **Properties** toolbar icon in Job Center.
 - Click Actions > Properties.
- **2** Adjust the print settings for each tab as desired.
- 3 Under Presets, choose Save Preset.
- **4** Enter a descriptive name for the preset, and select **Local Presets**.
- 5 Click Save.

The **Local Presets** are available any time you access the **Job Properties** window. They remain on your local hard disk until you delete them.

Create a server preset

Administrators can save settings in the **Job Properties** window as server presets. These presets are saved on the Fiery server and shared with its users.

- 1 Click Server > Device Center and then select Workflows > Job Presets.
- 2 Click New.
- **3** Enter a descriptive name for the preset. Spaces are not allowed in preset names.
- **4** (Optional) Enter a description for the preset.
- **5** Choose the type of server preset by selecting one of the following:
 - **Complete** The preset contains all the settings in Job Properties. When you apply this type of preset, it will override all current job settings.
 - **Selective** The preset contains only Job Properties settings that you select. When you apply this type of preset, it will change only the defined settings. All other job settings are preserved.

You cannot create a virtual printer from this preset if you choose **Selective**.

- **6** Click **Define** to specify the job properties, and then click **OK**.
- 7 Click **OK** to close the **Job Preset Settings** window.

The Server Presets are available from Job Properties or any time you access **Job Presets** under **Workflows** in Device Center. They remain on the Fiery server until an Administrator deletes them.

After a server preset is created, the **Settings** pane (located on the right side) shows the settings modified from the defaults and the locked settings. The server preset is published automatically so it can be shared with other users connected to the Fiery server.

Selective presets can be created only in Device Center. They cannot be created from Job Center.

Change presets for print jobs

You can choose a different preset to apply to all jobs. You can also edit or rename a preset, delete a local preset, or revert to the default preset.

You work with presets in the **Job Properties** window. To display it, double-click a job in the **Held** or **Printed** list, or select the job and click the **Properties** toolbar icon in Job Center.

Choose a different preset

You can change the current set of print options to another preset for a job.

- Select any job in the **Held** or **Printed** list and do one of the following:
 - Right-click to select **Apply Workflow**, and then choose a preset.
 - Right-click to select **Properties**. In the **Job Properties** window, under **Presets**, select a different preset.
 - Click **Actions** > **Apply Workflow**, and then choose a preset.

The preset is used until you select another one, or make further changes to Job Properties.

Edit a preset

A preset includes most print options that you set in the **Job Properties** window.

You can override a setting in the **Job Properties** window after choosing a preset. When you apply presets, add the preset to a job before modifying the print options.

- To edit a preset, use one of the following methods:
 - Apply a preset to a job, then edit the settings as required and click **Save as preset**. Type the same preset name as before, and select local or server preset.
 - In Device Center, click **Workflows** > **Job Presets**, select the preset from the list, and click **Edit**. Make the required changes in the **Job Properties** window and then close to save the changes.

When you edit a preset in Device Center, you cannot change the type of preset (Complete or Selective).

Delete a local preset

You can delete a local preset with the Manage Local Presets feature in the Job Properties window.

- 1 In the Job Properties window, under Presets, select Manage Local Presets.
- **2** Select a preset and click **Delete**.

Rename a preset

You can rename a local preset with the Manage Local Presets feature in the Job Properties window.

- 1 In the Job Properties window, under Presets, select Manage Local Presets.
- **2** Select a preset and click **Rename**.
- **3** Enter a descriptive name for the preset and click **Save**.

Revert to the default preset

You can apply the default preset to a job to revert the print options to the default settings of the Fiery server. You can apply the current defaults as configured by the Administrator with Set Defaults or Factory Default.

- When applying the default settings, do one of the following:
 - To apply the current server default settings in the Job Properties window, under Presets, select Default.
 - To apply the factory default settings in the Job Properties window, under Presets, select Factory Default.

For information about default job properties settings, see Set defaults for all job properties on page 61.

Server Presets

Server Presets provide a consistent set of printing options that all users can use. Users can save Local Presets to their computer, but only an Administrator can save, edit, publish, and delete Server Presets.

Server Presets are accessible from:

- Command WorkStation In Device Center, select Workflows > Job Presets.
- Command WorkStation Job Properties Click the Properties toolbar icon in Job Center and select from the Presets list.
- Fiery Hot Folders See Fiery Hot Folders Help.
- Virtual Printers See Virtual printers on page 271.
- Windows and macOS printer drivers

An Administrator can create Fiery Hot Folders and virtual printers based on a server preset. Editing the server preset also changes the settings for those hot folders and virtual printers.

Archived jobs with server presets

Archived jobs retain the job information and the preset name. When an archived job is restored to the same Fiery server from which it was created, the server preset is shown in the Preset column header for any of the Job Center queues, such as Processing and Printing.

Tracking edited presets

If a server preset was modified after it was applied to a held, printed, or archived job, the preset name is marked with an asterisk (*). The asterisk indicates that the preset was edited by an Administrator after the job was submitted. To use the latest settings, re-apply the preset to the job.

If the Preset column header was added to any of the Job Center queues (Printing, Processing, Held, Printed, or Archived), the asterisk and job name are displayed in the Preset column.

Default server presets

To help users getting started with Fiery server workflows, five default server presets that represent commonly used settings are included. The default server presets are factory installed. Default server presets are available on a Fiery server with Fiery system software FS200/200 Pro or later, if supported by the server.

When the Fiery server first starts, the relevant default presets are shown based on the Fiery server default paper size and language settings.

The default server presets are:

- 2up_landscape
- Duplex_grayscale
- Duplex_staple
- Large_booklet
- Small booklet

Note: User-created presets include all settings in the Job Properties window, even if the settings were not modified. In contrast, the default server preset includes only the settings listed above. All other settings are inherited from the job or server defaults.

A default server preset can be edited from Command WorkStation (in Device Center, select **Workflows** > **Job Presets**. If a default server preset is edited, then it stops being a default preset, and becomes a local preset.

The following restrictions and limitations apply to default server presets:

- When a default server preset is applied to jobs with mixed media settings, the mixed media settings are not retained.
- Default server presets for booklets do not show cover settings in the Layout tab. To add separate covers, click **Normal**, and then click **Booklet** again. The cover settings will be displayed.
- VDP jobs do not support Booklet Maker and Gangup settings from Job Properties, therefore these settings will be ignored when a default server preset is used.

Note: To create booklet or gangup jobs with VDP jobs, use Fiery Impose.

• When you use default server presets with Paper Catalog-driven or Media Catalog-driven printers, be sure to edit the preset to assign a paper catalog or media catalog entry before using it.

Edit, delete, or unpublish server presets

You can edit, delete, or unpublish a server preset in Device Center by selecting Job Presets under Workflows.

You must be logged on to the Fiery server as Administrator to perform these operations.

If you edit or delete a server preset that is currently being used, the changes will affect only future jobs. The changed preset settings are applied instantly to any Fiery Hot Folders or virtual printers using the specified server preset.

You can overwrite an existing server preset the same way you can overwrite files on a computer. A server preset can be overwritten from Job Properties.

Jobs already in the Held or Printed list of the Fiery server do not automatically reflect edits made to the preset. If you want to update any jobs in the queues of the Fiery server with a newly edited preset, you need to re-apply the preset to the job using Job Properties.

Edit server presets

Administrators can edit server presets. You can edit server presets from Device Center (select **Job Presets** under **Workflows**) or from Job Properties..

- 1 To edit a preset from Device Center, select the preset you want to edit, and click **Edit** on the toolbar in **Job Presets** under **Workflows**.
 - **a)** (Optional) Enter a description for the change.
 - **b)** Click **Define** to change the print settings.
 - c) Click OK.
- 2 To edit a preset from Job Properties, right-click a job in the Held or Printed list, and select Properties.
 - **a)** Select a server preset from the **Presets** list for the job.
 - b) In the Job Properties window, make any changes that you wish to apply to the preset.
 - c) In the Presets list, select Save Preset, select Server Preset, and type the exact name for the preset.
 - **d)** Click **Save** and then click **OK** to overwrite the existing preset.

Delete server presets

Administrators can delete server presets.

- 1 Select one or more presets (unpublished or published) from the list.
 - To select multiple presets, use shift-click, ctrl-click (Windows), or cmd-click (macOS). To select all presets, press ctrl+A (Windows) or cmd+A (macOS).
- **2** Click **Delete** on the toolbar.
- 3 Click Yes.

Any hot folders or virtual printers linked to the deleted preset will be disconnected. However, they will preserve the settings of the deleted preset.

Unpublish server presets

An unpublished preset is not available in the printer driver or Job Properties. After you unpublish a server preset, you can publish it again.

- 1 Select one or more presets with the published icon from the **Presets** list.
 - To select multiple presets, use Shift-click, ctrl-click (Windows), or cmd-click (macOS). To select all presets, press ctrl+A (Windows) or cmd+A (macOS).
- **2** Click **Unpublish** on the toolbar.

The preset is shown with the unpublished icon.

3 Click Yes.

Any hot folders or virtual printers linked to the unpublished preset will be disconnected. However, they will preserve the settings of the unpublished preset.

About locked server presets

You can lock or unlock the print settings in a server preset in Device Center by selecting Workflows > Job Presets.

You must be logged on to the Fiery server as Administrator to perform these operations.

Locking a setting in a server preset ensures that:

- The setting is applied to all files imported to Command WorkStation using the preset.
- The setting can be overridden in the printer driver job properties after it is selected, but when it is overridden, the **Presets** field becomes blank.
- The Fiery Hot Folders jobs also inherit the same locked settings (assuming the hot folder uses the server preset).
- Virtual printers show the settings as locked. Client printer drivers connected to a virtual printer are unable to modify the setting.

You cannot lock **Output profile** because the Fiery server always defaults to **Use job defined settings**.

Locks apply only at the time of job submission. After the jobs have been sent to the Fiery server, any locked setting can be edited in the **Job Properties** window of Command WorkStation.

Lock or unlock settings in Server Presets

You must be logged on to the Fiery server as Administrator to lock or unlock print settings. In Device Center, select **Workflows** > **Job Presets**.

- 1 Select the preset you want to edit, and click **Edit** on the toolbar.
- **2** (Optional) Enter a description for the change.
- **3** Click **Define** to change the print settings.
- **4** Do one of the following:
 - Click **Lock All** to lock all the print settings.
 - Click the lock icon to lock a specific print setting.
 - Click **Unlock All** to unlock all the print settings.
 - Click the lock icon to change it to the unlock icon for a specific print setting.
- 5 Click OK.

Export and import server presets

You can export server presets to a file (Exported Presets.fjp) from one Fiery server and import the file to another Fiery server of the same model and version in Device Center by selecting **Workflows** > **Job Presets**.

You can also export server presets for safekeeping by using the **Backup & Restore** tool. In Device Center, select **General** > **Tools**). Backup files of presets cannot be restored to a different model Fiery server.

When importing a presets file, the new presets can be merged with existing ones, or can replace existing presets.

You must be logged on to the Fiery server as Administrator to export and import server presets.

Export server presets

Administrators can export server presets for use on another Fiery server.

- 1 Click **Export** on the toolbar.
- **2** Browse to a location to save the Exported Presets.fjp file.
- 3 Click Save.

Import server presets

After exporting server presets from one Fiery server, Administrators can import them for use on another Fiery server of the same model and version.

- 1 Click **Import** on the toolbar.
- 2 Choose Merge with existing or Replace existing.

If the server presets are merged, the presets in the imported file are added to the existing presets on the Fiery server. If there are any duplicate names, the imported presets will have a numeric suffix appended to the end of the preset name, such as FirstTest-1.

If the server presets are replacing existing presets, all the current server presets are deleted and replaced with the server presets contained in the newly imported presets file.

- **3** Browse to the location of the Exported Presets.fjp file.
- 4 Click Open.

Set Defaults

The Set Defaults feature allows you to customize the Fiery server by modifying the default properties of a job.

Fiery Scribe

Fiery Scribe is an AI-powered job assistant that automates job properties selection for printing requests sent by email.

Fiery Scribe analyzes the content of an incoming email, extracts job specifications, and sets the requested job properties for the job in Command WorkStation. The job is placed in the Held list in Command WorkStation along

with the PDF attached to the email. Additionally, Fiery Scribe improves its decision making over time by learning from customer requests and any modifications you make to the job properties.

A paid license is required to use Fiery Scribe. The application appears in Command WorkStation only when connected to a Fiery Account, which must be a company account with Fiery Scribe enabled.

Note: Fiery Scribe is enabled in Fiery IQ. You can use Fiery Scribe only on a supported Fiery server with Fiery system software FS500 Pro or later. For a list of supported Fiery servers and languages that are available with Fiery Scribe, see https://solutions.fiery.com/scribe/specs.

Enable Fiery Scribe

Fiery Scribe allows users to submit print jobs using natural language prompts.

- 1 In Command WorkStation, click the Fiery IQ cloud services icon.
- **2** Sign in with your Fiery IQ credentials.
- **3** Select the desired Fiery server and click **Ready to connect to Fiery IQ**.

The Fiery server completes setup in about three minutes. Older servers with EFI Cloud Connector may require a reboot, and a prompt appears during setup. Newer servers with Fiery Cloud Connector typically do not require a reboot.

- 4 Click Fiery IQ Dashboard to open the Fiery IQ webpage.
- **5** Click **Scribe** and complete the welcome setup.
- **6** In Fiery Scribe **Settings**,
 - a) Select the Fiery server from the **Select your Fiery server** list. Set the Fiery server as default.
 - **b)** Add at least one email address under the **Email** section.

These are the email addresses that you use to send jobs to Fiery Scribe.

c) Take note of the Scribe ID.

This email address was assigned to your Fiery Scribe account during signup. This is the address to which you forward email jobs for processing.

- d) Click Submit.
- **7** Verify that the Fiery server appears on the Fiery Scribe homepage and that Fiery Scribe is visible in the Command WorkStation Job Center toolbar.

Submit print jobs manually with Fiery Scribe

You can manually submit print jobs using Fiery Scribe.

- 1 Go to Fiery IQ dashboard and click **Scribe**.
- **2** On the Fiery Scribe homepage, click **Create Job**.
- **3** Select a file to upload and click **Continue**.

The file must be a PDF and should not exceed 100 MB in size.

- 4 Type a command, for example, print four copies in black-and-white.
- **5** Confirm the selected Fiery server.
- 6 Click Continue.

A confirmation message appears when the job is submitted successfully.

7 Check the job status on the Fiery Scribe webpage.

Processing and sending the job to the Fiery server typically takes 60-90 seconds. Processing time may be longer for jobs with a large number of pages.

8 Confirm that the job appears in the Held list for the selected server in Command WorkStation.

Submit print jobs by email using Fiery Scribe

You can submit print jobs by sending an email using Fiery Scribe.

- 1 Open your email application and compose a new email.
 - a) In the To field, type the Scribe ID.
 - **b)** In the **Subject** field, type the subject.
 - c) In the message body, type a command, for example, print double-sided in black and white on letter size.
 - d) Attach the file.

The file must be a PDF and should not exceed 100 MB in size.

Note: Your email service provider may have additional file size restrictions.

- e) Send the email.
- **2** Check the job status on the Fiery Scribe webpage.

Processing and sending the job to the Fiery server typically takes 60-90 seconds. Processing time may be longer for jobs with a large number of pages.

3 Confirm that the job appears in the Held list for the selected server in Command WorkStation.

Print a job with Fiery Scribe

You can edit and print jobs submitted with Fiery Scribe.

- **1** Select a job submitted with Fiery Scribe.
- **2** Do one of the following:
 - On the Job Center toolbar, click Scribe.
 - In the Job Summary pane, click Scribe.

You can only select **Scribe** if the job was submitted with Fiery Scribe.

3 In the **Fiery Scribe** window, check the job settings.

If the settings need to be changed, click **Properties** to edit the settings in Job Properties.

Note: You must change Job Properties through Fiery Scribe so the AI feature can learn your workflow and create more accurate selections in Job Properties.

4 Click Print.

Fiery JobExpert

With Fiery JobExpert, you can automatically apply suggested job properties to your jobs in Fiery Command WorkStation. JobExpert optimizes job properties on a per-job basis and provides a detailed view of the changes made to a job.

You can also manually change job properties when JobExpert is applied.

Fiery JobExpert rules

JobExpert allows you to choose from a list of predefined rules.

Choose from the following options:

All Categories JobExpert will choose the best Job Properties settings based on the content

of the job.

Color Management JobExpert will choose the best color settings based on the content of the job.

Image Quality JobExpert will choose the best image quality settings based on the content

of the job.

After JobExpert analyzes the job, you can check the applied settings by

opening the **Image** tab in the **Job Properties** window.

VDP JobExpert will choose the best settings in **Job Properties** for PDF jobs that

contain variable data. If PDF/X objects are detected in the job, JobExpert

will also enable the PDF Print Engine.

Add the JobExpert column

You can add a column for JobExpert in Job Center in Command WorkStation.

- 1 Right-click any column header in the Job List.
- 2 Click Add New > Job Info.
- 3 Select JobExpert rule.

The JobExpert column displays any JobExpert rules currently applied to a job.

Import a job with JobExpert

You can import a job and apply JobExpert in Command WorkStation.

- 1 To import files into the **Held** list, do one of the following:
 - Click File > Import Job.
 - Click the **Import** toolbar icon in Job Center.
- **2** Navigate to the location of the file you want to add.
- 3 Click Open.

You can import multiple jobs by clicking the + (add) icon in the **Import Files** window.

4 Select Apply default settings.

Note: If you apply a server preset or virtual printer when you import a job, the settings from the server preset or virtual printer will be applied first. If JobExpert is also selected, then some settings may be overridden by JobExpert, such as color and imaging settings.

- **5** Select **Apply JobExpert**.
- **6** Choose from one of the following rules:
 - All categories
 - Color management
 - Image quality
 - VDP
- **7** Select a job action.

JobExpert will automatically apply the recommended settings to the job.

Add JobExpert to a virtual printer

You can apply JobExpert to new virtual printers in Command WorkStation.

Only Administrators can create new virtual printers.

- 1 Click Server > Device Center.
- 2 Click Virtual Printers in the Workflows section in Device Center.
- 3 Click New.
- 4 Select **JobExpert** in the **New Virtual Printer** window.

- **5** Choose from one of the following rules:
 - All categories
 - Color management
 - Image quality
 - VDP
- 6 Click OK.

When a PDF job is imported into Command WorkStation through a virtual printer, the job will be sent to the selected **Job action**, and JobExpert will apply the recommended settings.

Add JobExpert to Fiery Hot Folders

You can apply JobExpert to new hot folders in Fiery Hot Folders.

You must connect to a Fiery server that supports Fiery JobExpert.

Note: For more information about Fiery Hot Folders, see *Fiery Hot Folders Help*.

- 1 Open the Fiery Hot Folders Console window.
- 2 Click New.
- **3** Choose from one of the following rules:
 - · All categories
 - Color management
 - Image quality
 - VDP
- 4 Click OK.

When a job is imported through Fiery Hot Folders, JobExpert will apply the recommended settings.

Apply JobExpert in Job Center

You can apply JobExpert to an existing job in Job Center.

- 1 Right-click on a job in the **Held** list.
- **2** Select **Apply JobExpert** and choose one of the following rules:
 - · All categories
 - Color management

- · Image quality
- VDP

A progress bar shows the progress of JobExpert in the **Job Status** column. If the **JobExpert** column is added to Job Center, the message **Analyzing** will display.

Note: You can process multiple jobs with JobExpert simultaneously.

You can cancel JobExpert processing by doing one of the following:

- Click the **X** in the progress bar.
- Right-click the job and choose Cancel JobExpert.

Remove JobExpert settings

You can remove settings applied to a job by Fiery JobExpert in Command WorkStation.

In the **Held** list, do one of the following:

- If the job is not processed, right-click the job and select Clear JobExpert.
- If the job is processed, right-click the job and select Remove Raster. Then, right-click the job and select Clear JobExpert.

You can also remove JobExpert settings by navigating to **JobExpert** in the **Job Summary** pane and clicking **Clear**.

Note: When you remove the applied JobExpert settings, the job properties that are modified by JobExpert return to the server default settings. You can also duplicate a job and then apply JobExpert to return to the original job property settings.

View Fiery JobExpert report

You can view a summary of changes made to a job by JobExpert in Command WorkStation.

- 1 In **Job Center**, select a JobExpert job in the **Held list**.
- **2** Choose one of the following ways to open the JobExpert report:
 - Right-click the job and select View JobExpert Report.
 - Navigate to the Job Summary pane in Command WorkStation and click View Report.

Preview JobExpert changes

You can preview the changes made to a job by JobExpert.

- 1 In the Fiery JobExpert window, navigate to the job property you want to view.
- 2 Click Show Preview.

In the adjusted page preview pane, you can use the following controls:

- **Previous** and **Next** navigates between job properties.
- **Adjusted Pages** navigates between different adjusted pages in the same job property.
- **Background** opens a color picker tool to adjust the background mask color.

The following icons are available in the adjusted page preview pane:

- **X** closes the current job property preview pane.
- Zoom tool (magnifying glass) zooms in and out. You can also manually enter a value.

Remove raster data from a job

Some actions automatically remove raster data from a job, for example changing a job property that requires reprocessing.

Raster data is generated and linked with a job that is processed, or processed and held.

When you select a processed job and choose one of the following job actions: **Impose**, **Compose**, **JobMaster**, or **Process and Hold**, the raster is automatically removed so the job will open as a spooled job.



This icon indicates a processed job with raster data.



This icon indicates a spooled job without raster data.

If you must remove the raster data manually, follow the steps below.

- 1 Select the processed or held job in the **Held** list.
- **2** Do one of the following:
 - Right-click to select Remove Raster.
 - Click Actions > Remove Raster.

Raster Curve Editor

The Raster Curve Editor feature allows you to edit the color curves in a job without opening the Fiery ImageViewer.

With the Raster Curve Editor, you can customize the response curve for all the colors combined and for each color separation in a job. The Raster Curve Editor is a Job Properties feature that is available if you do not have Fiery ImageViewer.

Fiery servers on the A10 platform do not support the Raster Curve Editor.

In the Job Properties window, open the Color tab and under Color settings, click Raster Curve Editor.

You can import curves from the **Curve Table Edit** window by clicking **Edit Curve**. For information on the types of curves to import, see Apply color curve from Curve2/Curve3/Curve4 file on page 365.

In the Raster Curve Editor window, you can create a new preset, and edit or delete an existing preset.

To create a preset, see Save color edits as a preset on page 364.

Printing methods

You can shift page content by using the Tray Alignment feature, verify that the printer is performing correctly by using the Sample Print feature during a long print job, and check output by using the Proof Print feature.

Use Tray Alignment

The Tray Alignment feature shifts and rotates content on the page to correct misalignment problems caused by the imperfections of the paper tray.

The correction produces even margins which are ideal for registration on duplex (2-sided) printing.

Note: You must be an Administrator to use Tray Alignment.

- **1** Select the connected Fiery server.
- **2** Do one of the following:
 - Select Server > Align Tray.
 - In Device Center, select **General** > **Tools** > **Tray Alignment**.
- 3 In the Tray Alignment window, select the tray you want to align from the Tray list.
- **4** Select the paper size to be loaded in the tray from the **Paper Size** list.

Note: The size you specify must match the actual paper size. For example, if you specify Letter size paper but load Legal size paper in the tray, the tray alignment effort is invalidated. Perform a new tray alignment for each combination of tray and paper size.

- 5 Select Align for duplex to print a duplex page, or clear this check box to print a single-sided page.
- **6** Click **Continue** to print the tray alignment test page.
- **7** When the page has printed, follow the instructions on the alignment page.
- **8** In the **Adjustment settings** area, enter the value where the fold crosses each of the three scales marked A, B, and C, for Side 1. If you chose to align for duplex printing, enter the values for the three scales on Side 2 of the page. Click **Apply**.
- **9** After you enter all of the alignment values, click **Print Verification Page** to print the new alignment page.
- 10 Click Close.

Sample Print

The Sample Print feature allows you to print extra pages to an easily accessible output tray during a long print job, to verify that the printer is performing as expected.

For example, when a job is currently printing to a closed elevator (such as 1000 pages to an output tray that cannot be opened until the entire job is completed), you can use the sample print function to print a separate page or

finished output set to an open output tray to verify the output. If the output is unsatisfactory, you can take corrective action.

Use Sample Print only with printers that have multiple output trays; it is useful when one of the output trays is closed and not easily accessed during printing.

You can print an extra sheet or output set as follows:

- On-demand during the printing of a job
- Every N-sheets during the currently printing job
- Every N-sheets until canceled (can span jobs)

You can set up the Sample Print default settings for the specified Fiery server using Configure (**Server** > **Configure**). (See Configuring Fiery server settings on page 34.)

Start or stop a sample print

When the job is printing, you can initiate a sample print. The default setup values are applied and any existing sample print command in progress is overridden.

- 1 To initiate a sample print, select **Server** > **Start Sample Print** while a job is printing.
 - The Fiery server performs the sample print based on the options specified in Configure.
 - If Start Sample Print appears dimmed or unavailable, then the Fiery server is already performing a sample print or it is not available for the specified Fiery server.
- **2** To cancel a sample print, select **Server** > **Stop Sample Print**.

Set Sample Print options in Configure

You can configure the Fiery server to print sample prints at a predefined interval that spans print jobs.

This lets you print sample pages on a regular basis, either as a regular spot check or as a more methodical process where you can create an archive of printed sheets documenting the print quality at regular intervals.

In Configure, an Administrator can specify the content to print, the interval at which it is printed, and the output tray to use for the sample print job.

1 In Configure, click Job Management > Sample Print.

- **2** Specify Sample Print option settings as desired.
 - **Frequency** Specify **Every** or **On-demand**. When you select **Every**, the Fiery server prints a sample repeatedly as defined by the printed sheet(s) interval. A sample print can be printed for all jobs until the Fiery server is restarted or the sample print mode is canceled, or for the current job only until it finishes printing or is canceled. When you select **On-demand**, a single sample is printed.

Note: Printed sheets include all pages printed by the Fiery server, including system pages.

- Content Specify Sheet (for any kind of job) or Sheet (for uncollated job) / Set (for collated jobs). When you select Sheet (for any kind of job), a single sheet is printed as the sample. If the job is collated, an entire output set is printed as the sample. If the job is uncollated, a single sheet is printed as the sample. If the sample content is a set and the printed sheet interval triggers the Fiery server to print a sample, the Fiery server will begin printing the sample at the beginning of the next set.
- Output Tray Specify the output tray for the sample print jobs. All installed output trays that do not require finishing options are listed.

Note: The job's finishing options are not applied to the sample print job, except for duplex options.

- **3** Save your changes.
- **4** Restart the Fiery server.

Proof Print

Use Proof Print to print a proof (copy) to check the printed output of your job without changing the job's original copy count.

When you apply Proof Print to your job, the selected job is sent to the Printing queue with the number of copies set to one. The original job retains the specified number of copies and job properties and uses the raster data that was created from the proof print to print subsequent jobs.

If you apply Proof Print to a processed job (with a raster), the job goes directly to the Printing queue and does not process again unless a change is made to the job.

Proof Print jobs appear in the Job Log with the number of copies set to one.

Additionally, you can use Sample Print to print extra pages to an output tray during a long print job to verify that the printer is performing as expected.

Print a proof

You can use Proof Print by right-clicking on a job in the Held or Printed queue, or you can access the command from the **Actions** menu or from job actions within the **Job Properties** window and Fiery Hot Folders.

- Do one of the following:
 - Right-click a job in the Held or Printed queue and select **Proof Print**.
 - Click Actions > Proof Print.

If you select **Proof Print** with a variable data printing job, the printed proof is one copy of the first record. If you select **Proof Print** with an imposed variable data printing job, the printed proof is a set associated with the first record (all sheets that contain the first record).

Managing jobs

Search for jobs

Search for and locate jobs on a connected Fiery server using search parameters, such as job title, user, or date.

The Search function allows you to quickly locate jobs on the currently selected Fiery server. It is part of the Job Center toolbar and applies to the jobs in the current view. Search for jobs in the Held, Printed, Archived, Processing, Printing, or All Jobs queues.

You can search for jobs by doing one of the following:

- **Simple job search** To do a basic search of the content for all the columns in the current view, even if the columns are not visible on-screen (because of the scroll bar), use the **Search** field. For example, if you type **Letter** you can find jobs that have the word "Letter" in the job title, and also jobs that have "Letter" as part of the media name in the **Output paper size** column.
- **Advanced job search** To search by multiple criteria (columns) simultaneously, click the arrow next to the filters above the column headers, and specify the search criteria.

Simple job search

You can use the **Search** field in any view to find jobs. When you switch from one view to another, the previous search criteria are cleared.

- 1 Type your search criteria in the **Search** field located above the Job Center toolbar icons.
- **2** Press **Enter** or click the magnifying glass icon (Search icon) to locate the jobs that meet the specified search criteria.

The typed text is not case-sensitive.

The search for the specified value is conducted across all the columns in the current view, even if the columns are not visible on screen (because of the scroll bar).

3 After you have executed a search, you can clear the current search criteria by clicking **Clear** or switching to another view. This allows you to search by different criteria.

Search across all Fiery servers

You can locate jobs by searching across all connected Fiery servers in Command WorkStation.

To search across all Fiery servers, Command WorkStation must be connected to more than one Fiery server.

Search all Fiery servers selected from a simple search location in Command WorkStation Job Center.

When you use the Search all Fiery servers feature, you can also see all jobs submitted by a particular user to all servers.

- 1 Type your search criteria in the **Search** field located under the Job Center toolbar.
- 2 Click the Search all Fiery servers link under the Search field.

When jobs are selected through the simple search function, they are found by these criteria: job title, job status, date and time, user name, job size, and server name.

- **3** In the **Search all Fiery servers** window, you can further refine the search by typing more detailed search information into the **Search** field.
- **4** Double-click a job from the search results or select a job and click **Locate job**.

The **Search all Fiery servers** window closes, and the selected job is automatically highlighted on the relevant Fiery server.

Alternatively, if you select a job in the list and click **Show search on Fiery server**, you are taken to that search result on the Fiery server. All jobs that match the simple search criteria are shown in the **All Jobs** view.

After you have executed a search, you can clear the current search criteria by clicking **Clear**. This allows you to search by different criteria across all connected Fiery servers.

Advanced job search

You can use the **Advanced Search** function to search by multiple criteria (columns) simultaneously in the current view.

- 1 Select a view in the list of servers on the left side.
 - To view all the jobs in all queues on the selected Fiery server, select the **All Jobs** view.
- **2** Click the arrow next to the filter above the column headers (for example, Job Status).
- **3** Select the search criteria and click **Apply**.
 - You can make multiple selections within one column.
 - Ranges can be selected for some columns.

To revert to a view of all the jobs in all queues on the selected Fiery server, select the **All Jobs** view.

- **4** For the columns that display date information, you can select one of the following:
 - **Today** search jobs for the current day.
 - **Exact Date** search jobs for a specific date.
 - Select **Before** or **After** to search jobs that print before or after a specific date.
 - **From**, **To** search for jobs within a consecutive date range.
- **5** To search by more columns, click the arrow next to the **More** filter and select the columns to add. To remove filters, click the arrow next to the **More** filter, clear the selections, and click **Save**.
- **6** After you have executed a search, you can clear the current search criteria by clicking **Clear** or switching to another view. This allows you to search by different criteria.

Save an Advanced Search

- 1 Select the **All Jobs** view in the list of servers on the left side.
- **2** Search for jobs.
- **3** Click **Save** above the search results.
- **4** Type a name for the search and click **OK**.

The advanced search becomes a view on the left side below the list of queues.

Viewing job thumbnails

Thumbnail view displays previews of the first page of each processed job to help you visually identify the job.

If your Fiery server has Fiery system software FS300/300 Pro or later, spooled jobs also display previews for PostScript, PDF, TIFF, and EPS file formats. Other file formats display a generic thumbnail.

All other types of Fiery server display a thumbnail preview only for processed jobs.

- Click the icon in the upper-right corner of the Job Center toolbar 🔡 🖽.
- To sort the jobs, right-click anywhere in a blank area of the background (in other words, not on a job), and select the sort criteria and sort order (ascending or descending).
- You can use common keyboard shortcuts for selecting multiple jobs and for copying and pasting.
- To view additional job information, move your mouse over the thumbnail icon of the job.

Assign job tags to a job

You can add one or more tags to a job, which can help you to sort and organize jobs. You create a tag, choose the name and color of the tag, and then assign it to a job. Tags are saved with jobs for a particular Fiery server. After you assign tags to jobs, the color icons for the tags appear in the Tags column.

For more information on adding columns in Command WorkStation, see Change the column display on page 31.

You can apply a maximum of five tags per job, with a maximum of 50 tags per Fiery server.

- 1 To assign a tag to a job, select the job and do one of the following:
 - Click Actions > Tags.
 - Right-click the job and select **Tags**.

You can also select more than one job at a time.

2 Select an existing tag, or click **Add New**.

- **3** To assign a different or additional tag to a job that already has a tag assigned to it, you can use the same method as when you originally assigned the tag, or in the **Summary** pane, click the pencil icon next to the **Tags** section. Tags that are already created can also be assigned in **Job Properties** > **Job info**. Tags selected in **Job Properties** can be saved as part of a Server Preset, Virtual Printer, or Hot Folder.
- **4** To view all jobs that have the same tag, click the tag name under the list of queues in the **Servers** pane.
 - The first 10 created tags are listed under each Fiery server with the tag name, tag color, and number of jobs that use the tag. To change the order of the tags, select **Manage Tags**.

Manage job tags

- 1 Click the right arrow next to the **Tags** header in the **Servers** pane.
- 2 Select Manage tags.

You can move tags up and down in the list, or ensure your favorite or frequently used tags are at the top. By default, a tag named **Priority** is provided. You can use this tag or create your own tags. The **Priority** tag cannot be deleted unless you have already created at least one other tag.

Using the Completed view

The Completed view lists all jobs in the Fiery server that have been printed, regardless of the location of the job.

For example, a job sent to **Print and hold** will be displayed in the Held list and the Completed view. After the job is deleted from the Hold queue, it will also disappear from Completed view, and vice versa.

Jobs that are canceled while printing or that have errors are not displayed in Completed view.

Jobs submitted to the Direct queue are also not displayed in the Completed view.

This view is added by default but can be hidden by selecting the Completed view and then clicking the **Hide** button above the toolbar. After the Completed view has been hidden, it can be re-enabled by selecting **Server** > **Show Completed View**.

Export Current View

In any of the views in Command WorkStation, you can export the current job list view as a text file. This text file contains all the information displayed on-screen, including the contents of columns added to that view from the usual queues Printed, Held, etc.), as well as from custom views that you create by filtering.

Create the view by adding columns, removing columns, and filtering jobs.

- 1 Select File > Export Current View.
- **2** Select the format of the text file.

Job Groups

The Job Groups feature groups multiple jobs into a single job in Command WorkStation. The order of jobs in the groups is the order that the jobs will be printed.

Note: The Job Groups feature is supported on a Fiery server with Fiery system software FS600/600 Pro or later.

You can select from two types of job groups:

• **Print Group** - allows you to print jobs in a specified order with different job properties. When you apply job properties to the Print Group parent, the job properties from the parent will override the job properties from the child jobs. However, the **Copies** print option will not be overridden as it sets how many copies of the Print Group to print.

Note: Print Group parents are virtual jobs that cannot be imposed or edited with other plug-ins. Because Print Group parent jobs are virtual jobs, they do not change their job status, such as showing a change in status from Spooled to Processed states. Instead, the child jobs do change status as appropriate.

• **PDF Group** - combines PDFs into a single PDF job. Job properties cannot be selected or applied to child jobs after the PDF Group is created. The PDF Group can be printed or prepared with Fiery Impose, Fiery Compose, or Fiery JobMaster.

For more information on imposing a PDF Group, see Fiery JobMaster-Fiery Impose-Fiery Compose Help.

Note: When you create a PDF Group, the child jobs will not retain their individual job properties. The parent job in the PDF Group will appear as a newly imported job.

Create a job group

You can create a job group with spooled and processed jobs in the Held list in Command WorkStation.

- Select a job or jobs and right-click to open the Actions menu. Select multiple jobs by using Shift-click or ctrl-click.
- 2 Select Create Job Group.
- **3** Type a name for your job group.
- **4** Select one of the following types of groups:
 - Print Group
 - PDF Group
- **5** (Optional) Do any of the following:
 - Click **Add from Fiery** to add more jobs from the current Fiery server to the job group. When the Held list opens, you can select more jobs and then click **Add** to add them to the current group.
 - Click **Import** to import additional jobs into the job group.
 - Select a job and click **Remove** to remove the job from the group.
 - Select a job and click **Move Up** or **Move Down** to change the order of jobs in the group.
- **6** Click **Save** to add the job group to the Held list.

Edit a job group

You can edit job groups to add or remove jobs or change the order of jobs in the group.

- 1 Depending on your job group type, select one of the following in the Held list:
 - Edit Print Group
 - Edit PDF Group
- **2** Do any of the following:
 - Type a new name for your job group.
 - Click **Add from Fiery** to add more jobs from the current Fiery server to the job group. When the Held list opens, you can select more jobs and then click **Add** to add them to the current group.
 - Click **Import** to import additional jobs into the job group.
 - Select a job and click **Remove** to remove the job from the group.
 - Select a job and click **Move Up** or **Move Down** to change the order of jobs in the group.

Note: The job group type cannot be changed.

3 Click **Save** to add the job to the Held list.

Remove a job from a job group

You can remove individual jobs from a job group.

- Do one of the following:
 - In the **Job Groups** window, select the job or jobs you want to remove and click **Remove**. Then click **Save**.
 - In the Held list, expand the job group and select the job or jobs you want to remove from the group. Right-click
 your selection and then, depending on the type of job group, select Remove from Print Group or Remove from
 PDF Group.

Note: The job or jobs will be sent to the Held list after removing it from the job group.

Remove a job group

You can remove the parent job from the Held list.

- 1 Select the parent job in the Held list.
- **2** Right-click the parent job.

3 Select **Remove Print Group** or **Remove PDF Group**, depending on your job group type.

The individual jobs in the removed group will appear in the Held list.

Move jobs to another queue

You can move or drag jobs to the Processing or Printing queue from the Held, Printed, and Archived queues. Additionally, you can specify that a job be printed and then removed from the queue.

- Select any job from the Held, Printed, or Archived queue, click Actions and select one of the following:
 - **Print** Sends a job to Printing queue.
 - **Print and Hold** Sends the selected job from the Held, Printed, or Archived queue to the Processing queue if the job is not processed, or to the Printing queue if it is processed. After printing is completed, a raster of the job is kept when it is returned to the Held queue.
 - **Print and Delete** Sends the selected job from the Held, Printed, or Archived queue to the Processing queue if the job is not processed, or to the Printing queue if it is processed. After printing is completed, the job is deleted. Use this option if you want to print a job securely and ensure that jobs are not archived on the Fiery server.
 - Hold Sends a job to the Held queue.
 - **Print Next** Sends a selected job to the top of the Printing queue without interrupting the job that is currently printing.
 - **Rush Print** Sends a selected job to the top of the Printing queue and immediately prints the job, interrupting the job that is currently printing.
 - **Proof Print** Prints a single copy of a job to verify output. This option is not available for archived jobs.
 - Process and Hold Processes a job but does not print it.
 - **Archive** Archives the job to the Archived queue.

You can also select a job in one of the queues and drag it into another queue.

Reorder jobs

You can reorder the jobs in the Printing or Processing queue.

- Do one of the following:
 - From Job Center, select a job in the Printing or Processing queue and drag the file either up or down in the job list.
 - Select a job in the Processing or Printing queue and select **Actions** > **Move Up** or **Actions** > **Move Down**.

- If supported on your Fiery server, select a job in the Processing or Printing queue and select **Actions** > **Print Next** to allow the Fiery server to process the job as soon as the current job is finished processing.
- If supported on your Fiery server, select a job in the Processing or Printing queue and select **Actions** > **Rush Print** to allow the Fiery server to interrupt a currently printing job to print a Rush Print job. The Fiery server waits until the currently finishing set of the job is completed before printing the Rush Print job. After the Rush Print job is finished, the Fiery server resumes printing the interrupted job.

Send jobs to another Fiery server

With the Copy To and Move To commands, you can transfer jobs to another connected Fiery server.

When you transfer a job to an identical Fiery server model and version, raster data is transferred (if available). When you transfer a job to a different Fiery server model, only the source file is transferred, not the raster data; jobs need to be reprocessed on the target Fiery server before printing. When transferring a job, review and re-specify, if necessary, all job properties because non-identical Fiery servers may behave differently.

- **1** Do one of the following:
 - Select any held job in the Job Center and drag it to another Fiery server in the Servers list.
 - Select any held job in the Job Center and click **Actions** > **Copy To** or right-click the job and select **Copy To**.
 - Select any held job in the Job Center and click **Actions** > **Move To** or right-click the job and select or **Move To** (FS350/350 Pro or later).
- **2** Select a Fiery server.

The job is transferred to the selected server.

Archive jobs

Archiving jobs stores jobs with their settings for later use, which allows you to reprint the job quickly without having to import and set up the job again. You can save raster images to enable reprinting the job without reprocessing. You can store archive jobs in any folder your computer can access, such as a network folder, and you can back them up with your files.

Archiving jobs with Archive Manager

Archive Manager moves archived jobs from the Fiery server to a folder that you choose, ensuring jobs are preserved even if the Fiery server is upgraded or reloaded.

- Simple and safe archiving solution for all your Fiery server jobs
- Archive jobs outside of the Fiery server
- Share archive jobs easily across more than one Fiery server
- Share archives with multiple Command WorkStation users
- Find archived jobs faster, even when the Fiery server is offline
- List all archived jobs in one view

After you archive jobs with Archive Manager, the Archived queue is no longer listed under the name of the Fiery server. Instead, all archived jobs will be available in this **Archive Manager** window.

First-time setup with Archive Manager

1 In the upper-left corner of Command WorkStation, click **Archive Manager**.

If Archive Manager is not available, confirm the **Enable Archive Manager** check box is selected in **Edit** > **Preferences**.

- 2 Click Get started.
- 3 Click Browse, select a location for Archive Manager to store the archived jobs, and then click Select Folder.
- **4** Type a descriptive name for the location in the **Display name** field.
- 5 Click OK.
- 6 Click Migrate.
- 7 In the Migrate archive jobs window, ensure that the source locations are valid.

For more information, see Folders inaccessible during migration on page 92.

The locations at the top half of the window are the source location and folders where archived jobs are currently stored. The single location you select at the bottom half of the window is the destination where Archive Manager will move the jobs. Moving jobs to the new location allows Archive Manager to back up the jobs even if you reload or upgrade the Fiery server.

8 Click Migrate.

If the Fiery server has jobs remaining to migrate because the operation was skipped or canceled, Command WorkStation will still display the Archive queue. To resume the migration process, click the blue Migrate button on the Archived queue.

Archive jobs with Archive manager

Migrating jobs is a one-time event. After migrating jobs to an archive folder, you can archive subsequent jobs to the same location or to another location.

- **1** Do one of the following:
 - Select any job in the Held or Printed queue and drag it to Archive Manager.
 - Select any job in **Job Center** and click **Actions** > **Archive**.
 - Right-click any job in **Job Center** and click **Archive**.
- **2** Choose an archive location.

You can choose to preserve thumbnails and previews, if available.

Note: This increases the file size of the archived files.

3 To specify another location, click **Edit Locations**, and click **Add** in the **Manage Locations** window. Browse to the folder where you want to archive the job and click **Select Folder**.

Understand archived jobs

An archived job contains the source file received by the Fiery server, along with the job properties (job ticket) set for the job.

Job tickets may reference server-based resources such as color profiles and calibration settings. The archived file does not save these server resources even though the job ticket refers to them. If the job ticket points to an unavailable resource, the job will use the default settings for that resource.

Archives contain server-specific information and settings only applied when restoring the job to its original server. You can restore or import an archive job to a different server. If the server is a different model, the server will retain common job ticket settings from both servers, and the server default settings will replace other settings that are not present.

When you archive a job, you can save thumbnails and previews of processed jobs, which also saves the raster images of the job, so that the job does not need to be processed later. Preserving thumbnails and previews increases the file size of the archived files.

Folders inaccessible during migration

You cannot migrate jobs with Archive Manager if a location is unavailable.

- Verify that the folder is available on your computer or network. Locations may be unavailable because the folder has been renamed, moved or deleted.
- Verify that you have read or write access. Archive Manager relies on your computer operating system to handle authentication. Try to open the folder in Windows Explorer or the macOS Finder.
- Locations on other computers may be listed as a familiar path such as C:\users\admin\desktop, but the path may be to another user's computer. To access these jobs, use Command WorkStation on the other computer to access the job.

Manage archive locations

1 In the upper-left corner of Command WorkStation, click the Settings icon in the **Jobs** pane, above **Archive Manager**.

2 Click the icon for the action that you want to perform.

Add Click Add to add a folder of existing archived jobs into Archive Manager,

or to store archive jobs in the future.

Remove Removes the location.

Edit You can change only the display name of the folder, not the location. If

you moved the folder, add it again as a new folder.

Set as default Makes that location the default location where jobs are archived.

Share archives

Archive Manager folders can be on the network, a cloud replication service, or your local computer. Back up archive folders in the same manner that you would use for any other file or folder.

To share archives over the network, use a network folder that all users can access. Open this folder first on your computer to make sure it is available. On each computer that uses Command WorkStation, add this network folder as an Archive Manager location. Ask your network administrator to back up the Archive Manager network folder.

Fiery servers can share archived jobs. For example, you can use a job archived from Fiery server #1 on Fiery server #2. The archived jobs retain all job properties if the servers are the same model and version. If the destination Fiery server is a different model or version, the server will discard any present raster images, and you will need to process the job again before printing. The destination Fiery server will not use any unavailable job properties. Verify the properties of the job before printing.

Search archived jobs

You can search all archived jobs by title, user name, media size, or any other information accessible in the columns.

- 1 In the upper-left corner of Command WorkStation, click **Archive Manager**.
- **2** In the **Search** field, type the search criteria.

Archive Manager displays the first 50 jobs. To display more jobs, click the > and >> buttons.

To display more attributes about jobs, right-click the column header and add the column.

Use archived jobs

After archiving a job, you can use it as if it were still on the Fiery server.

- 1 In the upper-left corner of Command WorkStation, click Archive Manager.
- 2 In the All Locations menu, select All Locations or a specific location.

A maximum of 50 jobs is displayed. Use the arrows in the upper-right corner of the job list to see more jobs.

3 Right-click the job and choose the action that you want to perform on the archived job.

If more than one Fiery server is connected, you can also select the Fiery server to which you want to send the job. To ensure that you retain all the job properties, select the same Fiery server from which the job was archived, which is listed in the column **Source server**.

Disable Archive Manager

- Do one of the following actions.
 - a) From Edit > Preferences > Archive Manager, clear Enable Archive Manager.
 - **b)** From the introduction screen, click **No thanks**.

If you disable Archive Manager after migration, the migrated jobs remain in the locations or folders used by Archive Manager. To use these archived jobs, select **File** > **Import Archived Job** and browse to the location of the folder.

Archive jobs without Archive Manager

Archive jobs internally to the Fiery server hard disk or externally to removable media or networked drives.

After you archive a job, it appears in the **Archived** queue of **Job Center**.

- **1** Do one of the following:
 - Select any job in the **Held** or **Printed** queue and drag it to the **Archived** queue.

Note: You cannot drag jobs to the **Archived queue** from a computer. You can only drag jobs to the **Archived** queue if they are already on the Fiery server

- Select any job in **Job Center** and click **Actions** > **Archive**.
- Right-click any job in **Job Center** and click **Archive**.
- **2** Do one of the following:
 - Select **Set Defaults** in the directories list.
 - You can choose to preserve thumbnails and previews, if available.

Note: This increases the file size of the archived files.

- You can choose to always prompt for archive locations and options.
- To specify another location, click Add. Browse to the folder to which you want to archive the job and click Select Folder.
- **3** Click **OK** to archive the job.
- **4** At any time, access **Archive Settings** from the **Server** menu or click the More icon next to the server name in the **Servers** list.

You can edit archive settings even if you previously cleared the check box Always prompt for archive locations.

Clear Server

Clear Server allows you to clear various jobs, logs, and VDP resources from the Fiery server to make space available. **Clear Server** is available under the **Server** menu in Command WorkStation.

Note: This operation cannot be undone.

Drag and drop file management

Move files around with drag and drop functionality.

You can drag and drop files into several different regions. This functionality allows you to move files from a computer to Command WorkStation. This is an ease-of-use feature for file management and job workflow.

The following areas support drag and drop from your computer to Command WorkStation:

- Held queue (when in focus in the main window)
- Printing queue (when in focus in the main window)
- Processing queue (when in focus in the main window)
- Held queue of any connected Fiery servers in the Servers list
- Processing and Printing panes at the top of Job Center

The following areas support drag and drop within Command WorkStation:

- Held queue
- Processing queue
- Printing queue
- Archive Manager
- · Archived queue
- Between servers in the Servers list using the **Send To** command (**Actions** > **Send To**)

Note: You must be logged on to two Fiery servers.

• Processing and Printing panes at the top of Job Center

Estimate ink usage

With Command WorkStation, you can estimate the cost of toner that will be used for jobs. Estimates are provided only for processed jobs that have associated raster data.

Note: The term "toner" also refers to dry ink.

Set cost and job columns

1 Log in as Administrator or Operator.

2 Select Server > Cost Estimation Settings

The window shows all colorants that are supported by the Fiery server, not just those that are currently installed or configured on the connected printer.

- **3** Choose a currency symbol.
- 4 Click the Edit icon (pencil) next to a name and enter the cost.

You must enter a value to receive a cost estimate. To obtain the latest cost, contact your vendor. To receive an estimate of specialty colorants, enter only the costs of the colorants for which you are paying separately. Any colorants that are already included, such as by a maintenance contract, can be entered as zero.

- 5 Click OK.
- **6** To add the Estimated Cost column to Job Center, right-click any column header in the Job List and select **Estimated Cost**.

Estimate costs

progress bar.

This feature may not be supported for every Fiery server.

- 1 Select a processed job in the Job List.
 - If the job is not processed, right-click the job and select **Process and Hold**.
 - For the estimate to be correct, you must use the same job property settings that will be used when the job is printed.
- **2** Right-click the job and choose **Estimate Cost**, or select the job and choose **Actions** > **Estimate Cost**. While a job is being estimated, a progress bar shows the progress of the estimate next to the job title in the Held
- 3 To cancel an estimate in progress, right-click the job and choose **Cancel cost estimation**, or click the **X** in the
- **4** To view the completed estimate, do one of the following:
 - View the **Estimated Cost** column in the job list.
 - Click the **Details** link at the bottom of the Job Summary pane.
 - Right-click the job and select **Cost Estimation Details**.
 - Select Actions > Cost Estimation Details.
 - For completed, printed jobs, add the **Estimated Cost** column to the Job Log.
- **5** To view completed estimates for all the jobs in the job list, select **File** > **Export Current View** and save the file to your computer.

Change the number of copies after the estimate

If you change the number of copies for a job after the cost estimate is complete, the estimated cost is updated automatically.

Change cost or job properties after the estimate

If you change the cost after the estimate, the job must be re-processed and re-estimated. If you change the job properties (except the number of copies) after an estimate in such a way that the job requires reprocessing, the current estimate is cleared, and you must request a new estimate.

View the estimated print time

After you import a job into Command WorkStation, you can view an estimate of the time required for printing the job. The estimate is only approximate.

You can view the estimated time to print a job by adding the **Print Time Estimation** column in the Job Center.

- 1 Right-click any column header in the Job List.
- 2 Click Add New > Other.
- **3** Select **Print Time Estimation**.

Estimates are provided for unprocessed and processed jobs, but the estimates for processed jobs are analyzed more accurately.

When a job is printing, the estimated time to print (HH:MM:SS) is shown above the printing progress bar in Command WorkStation Job Center.

Fiery Print Scheduler

Fiery Print Scheduler allows you to set the time and date to print a job from Fiery Command WorkStation. You can view a timeline for your jobs and reschedule jobs as needed.

Note: The Fiery Print Scheduler feature is supported on a Fiery server with Fiery system software FS600/600 Pro and later.

Open Fiery Print Scheduler

Fiery Print Scheduler can be opened in Command WorkStation.

- In Command WorkStation, do one of the following:
 - Select Server > Schedule.
 - Click **Schedule** on the Job Center toolbar.

The Fiery Print Scheduler main workspace

The Fiery Print Scheduler main window consists of the following:

- Search bar searches your currently scheduled jobs.
- Timeline displays the times when jobs are scheduled to print. You can use the arrow buttons to scroll through the blocked times. You can also hover your mouse over the blocked times for more detailed information.
- **Printing** list displays when a job is printing at the scheduled time.
- **Scheduled Jobs** list displays the jobs that are scheduled and waiting to be printed.

Schedule a job

You can schedule both processed and spooled jobs for printing.

- 1 To open the **Schedule Jobs** window, do one of the following:
 - In Job Center, right-click (Windows) or cmd-click (macOS) your job and select Actions > Schedule Print.
 - In Job Center, click **Schedule** on the toolbar and then click **+ Schedule** in the Fiery Print Scheduler. Select a job in **Held Jobs** and click **Add**.
 - In the Fiery Print Scheduler application, click + Schedule. Select a job in Held Jobs and click Add.

Note: You can also select multiple jobs in the Held list to create a schedule for each job. Up to 100 jobs can be scheduled at a time. Scheduling multiple jobs together will display as a single blocked time in the timeline.

- **2** Select one of the following:
 - Next available slot schedules your job for the earliest available time.
 - **Schedule a time** allows you to specify a time to print the job.
- **3** Click **Add Jobs** to add another job to the schedule.
- 4 Click OK.

Reschedule a job

You can change the time slot for an existing scheduled job by rescheduling.

- 1 In the **Scheduled Jobs** list, navigate to the job you want to reschedule.
- **2** Click the More icon (three vertical dots).
- 3 Select Reschedule.

- **4** In the **Reschedule** window, select one of the following:
 - Next available slot schedules your job for the earliest available time.
 - Choose start time allows you to specify a time to print the job.
- 5 Click Reschedule.

Cancel a schedule

You can cancel a schedule for a job in Fiery Print Scheduler.

- 1 In the **Scheduled Jobs** list, navigate to the job you want to cancel.
- **2** Click the More icon (three vertical dots).
- 3 Select Cancel schedule.
- 4 Click Yes.

Print a job next

You can specify to send a job to print next.

- 1 In the **Scheduled Jobs** list, navigate to the job you want to print next.
- **2** Click the More icon (three vertical dots).
- 3 Select Print next.
- 4 Click Yes.

Search for a scheduled job

You can search for specific jobs in the **Scheduled Jobs** list.

- 1 In the main Fiery Print Scheduler window, navigate to the search bar.
- **2** Type in the name of your job or part of the name of the job.
- **3** Do one of the following:
 - Select the name of the job that appears in the list.
 - Click the magnifying glass icon.
 - Press the Enter key.

Apply Fiery JobFlow in Command WorkStation

You can apply Fiery JobFlow workflow to the available jobs on the Fiery server.

Note: Fiery JobFlow is supported on a Fiery server with Fiery system software FS600/600 Pro and later.

You must install Fiery JobFlow v2.9 or later on the Fiery server to apply Fiery JobFlow workflows from Command WorkStation.

1 Right-click an imported job and select **Submit to JobFlow**.

The **Fiery JobFlow Workflows** window opens in a default browser window. All the created workflows are displayed.

Note: By default, six printer-specific pre-installed sample workflows with the prefix PS are available.

2 Choose any workflow and click **Select**.

The **JobFlow** icon in the **Summary** tab in Command WorkStation indicates that the workflow has been successfully applied.

- **3** To cancel the workflow while it is being applied to the job, right-click the job and select **Cancel JobFlow**. The **Cancel JobFlow** command is not available after the workflow has been applied.
- **4** To view the JobFlow Report, right-click the job and select **View JobFlow Report**. The workflow modules that have been applied successfully are displayed with a green check mark.

Note: The **Summary** tab displays job details and the applied Fiery JobFlow workflow. To open the Fiery JobFlow Report, you can also click **View Report** under the Fiery JobFlow workflow name in the **Summary** tab.

Create a workflow from Command WorkStation

You can apply a Fiery JobFlow workflow to the available jobs on the Fiery server. You must install Fiery JobFlow v2.9 or later on the Fiery server to apply Fiery JobFlow workflows from Command WorkStation.

1 Right-click an imported spooled job and select **Submit to JobFlow**.

The Fiery JobFlow Workflows window opens. All created workflows are loaded.

Note: By default, six printer-specific pre-installed sample workflows which have the prefix PS are available.

2 Click Manage workflows.

Fiery JobFlow opens in a default browser window.

- **3** Log on to Fiery JobFlow using your credentials.
- **4** Click the plus sign next to the **Workflows** header in the **Workflows** tab to open the **Create New Workflow** window.
- **5** Select one of the following:
 - Printer Specific
 - Generic

- **6** Type a name for your workflow.
- 7 Click Create.
- **8** Click **Edit** to open the **Input Sources** module and select from the list of locations.

The location of your saved workflow is displayed.

Note the following:

- You can add up to a maximum of five input sources.
- After the Input Sources module, you can add either the Connect module, the Al Image Scale module, the
 Convert module, or all three, depending on the requirements of the job.
- After the **Input Sources** module, you can add multiple instances of the **Connect** module with different settings and parameters, depending on the requirements of the job.
- **9** Add the **Connect** module to convert native jobs to a format that Fiery JobFlow supports using a third-party solution. Specify script or hot folder parameters.
- **10** Add the **Al Image Scale** module to enlarge images using a third-party solution. Specify scaling method, resolution, and output size parameters.
- **11** Add the **Convert** module if the job needs to be converted to a PDF. If the **Convert** module is added, you can add any of the other modules, because all the other modules are PDF-dependent.
 - If the job is non-PDF dependent, you have the option to delete the **Convert** module, bypass other modules that are PDF-dependent, and directly output the job to a specified output location.
- 12 Click the plus sign below the Convert module to add the Collect, Fiery Preflight, Image Enhance, Impose, Pages, Approve, Correct, Connect, or Preflight modules.

For information about individual modules and settings, see Fiery JobFlow Help.

- **13** Specify the settings for each module and click **Add** to add the module to the workflow.
- **14** Select an output location in the **Output** pane.

If you selected a Fiery server, select a preset and then click **Save**. You can also add additional substitute Fiery servers by clicking **Add a substitute Fiery server**.

- **15** When creating or updating workflows, you have the option to:
 - Add rules to each module to trigger a certain action based on the job status (passed or failed). The available rules are **Archive job**, **Send email**, **Move job**, **Copy job**, and **Run script**. To set a rule, click **Add**, define trigger (**If**) and action (**Then**), and click **Save**.
 - Search for a particular function, module, or setting. You can type the search criteria or keyword in the **Search** field. To save the search, click **Save**.

The search results display all modules with settings that match the search criteria. For example, if you type "bleed" in the **Search** field, the search results display all modules with settings related to the keyword "bleed".

Note: Users can view only their own saved search criteria.

- Use the drag-and-drop operation to submit a single job, multiple files, or an archive (a .zip file) from your computer desktop onto the workflow.
- Delete a workflow, even if there are associated jobs present in the workflow. Deleting a workflow removes all associated workflows and the completed jobs automatically.

Associated workflows are workflows that are connected via rules.

Apply Fiery JobFlow workflow using a virtual printer

You can apply a Fiery JobFlow workflow when creating a virtual printer.

You must install Fiery JobFlow v2.9 or later on the Fiery server to apply Fiery JobFlow workflows from Command WorkStation.

- 1 In Command WorkStation, open Device Center, and select Workflows > Virtual Printers.
- **2** Click **New** to open the **New Virtual Printer** window.
- 3 Specify the required information, select the JobFlow check box, and click Select.
 - The **Fiery JobFlow Workflows** window lists all the workflows created in Fiery JobFlow.
- **4** Type the workflow name in the **Search Workflows** field to search for it or select the workflow name and click **Select**.

The Fiery JobFlow workflow name is displayed in the New Virtual Printer window.

- **5** Click **OK** to create the virtual printer.
- **6** In **Job Center**, click **Import** to import a job.
- 7 In the **Import Files** window, select **Use Virtual Printer** in the **Settings** area.
- **8** Choose the newly created virtual printer from the list.
- **9** Select **Hold** or **Process and Hold** for the job action.

The job is imported with the Fiery JobFlow workflow applied.

Fiery JDF Jobs

About Fiery JDF and JMF

Fiery JDF adds support for various JDF intent and process elements. You can use Command WorkStation to view JDF settings and resolve errors, such as media mismatch, during job processing.

Job Definition Format (JDF) is an open standard, XML-based file format that allows you to automate the print production process by passing data between different applications. By simplifying data exchange, JDF makes digital production faster and more efficient, while also facilitating faster movement of job details. A JDF electronic ticket specifies how a job is to be handled and produced from customer concept to final production.

Think of the JDF file as an electronic version of a customer's specifications for a particular job. For instance, a job ticket with the customer's request for a job with the specifications "100 copies of a 10-page document on 20# letter-size white paper, printed duplex, black-and- white" would be represented in a standardized XML format readable by JDF-enabled devices, in other words, by the JDF ticket.

Job Messaging Format (JMF) is the communication protocol used in a JDF workflow. JMF messages contain information about events (start, stop, error), status (available, offline, and so on) and results (count, waste, and so on). Fiery JDF turns on integrated, bi-directional communication of JDF intent or JDF process job tickets between JDF-submitting applications to a Fiery server using JMF.

Support for JMF allows the Fiery server to provide feedback on the status of the JDF job and production data (such as time of delivery or printing and materials used) to the JDF-submitting application.

Fiery JDF Setup

JDF must be turned on in Configure (**Job Submission** > **JDF Settings**) to allow JDF jobs to be submitted to the Fiery server. You can specify JDF parameters when you configure the Fiery server.

- Use Job settings from virtual printer Select a virtual printer, if desired.
- Job action Choose from Hold, Print, Print and Hold, and Process and Hold.
- Override JDF job with the above settings Override settings specified in the JDF job ticket.
- **Job Closing** Specify **Auto Close** or **Manual Close** to close JDF jobs back to the emitter after they are printed.
- **Required for Closing** Specify what information is required for closing.
- Common Global Paths Add, edit, or remove file search paths over SMB for common resources.

For information about how to specify JDF settings in Configure, see *Configure Help*.

Enabling JDF-submitting applications

Fiery JDF contains an enablement mechanism to test and certify JDF-submitting applications. The specific JDF-submitting applications are turned on for Fiery JDF either in the Fiery server or by a JMF (Job Messaging Format) message sent from the JDF-submitting application.

If a JDF-submitting application has not been turned on, the following indicators alert users to jobs from applications not yet tested and supported:

- A warning status message is displayed for the job in the Command WorkStation job list.
- A warning message is displayed in the JDF Details window.
- A JMF comment is returned to the JDF-submitting application with information on how to certify the application.

Fiery JDF workflow

When a job is processed, the Fiery server uses JMF (JDF's Job Messaging Format) to send back status and audit information to the JDF job-submitting application.

When a JDF job is submitted to the Fiery server, the job is checked for any errors or conflicts. If there are none, the operator can select additional print actions from the **Actions** menu in Command WorkStation or choose to print the job directly.

When an error is found, the job is shown with an error in the **Job Status** column.

You can choose to fix or ignore JDF ticket conflicts in the **Job Errors** window. If a conflict is ignored, the job may print without JDF information.

After a JDF job is printed, a job completion message is automatically returned to the submitting application if the Fiery server has been configured for **Auto Close**. For **Manual Close**, the operator needs to close the job through the Command WorkStation window after the job has finished printing.

Submit the JDF job

You can submit a JDF ticket through a Hot Folder filter or traditional JDF-submitting application using the JMF URL of the Fiery server.

1 Send a job to a Fiery server from a JDF-submitting application.

The job is sent through JMF (Job Messaging Format). The submitting application sends the job to the JMF URL of the Fiery server.

Note: You cannot import a JDF job or send it from the printer driver.

2 Enter the JMF URL of the Fiery server in the following format:

http://<host>:<port> (for example, http://192.168.1.159:8010)

Display JDF column headings in Command WorkStation

When a JDF job has been received by the Fiery server and displayed in the Command WorkStation Held or Printed queue, you can select a JDF set of column headings to display useful information about the JDF job.

To display column headings for a JDF job, right-click in the column heading bar and select JDF Set.

The default JDF set of headings is added. Right-click in the column heading bar and click **Add New** > **JDF** to see additional JDF categories.

Fiery JDF jobs and virtual printers

Virtual printers can be defined on the Fiery server and referenced inside a JDF ticket as a NamedFeature.

In Fiery JDF Setup, you can specify a virtual printer for job submission. The job would then use the job settings in that virtual printer, if so configured in the Fiery server (in the JDF section of Configure). Any settings in the JDF ticket override the "unlocked" virtual printer settings.

For more information about virtual printers, see Virtual printers on page 271.

Specify JDF settings for a job

You can set options for a JDF job in the **JDF Settings** window when you select a JDF job in the Held or Printed queue.

To open the JDF Settings window, right-click and select JDF Settings or click Actions > JDF Settings.

The following tabs are available from the JDF Settings window:

- **Media** displays the media attributes of the JDF job next to the corresponding Paper Catalog or Media Catalog entry. Media for the JDF job can be mapped manually to a Paper Catalog or Media Catalog entry in this tab. See Enabling JDF-submitting applications on page 104.
- Job Info displays information found in the JDF ticket. Allows you to specify additional MIS details and add comments.
- Run List displays the customer-supplied files used to generate the content of the JDF job. Allows you to add, edit, and reorder the files in the window.
- **Close Job** allows the job to be manually closed by the operator.

The following actions are available in every tab:

- **Close Job** closes the job, according to the parameters set in Configure.
- **View Paper Ticket** this option is turned on if the JDF-submitting application included a human-viewable copy of the original job ticket.
- **OK** saves the settings and closes the window.
- Cancel closes the window without saving any changes to settings.

Job Info tab

The **Job Info** tab displays JDF information about the job being submitted.

The **Job name**, **Job ID**, and **Source** fields are automatically populated.

The following areas are automatically populated and are read-only:

- Job Header
- Scheduling
- Customer Info

MIS Details

The MIS Details area allows you to select a setting from the menu for each of the following categories:

- Chargeable specifies if the job should be charged.
- Work Type specifies if and how the job should change.
- Work Type Details specifies the reason for the change. Certain values of Work Type Details are valid only with certain values of Work Type. For example, if Work Type is set to Original, then Work Type Details is ignored.
- Operation Mode specifies the type of operation mode.

Comments

The **Comments** area is populated with JDF comments as read-only, but you can add comments by clicking the **Add** button and typing your comments in the blank field.

The comments appear in the **Job notes** area in the **Job Info** tab of the **Job Properties** window.

Run List tab

The **Run List** tab displays the location of the PDL files used to generate the content page artwork to populate a JDF job. The file paths are displayed in the order that they are pulled to print the job. Each path supports one file type per job. Different protocols are supported.

- Supported protocols: HTTP, FTP, SMB, MIME, local files
- Supported file types: PDF, PostScript, PPML, VDP, ZIP

If the number of pages in a single run list job is unknown and you want to print the last few pages, you can use a negative number to represent the page number. In Fiery JDF, 0 represents the first page, -1 represents the last page, and -2 represents the second-to-last page.

Note: Multiple file types are not supported for the same job. If your first entry is connecting to a PDF file, then all files for the job should be PDF.

You can add paths, edit the path names, or remove the path.

Note: You cannot remove validated paths that are required for the job from the **Run List**. At least one valid entry is required for a job.

If the JDF ticket has the file names, but the files cannot be located in the path defined in Configure, an alert icon is displayed. You can then select **Edit** and insert the correct path.

Close Job tab

When **Manual Close** is turned on in Configure, the operator must close jobs in order for the submitting application to receive production information on the job, even if the job was canceled.

Other users can close jobs to record and return the actual completion status of the job to the sender. Print MIS Solution users receive production status during the run, and receive audit detail for costing when the job is closed out of the Fiery server.

You can close a job manually at any time during the Fiery JDF workflow, provided that any required information has been provided.

In Fiery JDF Setup, you specify either auto or manual closing for jobs, and what information, if any, is required to close a job.

The **Close Job** tab displays the following fields, which are automatically populated:

- Paper Catalog or Media Catalog lists the media specified in the JDF ticket. You can change this entry if a different media was used.
- **Employee ID** comes from the login the user used when logging in to Command WorkStation.
- Media Product ID refers to the Product ID in Paper Catalog or Media Catalog.
- Planned Sheets comes from the JDF ticket.
- Actual Sheets comes from the Fiery server Job Log.

You can override the entries for these fields if required, except for Media Product ID and Planned Sheets.

Add JDF job media to the Paper Catalog or Media Catalog

When a JDF ticket is submitted to the Fiery server, the server attempts to automatically map the specified media for the JDF job with a corresponding entry in the Paper Catalog or Media Catalog on the Fiery server.

If automatic media mapping fails, you can view the JDF job media in the JDF ticket and manually select a paper catalog or media catalog entry for the job.

- 1 If you want to add the media used in the JDF job, select it from the JDF ticket and add it to the Paper Catalog or Media Catalog in the **Media** tab of the **Job Properties** window.
- **2** Depending on what is supported on your Fiery server, select one of the following:
 - For Paper Catalog, select Add/Map to Paper Catalog from the Map to Paper Catalog menu.
 - For Media Catalog, select Add/Map to Media Catalog from the Map to Media Catalog menu.

For general information about adding new media to the:

- Paper Catalog, see Create a Paper Catalog entry on page 280
- Media Catalog, see Create a media catalog entry on page 306.

Resolve media conflicts in JDF jobs

If a JDF ticket uses media that cannot be automatically mapped to the Paper Catalog or Media Catalog, Command WorkStation displays an error for the job. You can add the media for the JDF job to the Paper Catalog or Media Catalog to resolve the problem, either by mapping it to an existing media entry or adding it as a new entry.

- 1 Right-click the selected JDF job and select JDF Settings or click Actions > JDF Settings.
- 2 Select Fix the JDF conflict.
- **3** In the **Media** tab of the **JDF Settings** window:
 - **a)** For Paper Catalog, select a corresponding media entry from the **Map to Paper Catalog** menu or select **Add/Map to Paper Catalog**, and click **OK**.
 - **b)** For Media Catalog, select a corresponding media entry from the **Map to Media Catalog** menu or select **Add/Map to Media Catalog**, and click **OK**.

The parameters of the media specified for the JDF job are listed alongside the parameters of the Paper Catalog or Media Catalog entry selected. You can now print the job.

Managing Fiery Central workflows

Fiery Central software integrates your production systems to make existing or new printers more scalable and productive. It combines multiple Fiery Driven printers, and other select printers, into a centralized print production system that you can access through Fiery Command WorkStation.

About Fiery Central

Fiery Central is a modular, paper catalog, PDF-based production workflow tool that provides efficient load-balanced network printing for high-volume print environments.

Fiery Central delivers an automated workflow in the following ways:

- Manages job submission, printer queues, and spooling
- Provides efficient load-balancing and printing for high-volume and production print environments
- Provides a workflow automation framework

Fiery Central software

Fiery Central standard features include the following:

- Fiery Command WorkStation for advanced job management
- Fiery Central Driver for job submission
- Fiery Hot Folders
- Fiery Printer Delete Utility
- Archiving
- Fiery Impose
- Fiery JobMaster
- Support for one printer group for the number of licensed printers

Note: If a Fiery Central server has more than one printer group, only the first group will be available.

• Support for three Fiery Driven printers, with the ability to add more

The Fiery Color Profiler Suite is an optional feature.

The Fiery Central Balance option includes the following:

- Automatic job routing, job splitting, load-balancing, and error recovery among groups of printers
- All Fiery Central standard features

Connect to or disconnect from a Fiery Central server

When you connect to a Fiery Central server in Command WorkStation, only the Fiery Central server name is shown in the **Servers** pane. The printer group name will not be displayed.

Command WorkStation 6.7 and later can connect to Fiery Central servers running version 2.9 software and later.

Note: Command WorkStation supports Fiery Central servers with a single printer group. If your Fiery Central server has more than one printer group, only the first group will be available.

When you first add a Fiery Central server to Command WorkStation, you will see a warning message about the single group support. This warning will not occur on subsequent logins.

Before you add a Fiery Central server that you want to monitor, make sure that you have the server DNS name or IP address.

If you type an IP address, the **Servers** pane will show what you typed. After the server connection has been made and authenticated, the IP address switches to the Fiery Central server name in the **Servers** pane.

Connect to a Fiery Central server from the network

To connect to a Fiery Central server from the network, you type the IP address or DNS name and then log in.

- 1 Click Server > Connect New to display the Connect to Server window.
- **2** Type the IP address or DNS name for the Fiery Central server in the **Connect to a server** field, and then click the **plus sign** icon to add it to the **Servers** pane or click **Connect** to open the **Login** window.

To find a Fiery Central server by name or IP address, look in the **Disconnected servers** list in the **Connect to Server** window. If not, you can click the **Search** icon.

- **3** Select **Administrator**, **Operator**, or **Guest** from the list, and type the appropriate password.
 - You do not need to type a password when logging on as Guest.
- 4 Click Login.

Re-connect to a Fiery Central server in the Servers pane

You can log on to a Fiery Central server after disconnecting.

- **1** Do one of the following:
 - Select a Fiery Central server and click Server > Connect.
 - Select a Fiery Central server and click the **Connect** icon.
 - Double-click on the Fiery Central server.
- 2 Select Administrator, Operator, or Guest from the list, and type the appropriate password.

You do not need to type a password when logging on as Guest.

3 Click Login.

Log off the Fiery Central server

The **Servers** pane allows you to disconnect from a Fiery Central server.

- **1** Select a Fiery Central server from the **Servers** pane.
- 2 Click the More icon (three vertical dots) beside the name of the Fiery Central server, and do one of the following:
 - Select **Logout "Administrator"** to log out of the Fiery Central server.
 - Select **Remove Fiery server** to remove the Fiery Central server from the **Servers** pane.

Fiery Central server in Command WorkStation

The Fiery Central server connections, and errors and alerts are shown in Command WorkStation. You can also view the Fiery Central Device Center and Paper Catalog Map.

Servers pane in Fiery Central

The **Servers** pane shows the authenticated Fiery Central server connections.

Viewing server information

To view a detailed and complete list of server information, click the More icon (three vertical dots) next to the Fiery Central server name, and in Device Center, select the **General** tab and then **General Info**.

Viewing status and error messages

View status information about the Fiery Central server, and error messages about the printer in the status bar.

Customize Fiery Central Job Center

You can customize the toolbar icons and column header in the Command WorkStation Job Center for Fiery Central. To customize these items, the Fiery Central server must be selected in the **Servers** pane.

Customize Fiery Central toolbar icons

You can use a default set up Fiery Central toolbar icons, move icons in and out of the toolbar, and determine whether toolbar icons are displayed with text.

- 1 Right-click anywhere in the toolbar, and select **Customize** from the menu that appears.
- 2 Specify how the toolbar icons should be shown by right-clicking the toolbar and choosing an option.
- **3** Click **Done** when you have finished.

Display Fiery Central Destination column heading

When the Fiery server receives a Fiery Central job and displays it in the Command WorkStation job list, the **Fiery Central Destination** column heading can be shown.

• To display the column heading for the Fiery Central printer group, right-click in the column heading bar and select Add New > Other > Fiery Central Destination.

View or edit the Fiery Central license

The Fiery Central License Manager displays the terms of your Fiery Central license. You can access this feature only from Command WorkStation installed on the Fiery Central server.

If you have licensed additional Fiery Central applications or features, you can enter updated license information without running the installation program. You must enter this updated license information in the Fiery Central License Manager before you can use new features. You can also update your license during Fiery Central software installation.

Note: You can create a maximum of 10 printer groups for each Fiery Central server.

Note: Command WorkStation 6.7 and later supports a Fiery Central server with one printer group. If a Fiery Central server has more than one printer group, only the first group will be available.

- **1** Do one of the following:
 - In Device Center, select the **General** tab, click **Tools**, and then click **Launch FC License Manager**.
 - Click Server > Central Tools > Manage Fiery Central License.
 - Click Start > Programs > EFI > Fiery Central > Fiery Central License Manager.
- **2** To enter licensing information, type the activation key code exactly as displayed on the Fiery Central License Form included in your Fiery Central software package.

Configure Fiery Central

You configure Fiery Central from the Fiery Central tray icon (\square) after you complete installation of the Fiery Central software and restart the Fiery Central server.

Configure the Fiery Central server

You can configure the Fiery Central server from WebTools, from Configure, or from Device Center.

- Do one of the following:
 - Right-click the Fiery Central tray icon [3], select WebTools, and then select the **Configure** tab. For information about using WebTools Configure, click the **Online Help** icon in the WebTools **Configure** window.
 - In Command WorkStation, click **Server** and then select **Configure**.
 - In Command WorkStation Device Center, select the **General** tab, click **Tools** and then click **Configure** in the lower-right corner.

Note: This feature can only be accessed from Command WorkStation installed on the Fiery Central server.

You can launch WebTools from the Fiery Central tray icon at any time to update your server configuration to reflect changes in your Fiery Central printing environment.

Enable JDF in Configure

JDF (Job Definition Format) technology is an XML-based open industry standard for job tickets. It simplifies the information exchange among different graphic arts applications and systems.

Fiery JDF allows submission of JDF jobs to the Fiery Central server from applications that allow creation of JDF tickets. Use Configure to specify JDF settings and to view the Fiery JDF version, the JDF Device ID, and the JMF URL.

- 1 From Configure, click **Server** > **JDF**.
- **2** Select **Enable JDF** to enable JDF functionality.
- **3** Specify a default print queue action from **Job Action**.
- 4 Select Override JDF job with the above settings, if you want to override the settings specified in the JDF ticket.
- 5 Click Apply.

Fiery Central Manager

Fiery Central Manager allows you to create printer groups, add new printers, change printer group settings, and configure VDP settings and DSF connection settings.

Access Fiery Central Manager

The **Fiery Central Manager** window, which appears after you install Fiery Central, allows you to perform tasks such as configuring and editing printer groups.

- Do one of the following:
 - Right-click the Fiery Central icon () and select Fiery Central Manager.
 - Click Start > All Programs > EFI > Fiery Central > Fiery Central Manager.
 - In Command WorkStation Device Center, select the **General** tab, click **Tools**, and then click **Launch Manage Groups**.
 - From Server > Central Tools, select Manage Groups.

Note: This feature can only be accessed from Command WorkStation installed on the Fiery Central server.

Fiery Central Printer Groups

A printer group is a set of printers and default print options. Printer groups allow the Fiery Central server to route jobs to printers and balance them across multiple printers.

Fiery Central may have multiple printer groups. If the optional Balance module is installed, the printer groups may each contain multiple printers, and each printer may belong to one or more groups.

Note: Fiery Command WorkStation 6.7 and later supports Fiery Central with a single printer group. If you have more than one printer group, only the first group will be available.

A printer group appears on the network as a virtual printer, and has both Print and Hold queues. Jobs printed with the Fiery Central printer driver, Fiery Hot Folders, or other printing utilities associated with the printer group can be tagged with any of the print options provided by printers in the group.

Note: Fiery Command WorkStation 6.7 and later does not support the creation of signed printer drivers for printer groups.

Create or edit a printer group

To allow Fiery Central to print jobs to the printers, you must create a printer group.

Note: Before you configure printer groups, you must have the IP address or server DNS name for each printer you want to use with Fiery Central. Make a note of any additional options installed with each printer.

When you create printer groups, keep in mind the capabilities of your printers, the types of printing you will be doing, and if speed or custom printing is a priority.

- 1 In the Fiery Central Manager window, select the Printer Groups tab.
- 2 To add a printer group, click Add; to edit an existing printer group, select a group and click Edit.
- **3** Type a group name to identify the printer group, add a description (optional), and then click **Next**.

A group name can be up to 16 characters long and cannot include special characters, hyphens, spaces, or underscores.

4 Type the IP address or printer name in the **IP/Server Name** field.

For printers that maintain multiple queues and treat each as a separate printer, enter a **Queue Name** to locate the printer for selection.

5 Select the server family and printer model from the **Model** list.

The **Port Number** field is filled in by default (631).

- **6** Do one of the following:
 - Click Search.
 - Click **Auto Discovery** to search for available Fiery Central servers on the network. Auto Discovery searches only for the Fiery Central server with its local TCP/IP subnet.

Note: Auto Discovery will not find non-Fiery printers or generic PostScript printers on the network. You have to manually add them to the printer group by using their IP address or printer name.

- 7 In the Available Printers list, select a printer and click the arrow button to move it to the Selected Printers list.
- **8** In the **Edit/Configure Printer** window, confirm that the printer name is correct and unique.
- **9** Click **Paper Catalog Map** to set up the Paper Catalog or tray selection for the printer you are editing and configuring.

The Paper Catalog Map feature is available only if the Fiery server or non-Fiery printer supports it.

10 Verify that the **Installable Options** pane lists the options installed on the printer, and then click **OK**.

You can specify optional and printer-specific options such as staplers, stackers, and booklet finishers for individual printers in a printer group. The Fiery Central Manager incorporates these additional features into printer group PPD files for printing.

Note: When you add a Fiery server to a printer group, the configurable options are selected by default. You manually install printer-specific options for non-Fiery printers.

11 Add and configure additional printers.

Move any other printers you want for that group, one by one, to the **Selected Printers** list, and then configure them. You can also remove printers from the group.

- **12** Click **Next** when you have added and configured all of the printers you have selected for the printer group.
- **13** Set the default options for the printer group:
 - Select the **Load Balance** option for balancing individual print jobs among the printers in the group. If you set **Load Balance** to **Preferred Printer**, also select a printer from the printer group in the **Preferred Printer** field.
 - Set the **Use Printer Type** default, and specify whether black-and-white or color printers are used exclusively for jobs sent to this group.
 - Set one of the Cover Sheet/Merge Options.

- Set the Maximum Number of Printers.
- Select **Reroute on Error** to send the remaining portion of a job to the Fastest Single Engine when an error occurs at the destination printer. If you do not select this option, jobs wait in the Print queue of the destination printer until the error is cleared.
- **14** Click **Next**; then review the summary information for the printer group and click **Save**.

If you need to make changes, click Cancel to discard the current printer group and create a new one.

15 With the printer group selected in the Fiery Central Manager Printer Groups pane, select **Make Printer Group drivers available through WebTools** if you want users to be able to download Fiery Central printer drivers through an Internet browser.

Note: If you are using a Windows or Mac computer, this option should be selected.

- **16** Select the printer queues that you want to publish.
- 17 To save changes and create the printer group, click **OK** in the **Fiery Central Manager** window.

Printer group options

You can specify Load Balance, Cover Sheet/Merge, and Reroute on Error options when you set up a printer group.

Load Balance options

FC. 1 F .		
Fastest Single Engine	Prints the entire job to the fastest printer that meets the print specification	าร
I docest single Lingline	Times the chille job to the lastest printer that incets the print specification	.10

of the job.

Preferred Printer Prints the entire job to the printer you specify.

Copy Split Sends multiple copies of a single document to different printers, based on

print specifications and the current print load on each printer. **Copy Split** requires a minimum of two color printers or two black-and-white printers.

Long Job Split Splits a single copy of a document across different printers. **Long Job Split**

requires a minimum of two color printers or two black-and-white printers.

Color Split Splits all copies across two printers, with color content sent to the fastest

color printer in the group, and black-and-white content sent to the fastest black-and-white printer in the group. **Color Split** requires a minimum of one

color and one black-and-white printer.

Cover Sheet/Merge options

None Does not generate cover sheets or insert inline pages.

Cover Sheet-Manual Merge Automatically generates covers sheets with information about each portion

of the job to aid in manual merging.

Bar Code-Offline Merge Automatically generates cover sheets containing bar codes for collation by

an offline merge finisher. This option is available only when Load Balance is

set to Color Split.

No Cover Sheet-Inline Merge Inserts preprinted pages from an inline insertion tray. This option is

available only if a black-and-white printer in the group has an insertion tray,

and if Load Balance is set to Color Split.

Reroute on Error parameters

Job Time Out Specifies how long a job waits in the Print queue for the destination printer

when an error occurs, before being rerouted.

Total Reroutes Specifies how many reroutes are allowed for a single job. When the

maximum is reached, the job waits in the Print queue of the last printer

until the error is cleared.

Manage printer groups

After you have a printer group set up, you can manage the group by adding or deleting printers from the group, or view information about the printer group.

- 1 In the Fiery Central Manager window, select the Printer Groups tab to display printer groups.
- 2 Select an existing printer group, and do any of the following:
 - Click **Edit** to update the group, or **View** to see the summary information for the group.
 - Click **Delete** to remove the selected printer group.
 - Click **Add** to add a new group.
 - Select **Make Printer Group drivers available through WebTools** if you would like users to be able to download Fiery Central Manager printer drivers through an Internet browser.

Note: If you are using a Windows or Mac computer, this option should be selected.

- Select the printer queues you want to publish (selected by default).
- **3** Click **OK** to save changes and create the printer group.

Back up or restore Fiery Central

The Fiery Central Manager allows you to back up printer group information so your printer groups can be restored after system crashes or upgrades.

Note: Before restoring from a backup, you must delete all existing printer groups. You cannot merge backed up printer groups with existing printer groups.

The following information is backed up:

- Printer group information
- Paper Catalog
- Paper Catalog mapping

Note: The backup and restore feature can only be accessed from Command WorkStation installed on the Fiery Central server.

Back up Fiery Central

You can back up printer group information, Paper Catalog, and Paper Catalog mapping by using a wizard.

- 1 Start the Backup tool using one of the following methods:
 - Click **Backup** in the **Printer Groups** tab of the Fiery Central Manager.
 - In Command WorkStation Device Center, select the **General** tab, click **Tools**, click **Launch Backup & Restore**, and then click **Backup** in Fiery Central Manager.
 - From **Server** > **Central Tools**, select **Manage Backup & Restore**, and then click **Backup** in Fiery Central Manager.
- **2** Follow the instructions in the Backup & Restore wizard.

Restore Fiery Central

You can restore printer group information, Paper Catalog, and Paper Catalog mapping by using a wizard.

- 1 Start the Restore tool using one of the following methods:
 - Click **Restore** in the **Printer Groups** tab of the Fiery Central Manager.
 - In Command WorkStation Device Center, click the **General** tab, click **Tools**, click **Launch Backup & Restore**, and then click **Restore** in Fiery Central Manager.
 - From Server > Central Tools, select Manage Backup & Restore, and then click Restore in Fiery Central Manager.
- **2** Follow the instructions in the Backup & Restore wizard.

During the restore process, Paper Catalog Map will be opened to restore Paper Catalog mapping. You can check the restored mapping.

Note: A printer group cannot be restored if any of the printer devices are not accessible on the network.

Use Fiery Central Paper Catalog

The Fiery Central Paper Catalog provides a uniform inventory of media, allowing users to specify the exact media they want for a job.

When Fiery Central paper catalog media is mapped to corresponding paper catalog media on the Fiery server, jobs printed with paper catalog media print directly to printers stocked with that media.

Note: The Paper Catalog Map feature is available only if the Fiery server or non-Fiery printer supports it.

Create paper catalog entries for Fiery Central

If you are logged on to a Fiery server on the Fiery Central server as Administrator, you can create Fiery Central paper catalog entries.

Access Paper Catalog from Command WorkStation Device Center, click Resources > Paper Catalog.

Map the Paper Catalog

You must set up the paper catalog for the printer and associate printer trays with paper catalog media before printing for correct operation. Printers are assumed to have paper catalog media stocked at all times.

- 1 In the Add/Remove Printers window, select a printer in the Selected Printers list and click Edit/Configure.

 To access the Add/Remove Printers window, you must be adding or editing a printer group.
- **2** Do one of the following:
 - In the Edit/Configure Printer window, click Paper Catalog Map.
 - In Command WorkStation Device Center, for the selected Fiery Central server, click **Resources** > **Paper Catalog**, and then click **Mapping**. This is not available on client computers.

The **Paper Catalog Map** utility appears. If a printer has a paper catalog, you must map the paper catalog entries for the printer to the appropriate Fiery Central Paper Catalog entries.

You can import the paper catalog entries for a printer into the Fiery Central Paper Catalog by selecting **Add as New** in the Fiery Central Paper Catalog column.

If a printer does not have a paper catalog, you must map the Fiery Central Paper Catalog entries to appropriate media attributes for that printer.

Set up VDP file search paths

Fiery Central Manager allows you to specify shared locations for VDP resources.

You can set up file search paths that can be used globally for all jobs for the following types of variable data printing elements: common resources, PPML objects, or VPS objects.

Note: To define job specific search paths, use the **VDP** tab of the Command WorkStation Job Properties for the specific job.

- 1 In the Fiery Central Manager window, click the VDP tab.
- 2 Click Add for the type of resources you want to add locations for: Common, PPML, or VPS.
 - PPML objects use PPML (Personalized Print Markup Language), an XML-based language developed by PODi, considered an industry standard. To print documents in PPML format, use a third-party software application that is compatible with PPML format.
 - VPS objects use Creo VPS, an extension of the PostScript language developed by Creo. All of the page elements must be packaged inside the Creo VPS file. To print, you must have an application that emits the Creo VPS data stream.

Note: Some PPML and Creo VPS jobs do not contain all of the variable data job resources in a single file. In these cases, specify the location of the variable data job external resources so that Fiery Central can access them. These shared locations must have read permissions from Fiery Central and the Fiery servers.

3 Browse to the location of the stored objects and click **OK**.

Managing color

Color print options

Color print options control the color management applied to a print job.

The color print options accessed from the **Device Center** > **Color Setup** > **Color Management** in Command WorkStation show the default color print settings for the Fiery server. A default color print setting is applied if the color print setting has not otherwise been specified for the job. You can override the default settings for a job by changing them in the Fiery Driver or in Job Properties, unless the settings has been locked.

Default color print settings are referenced in other locations that list color print options. For example, the **Printer's default** setting in the printer driver refers to the default setting.

For more information about default job settings, see Set defaults for all job properties on page 61.

Calibration is determined by the output profile, not by a print option. The calibration setting displayed is the one associated with the selected output profile.

For more information about printing with color print options, see *Color Printing*, which is part of the user documentation set.

Various resources for helping you manage color workflows in Command WorkStation are available. You can find links to training videos and other materials for making the most of the color tools. See:

- Learning solutions at Learning@Fiery
- Color settings best practices flowchart and video

View or edit default color print options

You can view or edit default settings for most color print options.

All color print options are displayed in one window, with the basic settings at the top, followed by **Color input** and **Color settings** below. The **Color settings** are for the most advanced users.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 Under Color Setup, click Color Management and then click Set Defaults.

3 On the **Color** tab in the **Default settings** window, set color options individually and choose whether to lock the option or leave it unlocked.

You can also choose to **Lock All** or **Unlock All**.

4 Click OK.

Various resources for helping you manage color workflows in Command WorkStation are available. You can find links to training videos and other materials for making the most of the color tools. See:

- Learning solutions at Learning@Fiery
- Color settings best practices flowchart and video

Color mode settings

The **Color mode** settings specify the output color space (CMYK, for example). If you change the **Color mode** setting, color management options are reset to the server default settings.

Depending on the **Color mode** setting you select, the whole job will be printed in grayscale, CMYK, or CMYK+.

Note: CMYK output refers to press output of at least four process colors. If your press or printer supports RGB output, and not CMYK output, all references to CMYK in the *Fiery Command WorkStation Help* do not apply. For information about a press or printer that supports RGB output exclusively, see the product-specific documentation.

The possible settings for color mode are:

- **Grayscale** for a grayscale or black-and-white document.
- CMYK for a color document.
- **CMYK+** prints color output with CMYK colorants plus additional colorants where available, using all colorants as process colors. One to three additional colorants may be available for your Fiery server, if supported.

To use CMYK+ only for spot colors, select the **Use CMYK+ only for spot colors** option. When this option is selected, you can specify output profiles for both the CMYK+ spot color content and for the non-spot colors.

Note: CMYK+ is not available for all Fiery servers.

Output profile

The **Output profile** print option specifies the output profile used to process a job. Color data in a print job is converted to the color space of the printer, which is described by the output profile.

In addition, the calibration that is associated with the output profile is applied to the job before printing.

The Fiery server includes one or more default output profiles, each created for a specific media type. You can also import your own output profiles to the Fiery server.

Use job defined settings

Rather than select a specific output profile for your job, you can let the Fiery server determine the output profile automatically. The color mode and media type used in the print job determine the profile, or if the job uses media from Paper Catalog or Media Catalog, the output profile specified in Paper Catalog or Media Catalog is used.

For more information on default output profiles, see Setting a default color output profile on page 123 and How does the Fiery server decide which output profile to use? on page 123.

Device link profiles

If a CMYK-to-CMYK or RGB-to-CMYK device link profile is available for the specified output profile and source profile, **Device link profile selected** is displayed below the **Output profile** list. When a device link profile has been selected, the specific device link profile name is displayed below the **Source profile** list. The other source settings in the area are disabled as they are not applicable in the device link profile workflow.

In this case, the selected output profile is not used for color management, since the device link profile is used.

For more information on device link profiles, see Device link profiles on page 125.

Setting a default color output profile

If you do not want to manually select an output profile for every job, you can specify an output profile as the default. You can also override the default setting for a specific job.

Your preferred output profile must be specified according to the **Use job defined settings** rules.

For jobs using Paper Catalog or Media Catalog:

Do not modify the front and back color profile settings for your media or substrate.
 The specified profile will be used, unless the setting is Server's default.

For jobs not using Paper Catalog or Media Catalog, or when Paper Catalog or Media Catalog specifies **Server's default**:

• In Device Center, click **Resources** > **Profiles**. Under **Output Profiles**, select your preferred output profile and associate it with all the available media types.

Note: Association of output profiles with media is only possible if the Fiery server workflow supports it.

You can override the default for a specific job by going to **Job Properties** > **Color** > **Output profile**. Instead of **Use job defined settings**, select a profile from the list. You can also set a specific output profile as the default by accessing **Set defaults** from the **Server** menu in Command WorkStation.

Note: The default output profile displayed in the **Color** tab of the **Default Settings** window is that set by the Fiery server. The note displayed there ("Use job defined settings" is always the default profile selection.) refers to the **Output profile** menu in the **Job Properties** window.

If a job is using Paper Catalog or Media Catalog, the default output profile will be that specified in the Paper Catalog or Media Catalog entry for the front color profile and the back color profile. **Server's default** is the profile determined by the Fiery server. For more information, see How does the Fiery server decide which output profile to use? on page 123.

How does the Fiery server decide which output profile to use?

The Fiery server takes a number of factors into account when deciding which output profile to use for a job.

These factors are dependent on the implementation of Paper Catalog or Media Catalog on the Fiery server, which determines how the user will select the media for a job.

Paper Catalog or Media Catalog can be implemented in one of three ways:

- Paper Catalog or Media Catalog must be used for media selection.
- Paper Catalog or Media Catalog is optional for media selection.
- Paper Catalog or Media Catalog is not available for media selection.

Note: Implementation of Paper Catalog or Media Catalog is dependent on how it is supported on the Fiery server.

The Fiery server runs the following tests to determine which output profile to use.

- 1 Is the **Output profile** in **Job Properties** set to the automatic output profile selection?
- **2** Is Paper Catalog or Media Catalog used?
- **3** Which output profile is set most closely to the settings for your job?

Is the Output profile in Job Properties set to the automatic output profile selection?

For automatic profile selection, the **Output profile** print option in the **Color** tab of the **Job Properties** window must be set to **Use job defined settings**. The option is displayed as **Use job defined settings** because more settings than the media alone are considered. For example, if **Color mode** is set for CMYK+, the **Color mode** might be used in addition to the media itself to determine the profile.

If a specific output profile is selected, it will be used. Make a specific selection when you are not satisfied with the automatic selection or when you want to experiment with other profiles.

Is Paper Catalog or Media Catalog used?

When a Paper Catalog or Media Catalog media is specified in **Job Properties**, check the Paper Catalog or Media Catalog output profile association. To see the front and back color profiles association, right-click the chosen media in Paper Catalog or Media Catalog and select **Edit**. If a specific output profile is associated with the media or substrate, that profile will be used.

If the output profile association is set to **Server's default**, the third test will be used.

Which output profile is set most closely to the settings for your job?

Check the association between the available output profiles and the job settings. In Device Center, click Resources > Profiles and expand Output Profiles.

Print options are dependent on the connected server. For example, the **Media type** print option is often available but not always.

Options in the **Profiles** typically do not match one-for-one the large number of equivalent job settings.

For instance, **Job Properties** may offer multiple coated options, while there might be only one output profile setting associated with coated media type. In this case, the output profile associated with coated will be used for all coated media.

To change which output profile will be used by default with a media type, double-click the output profile of your choice, then check the media type this profile is compatible with. A single output profile can be specified for many, or all of the available media settings.

Device link profiles

To be selected for a print job, a device link profile must reside on the Fiery server and be associated with a specific source profile and output profile.

When you select the source profile and output profile settings associated with a device link profile, the Fiery server bypasses its normal color management and applies the device link conversion to the color data in the job. The source profile and the output profile are not used.

Profiles that do not reside on the Fiery server do not appear as settings. A device link profile that is not associated with a source profile setting and an output profile setting cannot be selected for a job. Therefore, even though the source profile and output profile that are associated with a device link profile are not used to calculate color conversions, they must reside on the Fiery server.

Device link profiles are disabled when any of the **Color input** settings shown in the following table have been enabled or specified:

Device link profile	Color input settings
RGB-CMYK device link	Use RGB embedded profiles
	RGB rendering intent
	Print RGB gray using black only
CMYK-CMYK device link	Use CMYK embedded profiles
	CMYK rendering intent
	Print CMYK gray using black only
	Black point compensation

RGB source, CMYK source, and Grayscale source

The **RGB source**, **CMYK source**, and **Grayscale source** print options allow you to define the color spaces of the RGB, CMYK, and grayscale data, respectively, in your document so that the appropriate color conversion occurs on the Fiery server.

Commonly used color spaces are available on the Fiery server. For others, you can import CMYK and RGB custom profiles to the Fiery server. Custom grayscale profiles cannot be imported.

RGB source

When you specify a profile for **RGB source**, the Fiery server overrides source color space definitions or profiles that other color management systems may have specified. For example, if your document contains an embedded RGB profile, the **RGB source** setting overrides it.

When you specify an RGB source profile, the output from the Fiery server is consistent across platforms. The **RGB source** options are as follows:

- EFIRGB Specifies a Fiery-defined color space recommended for users who have no detailed information about their RGB data.
- sRGB (PC) A Microsoft and Hewlett-Packard recommended color space designed for typical home and office
 applications.
- Apple Standard Specifies the color space of an older Mac computer monitor.
- Adobe RGB (1998) An Adobe-defined color space, used in some prepress workflows as the default working space for Adobe Photoshop.
- **eciRGB v2** The European Color Initiative (ECI) recommended color space for use as an RGB working color space and color data exchange format for ad agencies, publishers, reproduction, and printing houses.
- **Fiery RGB v5** A Fiery-defined color space recommended for users of office applications. This color space is similar to EFIRGB but is larger and can provide a more desirable blue output.

In cases where you do not want **RGB source** to override another specified source color space, select the **Use RGB embedded profiles** option.

If the **Use RGB embedded profiles** option is enabled, the Fiery server honors objects in the document with RGB profiles, and objects without profiles are color managed with the RGB source profile from Job Properties.

CMYK source

The **CMYK source** option can be set to any CMYK source profile that is present on the Fiery server.

To properly manage color in a printed image that was separated using an ICC profile, the same profile must be specified for printing the image.

The **CMYK source** profile setting you specify depends on the CMYK profile or press standard for which the CMYK data was separated. This option affects CMYK data only.

- For images that were separated using a custom separation (such as a separation produced with an ICC profile), select the profile used for RGB to CMYK conversions in the prepress workflow on the Fiery server with the CMYK source setting.
- For images that were separated for a press standard, select the press standard as the CMYK source setting.

If the job contains an embedded CMYK profile, select the **Use CMYK embedded profiles** option. The embedded profile is applied to CMYK data.

The **CMYK source** option can be set to any CMYK source profile that is present on the Fiery server.

If you do not want CMYK data in a job to be converted to the output color space, you can select one of the following settings:

- **Bypass conversion** This setting sends the original CMYK data in the job to the printer without conversion, but with calibration applied.
- **ColorWise OFF** This setting sends the original CMYK data in the job to the printer without calibration applied and without converting the CMYK data. The CMYK data is still subject to the total ink or toner limit, however.

The **ColorWise OFF** setting is available for a specific job but it cannot be the default setting on the Fiery server. You select this setting for a specific job.

Note: When you print with the **ColorWise OFF** setting, make sure that the options you choose in your application do not cause the application to modify CMYK data. You must specify no color management in the application when you print with the **ColorWise OFF** setting.

Grayscale source

The Fiery server supports separate processing of jobs with Device Gray and ICC Based Grayscale through their own color conversion.

For FS200/FS200 Pro and earlier, the grayscale color spaces were processed through the CMYK color path.

The **Grayscale source** profile setting provides factory-installed grayscale profiles to use for source-to-output profile color conversion. You cannot import your own grayscale ICC profiles.

If the job contains an embedded profile associated with grayscale objects in the document, select the **Use Gray embedded profiles** option.

The **Grayscale source** option can be set to any of the factory-installed grayscale source profiles that are present on the Fiery server.

Use RGB, CMYK, or Gray embedded profiles

You can specify whether the Fiery server uses the source profile (either RGB or CMYK or grayscale) that is embedded in the print job rather than the source profile specified in the print settings.

RGB

If you select the **Use RGB embedded profiles** option, the Fiery server honors the embedded RGB profile information for objects tagged with an RGB profile and uses the RGB source profile for RGB objects without an RGB profile. If you clear this option, the Fiery server uses the profile specified in the **RGB source** option.

CMYK

If you select the **Use CMYK embedded profiles** option, the Fiery server honors the embedded CMYK profile information for objects tagged with a CMYK profile and uses the CMYK source profile for CMYK objects without a CMYK profile. If you clear this option, the Fiery server uses the profile specified in the **CMYK source** option.

Gray

If you select the **Use Gray embedded profiles** option, the Fiery server honors the embedded gray profile information for objects tagged with a gray profile and uses the source gray profile for gray objects without a gray profile.

Black point compensation

The **Black point compensation** option lets you control the output quality of shadow areas for CMYK source colors.

Black point compensation works by scaling the source colors so that the darkest point in the source profile maps to the darkest point in the output profile. Use **Black point compensation** to enhance details in shadows when the CMYK source space is larger than the gamut of the printer. In proofing applications, when the CMYK source space is smaller than the gamut of the printer, do not use this option.

Note: For RGB source colors, black point compensation is always applied to Relative Colorimetric. Black point compensation does not apply to Absolute Colorimetric. Photographic already scales the saturated colors and shadow detail to the color capabilities of the output device, so black point compensation is not relevant.

CMYK rendering intent

The **CMYK rendering intent** option specifies how CMYK input data is converted to the available color gamut of the output color space. This conversion can be optimized for the type of color image being printed.

The Fiery server also provides support for a fifth rendering intent, Pure Primaries.

Note: If you experience tone reproduction problems, use the **Photographic** setting.

Rendering intent	Best used for	Equivalent ICC rendering intent
Photographic - Typically results in less-saturated output than presentation rendering when printing out-of-gamut colors. This style preserves tonal relationships in images, and scales the grayscale tonal range in the source to the available tonal range in the output device.	Photographs, including scans and images from stock photography and digital camera images.	Image, Contrast, and Perceptual
Presentation - Creates saturated colors but does not match printed colors precisely to displayed colors. In-gamut colors, such as flesh tones, are rendered well. This style is similar to Photographic rendering intent, and can be used to increase contrast for grayscale content.	Artwork and graphs in presentations. This style can be used for mixed pages that contain presentation graphics and photographs.	Saturation, Graphics

Rendering intent	Best used for	Equivalent ICC rendering intent
Relative Colorimetric - Provides white point transformation between the source and destination white points. For example, the bluish- white color (gray) of a monitor is replaced by paper white. This style avoids visible borders between blank spaces and white objects. Relative Colorimetric is the default rendering intent for grayscale and is best suited for preserving the appearance of gray.	Advanced use when color matching is important, but you prefer white colors in the document to print as paper white. This style may also be used with PostScript color management to affect CMYK data for simulation purposes.	Relative Colorimetric
Absolute Colorimetric - Provides no white point transformation between the source and destination white points. For example, the bluish- white color (gray) is not replaced by paper white. This style can introduce gamut clipping in high light and shadow details.	Situations when exact colors are needed and visible borders are not distracting. This style may also be used with PostScript color management to affect CMYK data for simulation purposes. Setting CMYK rendering intent to Absolute Colorimetric simulates the white of the paper using CMYK values rather than leaving the paper white areas of the page unprinted.	Absolute Colorimetric
Pure Primaries - Uses pure colorants, free from contaminating colorants that are introduced when color management tries to match the appearance of a color on image systems with different color capabilities.	If the Fiery server supports this setting, Pure Primaries ensures that only single colorant input will be rendered using a pure output colorant. Combinations of two input colorants will usually be printed with just two colors, depending on the specified source and output profiles.	Pure Primaries

Grayscale rendering intent

The **Grayscale rendering intent** option specifies how grayscale input data is converted to the available color gamut of the output color space. This conversion can be optimized for the type of gray objects being printed.

To control the appearance of text, graphics, and images in grayscale, select the appropriate rendering intent. The Fiery server allows you to select from the four rendering intents currently found in industry-standard ICC profiles.

Note: If you experience tone reproduction problems, use the **Photographic** setting.

Rendering intent	Best used for	Equivalent ICC rendering intent
Photographic - Preserves relationships between various colors in an image when performing gamut compression.	High-gamut photographic images, especially when converting to a small gamut printer space. Typically not required for grayscale images.	Perceptual
Presentation - Increases color saturation when performing gamut compression.	Vector artwork and graphics for presentations. Generally not used for grayscale source rendering.	Saturation
Relative Colorimetric - Preserves in-gamut colors and remaps out-of-color gamut colors only when performing out-of-gamut compression. Maps source white point to destination white point (no paper simulation).	Precise color matching of vector artwork and logos. Best choice for grayscale source rendering.	Relative Colorimetric
Absolute Colorimetric - Preserves in-gamut colors and remaps out-of-color gamut colors only when performing out-of-gamut compression. It does not map the source white point to destination white point (paper simulation).	Proofing jobs. Generally not used for grayscale source rendering.	Absolute Colorimetric

RGB rendering intent

The **RGB** rendering intent option specifies how RGB input data is converted to the available color gamut of the output color space. This conversion can be optimized for the type of color image being printed.

To control the appearance of images in artwork, or RGB photographs from Adobe Photoshop, select the appropriate rendering intent. The Fiery server allows you to select from the four rendering intents currently found in industry-standard ICC profiles.

Note: If you experience tone reproduction problems, use the **Photographic** setting.

Rendering intent	Best used for	Equivalent ICC rendering intent
Photographic - Typically results in less-saturated output than presentation rendering when printing out-of-gamut colors. This style preserves tonal relationships in images.	Photographs, including scans and images from stock photography and digital camera images.	Image, Contrast, and Perceptual

Rendering intent	Best used for	Equivalent ICC rendering intent
Presentation - Creates saturated colors but does not match printed colors precisely to displayed colors. In-gamut colors, such as flesh tones, are rendered well. This style is similar to the Photographic rendering intent.	Artwork and graphs in presentations. This style can be used for mixed pages that contain presentation graphics and photographs.	Saturation, Graphics
Relative Colorimetric - Provides white point transformation between the source and destination white points. For example, the bluish- white color (gray) of a monitor is replaced by paper white. This style avoids visible borders between blank spaces and white objects.	When color matching is important, but you prefer white colors in the document to print as paper white. This style may also be used with PostScript color management to affect CMYK or RGB data for simulation purposes.	Relative Colorimetric
Absolute Colorimetric - Provides no white point transformation between the source and destination white points. For example, the bluish- white color (gray) is not replaced by paper white.	Situations when exact colors are needed and visible borders are not distracting. This style may also be used with PostScript color management to affect CMYK or RGB data for simulation purposes.	Absolute Colorimetric

Print gray using black only for RGB or CMYK

When you turn on the **Print RGB gray using black only** option, any RGB color that has equal R, G, and B values is printed as K-only black instead of CMYK black. Similarly, when you turn on **Print CMYK gray using black only**, any CMYK color, where C, M, and Y are 0 (zero), and K is any value, prints using K-only black instead of CMYK black.

You can turn on Print RGB gray using black only or Print CMYK gray using black only for either Text/Graphics or Text/Graphics/Images. "Graphics" refers to vector graphics. "Images" refers to bitmap images.

Note: You can also turn on **Print gray using black only** for the Grayscale source profile, with the same **Text/Graphics** or **Text/Graphics/Images** options.

The following limitations apply:

- The Print RGB gray using black only and Print CMYK gray using black only options do not affect jobs sent as separations.
- If CMYK rendering intent is set to Pure Primaries, Print CMYK gray using black only does not affect the output.
- If you select Separate RGB/Lab to CMYK source, Print RGB gray using black only must be set to Off. Likewise, if you select either the Text/Graphics or Text/Graphics/Images options for Print RGB gray using black only, the Separate RGB/Lab to CMYK source check box must be cleared.

- If you set Black Text and Graphics to Pure Black On or Rich Black On, that setting takes precedence over Print RGB gray using black only and Print CMYK gray using black only for 100% black text and graphics.
- If a gray is specified as a spot color, **Print RGB gray using black only** and **Print CMYK gray using black only** do not affect that gray.

Separate RGB/Lab to CMYK source

The **Separate RGB/Lab to CMYK source** option manages RGB colors (as well as device independent color spaces, such as $L^*a^*b^*$) to source CMYK.

• When you select **Separate RGB/Lab to CMYK source**, the Fiery server converts the original RGB colors in a document to the source CMYK profile selected in **Job Properties** before converting to the output profile of the printer (as defined by the **Output profile** print option). The color reproduction from converting RGB colors to the CMYK source and then the output color space is similar to converting the RGB content to that CMYK source profile.

For example, the color reproduction from converting RGB colors to the CMYK source in the Fiery server is similar to converting an RGB image to a CMYK profile in Adobe Photoshop. Another helpful technique with **Separate RGB/Lab to CMYK source** is to use a high-quality ICC profile for another printer, define that high-quality ICC profile as the source CMYK profile in the Fiery server, and simulate the color appearance of RGB colors by the other printer.

You can use this feature with PDF/X workflows to convert all color spaces to CMYK source before conversion to the output color space. These workflows require device-dependent colors (RGB or Grayscale) and device-independent colors (ICC or $L^*a^*b^*$) to match the document's CMYK content. With the introduction of PDF/X-4 allowing transparency in a PDF/X document, the feature also supports CMYK overprinting included in designs that have transparency effects. A best practice for rendering transparency is to select the **Separate RGB/Lab to CMYK source** print option because rendering transparency requires complex processing policies to achieve the desired appearance.

• When the **Separate RGB/Lab to CMYK source** check box is cleared, the Fiery server manages all RGB colors with the output profile. This workflow renders the RGB colors with the full gamut of the output device and is a best practice when you need the most vibrant color achievable with the printer.

Spot color matching

The **Spot color matching** option automatically matches spot colors in a job with their best CMYK equivalents.

- When you enable **Spot color matching**, the Fiery server uses a built-in table to generate the closest CMYK match for spot colors that the printer can produce. (New tables are generated automatically for each output profile you add to the Fiery server.)
 - With Fiery Spot-On, the Fiery server uses the CMYK matches determined using Command WorkStation Spot Colors.
 - With Spot Pro, the Fiery server matches spot colors with their best CMYK equivalents.
- The **Use spot group** menu allows you to select a spot color group that the Fiery server searches first for spot color definitions during file processing. When you create new spot color groups in **Spot Pro**, the new groups are displayed in the **Use spot group** menu. If a spot color is not in the selected list, the Fiery server searches all other spot color groups for a matching spot color name. If the spot color name is not found, the spot color is rendered with the alternate color in the document.
- When the **Spot color matching** check box is cleared, the Fiery server processes spot colors as CMYK data and uses the alternate color space in the document. By default, most applications use the CMYK equivalents defined by the spot color manufacturer, such as Pantone. These are the same CMYK equivalents used by applications that include spot color libraries.

For jobs that include spot colors, turn **Spot color matching** on unless you are printing press simulations. In that case, turn **Spot color matching** off and select the appropriate **CMYK source** setting.

For PDF and PostScript jobs that include spot colors that are not in the built-in table, turning **Spot color matching** on causes the alternate color space to be used. The Fiery server references the built-in table to generate the closest CMYK matches of the original spot color.

Note: Use **Spot color matching** only when printing composites, not when printing separations.

Spot color overprint

The **Spot color overprint** option defines how two or more spot colors will behave when printed on top of each other.

Typically, when two different colored objects overlap, there is a knockout effect. The two different colored objects will not print on top of each other. Intentionally printing one layer of toner or ink on top of another is overprinting. The overprint setting defines how two or more spot colors will behave when printed on top of each other.

Higher overprint settings result in darker printouts. For example, an overprint value of 100% means that the colors will be completely added to each other. Lower overprint settings result in lighter printouts because colors appear more opaque and hide parts of other colors.

The **Spot color overprint** settings specify the different methods to add spot colors to a background color or on top of other spot colors. The selected setting for spot color overprinting defines the overprint behavior.

The following methods are available:

- **Standard** The Standard setting uses CMYK addition. CMYK addition is the most common way of calculating the resulting color for either an overprint of two spot colors or an overprint of a spot color with process colors. The final channel values are the result of the per-channel addition of the values of background color and spot color.
- **Vivid** The Vivid setting uses overprint calculation in L*a*b* or XYZ color space and uses numerical color values based on the actual color profiles of the output device. The Vivid setting is more accurate and avoids the typical clamping errors that sometimes occur with the Standard setting.
- Natural The Natural setting allows you to merge the spot color channels into the process colors during document creation. This method converts all channels to RGB and then multiplies the R, G, and B components into a resulting RGB value.

Black text and graphics

The **Black text and graphics** option affects black text and vector graphics. When you set this option to **Pure Black On**, the black generated by applications (RGB=0, 0, 0 or CMYK=0%, 0%, 0%, 100%) prints using black only.

With **Black text and graphics** set to **Pure Black On**, black text and line art cannot be misregistered since only black colorant is used. This setting also eliminates blasting, which is an undesirable effect that occurs when excess amounts of ink or toner, combined with certain types of paper stock, cause objects to spread beyond their defined boundaries.

For some jobs, the best practice is to set **Black text and graphics** to **Normal**. For example, if a job includes gradient fills that use black, the **Normal** setting gives the best result.

If you set Black overprint (for pure black) to Text or Text/Graphics, Black text and graphics must be set to Pure Black On.

Note: Use **Black text and graphics** only when printing composites. Do not use **Black text and graphics** when printing separations.

The following table describes the behavior of **Black text and graphics** with black defined in different color spaces.

Color	Black text and graphics = Normal	Black text and graphics = Pure Black On or Rich Black On
RGB=0,0,0 (all other RGB values are unaffected by Black text and graphics)	Printed according to the definition for RGB=0,0,0 in the output profile. This may be a rich black (one that uses multiple colorants) if the output profile specifies a rich black, or K-only if the output profile specifies K-only for RGB=0,0,0. The output is affected by calibration.	Printed as 100% K (Pure Black On) or 100% K plus 50% Cyan (Rich Black On) using black and cyan.

Color	Black text and graphics = Normal	Black text and graphics = Pure Black On or Rich Black On
CMYK=0%,0%,0%,100% (all other CMYK values are unaffected by Black text and graphics)	Printed as K-only or as a rich black using all colorants, depending on the CMYK source and CMYK rendering intent settings. If CMYK rendering intent is set to Pure Primaries, CMYK=0%,0%,0%,100% prints as 100% K and the amount of black is limited by the CMYK source profile and calibration. If CMYK source is set to Bypass conversion, CMYK=0%,0%,0%,100% prints as 100% K and the amount of black is limited by the CMYK source profile and calibration. If CMYK rendering intent is set to Relative Colorimetric, CMYK=0%,0%,0%,100% is printed as a rich black using all colorants according to the output profile. The output is affected by calibration. Note: Setting CMYK source to ColorWise OFF disables the CMYK Source profile and calibration. In this case, the black is not limited by calibration.	Printed as 100% K (Pure Black On) or 100% K plus 50% Cyan (Rich Black On) using black and cyan, regardless of the CMYK source and CMYK rendering intent settings.
Spot colors (unaffected by Black text and graphics)	Standard spot color processing	Standard spot color processing

Note:

PostScript applications may convert elements defined as RGB=0, 0, 0 to four-color CMYK black before sending the job to the Fiery server. These elements are not affected by the **Black text and graphics** option.

Black overprint (for pure black)

The **Black overprint (for pure black)** option specifies whether black text, or black text and vector graphics (where black is defined as RGB=0, 0, 0, or as CMYK=0%, 0%, 0%, 100%) print over colored backgrounds. If you turn off this option, black text, or black text and graphics knock out colored backgrounds. Knocking out can create white space or a white edge around objects, caused by the misalignment of color plates.

Note: You can only set Black overprint (for pure black) when Pure Black On is selected for Black text and graphics.

The Black overprint (for pure black) option has the following settings:

- **Text** Black text overprints colored backgrounds, eliminating white gaps and reducing the halo effect from misregistration of colors.
- **Text/Graphics** Black text and graphics overprint colored backgrounds, eliminating white gaps and the halo effect from misregistration of colors.
- Off Black text and graphics knock out colored backgrounds.

Note: PostScript applications may perform their own black overprint conversions before printing.

An example of how you might use this setting is a page with black text on a light blue background. The background blue is CMYK=40%, 30%, 0%, 0%. The black text is CMYK=0%, 0%, 0%, 100%.

- With **Black overprint (for pure black)** set to **Text** or **Text/Graphics**, the final text or graphic portions of the page are overprinted, or combined with the underlying color.
- With **Black overprint (for pure black)** set to **Off**, the border of the text or graphic is on an edge that has cyan and magenta on one side (outside the object) and black on the other side (inside the object). This transition may cause visible artifacts due to the practical limitations of the printer.

Note: The reproduction of CMYK components is affected by the **CMYK source** setting and calibration when CMYK is not 0%, 0%, 0%, 100%.

Profiles

Profile Manager in Command WorkStation allows you to manage the ICC profiles that reside on the Fiery server. Color Editor (in Profile Manager) allows you to create a custom profile from an existing CMYK profile and use the AutoGray feature to adjust the gray balance of output profiles.

The Fiery server uses the following types of profiles for color management:

- An RGB source profile defines the source color space for RGB (and L*a*b*) colors in a print job. Typical devices using RGB profiles are monitors, scanners, and digital cameras. An RGB source profile enables the Fiery server to accurately convert RGB colors in a print job to the CMYK color space of the printer.
- A CMYK source profile defines the source color space for CMYK colors in a print job. Typical devices using CMYK profiles are printing presses and digital printers. A CMYK source profile enables the Fiery server to accurately convert CMYK colors in a print job to the CMYK color space of the printer.
- A grayscale source profile defines the source color space for grayscale colors in a print job. Typical devices using
 grayscale profiles are printing presses and digital printers. A grayscale source profile enables the Fiery server to
 accurately convert grayscale colors in a print job to the grayscale color space of the printer.
- An output profile describes the color characteristics of the printer when printing to a specific media type. An
 output profile is associated with a calibration that describes the expected color output densities of the printer.
 The Fiery server applies the output profile and the associated calibration to all color data in a print job.
- A device link profile describes the conversion from a specific source color space to an output color space. Device link profiles define the complete conversion from the source device to the destination device, and the Fiery server does not calculate the conversion..

The Fiery server supports two kinds of device link profiles: RGB source to CMYK destination and CMYK source to CMYK destination.

A device link profile must be associated with a source profile setting and an **Output Profile** setting, otherwise the device link profile cannot be selected for a job.

View profile properties

Profile Manager in Command WorkStation displays information (such as device or paper type) for the profiles on the Fiery server.

A check mark to the left of a profile name indicates that the profile is the default profile. For example, a check mark next to the sRGB (PC) profile under RGB Source Profiles means that sRGB (PC) is the default setting for the RGB Source option. You can change the default profile in the Color Management window.

A lock icon to the left of the profile name indicates that the profile is factory-installed and cannot be deleted or edited.

- 1 In Device Center, click **Profiles** under **Resources**.
- 2 In Profile Manager, click the profile to select it.

Profile Manager shows the properties of the selected profile on the right side of the window.

Compare profile gamuts

If Fiery Color Profiler Suite is installed on your computer, you can use Fiery Profile Inspector to compare the gamuts of two profiles. Profile Inspector displays the gamuts in three-dimensional models, allowing you to see the colors that do and do not overlap between the two gamuts. For example, one profile might have a wider range of blue hues.

- 1 In Device Center, click **Resources** > **Profiles** and select a profile.
- **2** While pressing the **Ctrl** key, select the second profile so that both profiles are selected.
- **3** Right-click either profile and select **Compare Profiles**.

Profile Inspector opens in a separate window. For more information, click the Help icon in Profile Inspector.

Import or export profiles

Profile Manager in Command WorkStation allows you to import profiles to the Fiery server to make the profiles available for printing jobs on the Fiery server. Use the export function to back up profiles so that no custom profiles are lost.

You can also export a profile to your computer to use it with an ICC-aware application, such as Adobe Photoshop.

Import profiles

You can import a source profile (RGB or CMYK), an output profile, or a device link profile to the Fiery server. You cannot import a grayscale profile.

Note: On Windows, a profile must have a file name extension of .icc or .icm to be selectable for importing. On macOS, a profile must have a file type of "profile."

1 In Device Center, click **Resources** > **Profiles** and then click **Import**.

- **2** Select a folder in the **Location** list.
- **3** Browse to the location of the profile to import.
- 4 Select the profile, and click **Open**.
- **5** If the Profile Settings window is displayed, select settings for this profile and click **OK**. You set the profile settings when the imported profile is a new profile and not a replacement of a profile already on the Fiery server.

Export profiles

You can export a profile from the Fiery server as a backup measure or to use the profile with an ICC-aware application such as Adobe Photoshop.

- 1 In Device Center, click Resources > Profiles.
- **2** Select the profile and click **Export**.
- **3** Browse to the desired location on your computer and click **Select Folder** to save the profile.

Create or delete profiles

Profile Manager in Command WorkStation allows you to create and delete output profiles and device link profiles. You must install Fiery Color Profiler Suite on your computer to create new profiles.

Create output profiles

If you install Fiery Color Profiler Suite on your computer, you can use Fiery Printer Profiler to create an output profile.

Note: You can also create an output profile by editing an existing output profile in Color Editor and saving it as a new profile.

You can start Fiery Printer Profiler from Profile Manager in Command WorkStation.

- 1 In Device Center, click Resources > Profiles.
- 2 Click New and select Output Profile.

Printer Profiler opens in a separate window. For more information about using Printer Profiler to create an output profile, see the online Help for Printer Profiler.

Note: You can also start Fiery Printer Profiler from Command WorkStation Calibrator, after you create a new calibration setting.

Create device link profiles

If you install Fiery Color Profiler Suite on your computer, you can use Fiery Device Linker to create a device link profile.

You can start Fiery Device Linker from Profile Manager in Command WorkStation.

- 1 In Device Center, click **Profiles** > **Resources**.
- 2 Click New and select Device Link.

Device Linker opens in a separate window. For more information about using Device Linker to create a device link profile, see the online Help for Device Linker.

Delete profiles

You can delete profiles that are no longer needed. Deleting profiles also helps to free up disk space on the Fiery server. You cannot delete locked profiles.

- 1 In Device Center, click Resources > Profiles.
- **2** Select the profile and click **Settings**.
- 3 Set Label in Driver to Unassigned, and then click OK.

Note: Label in Driver is not available for some Fiery servers. If this option does not appear, skip this step.

4 Click **Delete**, and then click **Yes** to confirm.

Edit profile settings

Profile settings are attributes that determine how the Fiery server uses the profile. For example, you can assign a description or media type to a profile. Profile settings do not affect the content of the profile.

- 1 In Device Center, click **Resources** > **Profiles**.
- **2** Select a profile and click **Settings**.
- **3** In the **Profile Settings** window, set the options as needed and click **OK**. The available selections depend on the type of profile and the model of Fiery server.

Settings common to all profiles:

• **Profile Description** - A description that identifies the profile. You can only change the description if the profile is unlocked.

Settings applicable only to output profiles:

- **Media Type** One or more media settings associated with an output profile. Use **Media Type** settings when the media settings for the job determines the output profile.
 - If **Media Type** is not available for your Fiery server, use Paper Catalog or Media Catalog to configure media-defined profiles.
- **Calibration** The calibration to associate with an output profile.

Settings applicable only to device link profiles:

CMYK Source Profile or RGB Source Profile - The source profile setting associated with a device link profile.
 Select a device link profile for a job using the source profile and output profile settings. A CMYK-to-CMYK device link profile has a CMYK Source Profile setting. An RGB-to-CMYK device link profile has an RGB Source Profile setting.

Note: Edits made to a CMYK source profile do not apply when a device link profile associated with the CMYK source profile is used.

• Output Profile - The output profile setting associated with a device link profile.

Edit profile content

Command WorkStation provides Color Editor for editing CMYK profiles.

In Color Editor, you can edit a CMYK profile (CMYK source or output profile). Use Color Editor to fine-tune the density curves of a profile.

If you have the Fiery Color Profiler Suite option installed on your computer, you can edit profiles in Fiery Profile Editor, accessed from Command WorkStation. You can edit the color data that defines the gamut of an output profile.

Edit profiles in Color Editor

With Color Editor, you can adjust features such as CMYK density curves and target densities.

Edits made with Color Editor are for printing with the Fiery server only. They do not affect the profile if the profile is used in another context.

- 1 In Device Center, click Resources > Profiles.
- **2** Select a profile and click **Edit**.
- 3 Select Color Editor.

Note: If you do not have Fiery Color Profiler Suite installed on your computer, skip this step. Color Editor will open automatically.

4 In Color Editor, adjust the density curves. For fine adjustments, work with only one or two colors at a time.

The curves on the graph map the input percentage to the output percentage for each of the four color channels (C, M, Y, and K). The percentages refer to the size of the CMYK halftone dots.

- To show or hide the C, M, Y, or K curves, click the "eye" icon for each color.
- To bring a curve to the front, click its color bar, next to the "eye" icon.
- To adjust the brightness of the shown curves, use the plus and minus buttons.
- To adjust a curve, drag a point on the curve, click a point, and type new numbers in the **Input** and **Output** fields. You can also click a point and use the arrow keys to move it.

Note: Adjust the curves after you adjust the brightness.

- **5** You can set additional options.
 - If your Fiery server stores the calibration target in the output profile, you can edit the maximum densities of the calibration target (the D-Max values) for each color (C, M, Y, and K). If the D-Max values are not shown, then your Fiery server stores the calibration target separately from the output profile. In this case, you can view and adjust the D-Max values in Calibrator.

Note: Even if you can edit the maximum density values, we recommend only viewing them. A calibration target represents the ideal values for calibration, and the output profile contains these values. You should not change the calibration target unnecessarily.

- Adjust the gray balance of the output profile by clicking **AutoGray**.
- If your Fiery server supports paper simulation, configure settings for white point simulation by clicking **Paper Simulation**.
- Print a test page.
- **6** Click **Save** and enter a description for the new profile.

Note: If you do not enter a new description, the edited profile overwrites the original. If you edit and save a locked profile, you can only save it as a copy. You cannot overwrite a locked profile.

Edit profiles in Fiery Profile Editor

If you install Fiery Color Profiler Suite on your computer, you can use Fiery Profile Editor to edit an output profile. With Profile Editor, you can adjust global color features such as rendering intent and CMYK density curves, as well as adjust specific hues, colors, or even a specific data point in the profile gamut.

- 1 In Device Center, click Resources > Profiles.
- 2 Select an output profile, click **Edit**, and then select **Fiery Profile Editor**.

For more information about using Fiery Profile Editor to edit a profile, click the Help icon in Profile Editor.

Print a test page

After editing a profile in Color Editor, you can print a test page that shows images with and without your edits. The test page is either your own sample image or the comparison page provided by the Fiery server.

Print the comparison page

You can print the comparison page provided by the Fiery server. The comparison page shows a variety of images and color patches printed with and without the profile edits.

- 1 In Device Center, click Resources > Profiles.
- 2 Select a profile and click Edit. If you have Fiery Color Profiler Suite installed on your computer, select Color Editor.
- 3 In Color Editor, click Test Print.

4 Select Comparison page, select the desired Paper Size and Input tray settings, and click Print.

Print a sample image

You can create a sample image to print as a test page. The sample image is a user-defined CALIB.PS file in the Hold queue.

- 1 In a graphics application, create a file for the sample image.
- 2 Save the sample image as a PostScript or Encapsulated PostScript (EPS) file called CALIB.PS.
- **3** In Command WorkStation, import the file to the Hold queue of the Fiery server.
- 4 In Job Center, double-click the CALIB.PS job and set the job properties for printing the page.
- 5 In Device Center, click Resources > Profiles.
- 6 Select a profile and click Edit. If you have the Fiery Color Profiler Suite installed on your computer, select Color Editor.
- 7 In Color Editor, click **Test Print**.
- 8 Select Sample image page and click Print.

Adjust the gray balance of a profile

The AutoGray feature allows you to adjust the gray balance of output profiles. Gray balance refers to the quality of neutral gray tones in a profile. In many cases, gray tones may contain a bluish or reddish color cast. AutoGray helps shift these tones back toward neutral gray.

If you are satisfied with the gray balance of the printer, you do not need to use AutoGray.

To use AutoGray, you need a grayscale strip. If you do not have a grayscale strip, obtain one from the manufacturer of your printer or from the Tiffen company at www.tiffen.com.

Note: AutoGray is not available if the printer does not have a built-in scanner.

- 1 In Device Center, click Resources > Profiles.
- 2 Select an output profile and click **Edit**. If you have Fiery Color Profiler Suite installed on your computer, select **Color Editor**.
- 3 In Color Editor, click AutoGray.
- **4** Select the input tray to use for printing the measurement page and click **Print**. The Paper Size is automatically set to LTR/A4.
- **5** Retrieve the measurement page from the printer.
- **6** Follow the on-screen directions for placing the grayscale strip and the AutoGray measurement page on the glass (platen), and click **Continue**.

7 When the adjustment is complete, click **OK**.

Color Editor displays the adjusted output profile curve. AutoGray inserts new edit points to modify the gray balance.

- **8** To accept the AutoGray adjustment and save the results, click **Save**.
- **9** Click **Done** (Windows) or **Close** (macOS) to close Color Editor.

Calibrator overview

Fiery-driven presses and printers come in different flavors: laser or inkjet; monochrome or CMYK or extended gamut, with or without specialty inks. Calibrator is designed to address the different calibration needs of each technology.

Calibrator 2 for the connected Fiery server is available for calibration of conventional CMYK and black-and-white presses.

Calibrator 3 for the connected Fiery server is available for the Density-based calibration and $L^*a^*b^*$ -based calibration workflows. With conventional CMYK products and calibration sets, Calibrator 3 will automatically select the Density-based calibration workflow. Calibrator 3 will follow the $L^*a^*b^*$ -based calibration workflow whenever imposed by an expanded ink set.

The Calibrator Help specific for the Fiery server connected to Command WorkStation will be available from the Help icon within the Calibrator application.

Calibration for conventional CMYK and black-and-white presses

The output of a printer changes over time and under different printing conditions. Calibration helps to ensure consistent and reliable output.

Calibration measures current output densities and then adjusts print jobs to achieve the desired output densities (the calibration target or calibration goal). The calibration applied to a job is associated with the particular output profile that is used for the job.

Changing calibration may affect all jobs for all users, so try to limit the number of people authorized to perform calibration.

Only one user at a time can use Calibrator. If you try to calibrate when another user is using Calibrator, an error message appears.

Access Calibrator Help by clicking the Help button in the Calibrator windows.

Calibration for black-and-white printing

Some of the calibration features that are related to color are not available for black-and-white printing. With a single colorant, calibration can be simpler.

For black-and-white printing:

- Output profiles and calibration settings are not selectable.
- You cannot view calibration measurements (curves) or print a test page.

- You cannot export or import measurement data. You cannot import the calibration target.
- Only the EFI spectrophotometer is supported as a measurement method, with a single patch layout, and provides more accurate calibration.

Calibration workflow

When you calibrate a Fiery server, you perform the following tasks.

- Print a calibration page, which contains patches of various colors (or shades of gray, for black-and-white printers) in a specific layout. You use this page to measure the current output of the printer.
 - The output of the printer changes with time and usage. For the most current data, always measure a newly printed calibration page.
- Measure the color values of the patches on the calibration page using a spectrophotometer.
- Apply the measurements.

The measurement data is saved with the specific calibration setting. When you print a job with the calibration setting, the measurement data is used to calculate the calibration adjustment that is needed to produce the desired output (the calibration target).

Start Calibrator

How you start Calibrator depends on what you want to do.

- 1 To calibrate for any calibration setting on the Fiery server, do one of the following:
 - In Job Center, click the **Calibrate** icon in the toolbar.
 - In Device Center, click the **General** tab, click **Tools**, and then click **Calibrate**.
- **2** To calibrate for the calibration setting used in a particular job, select the job in Job Center and then select **Server > Calibrate**.

If you use this method, calibration updates only the calibration setting that is used to print this job.

Print a calibration page

When you print a calibration page, first specify the calibration setting (color printers), paper source, and measurement method.

Note: Calibrate the spectrophotometer to prepare it for measuring the calibration page.

- For color printers, if the calibration setting that you want is not selectable, it is probably because you started calibration for a selected job. When you start calibration for a specific job, only calibration setting(s) used to print the job is shown. Multiple calibration settings are commonly used by mixed-media jobs.
 - The recommended paper and the date and time of the most recent calibration measurements associated with the selected calibration setting are displayed. If no date and time are given, the Fiery server has not been calibrated (for this calibration setting).
- Be sure the paper source contains paper that is appropriate for the calibration setting. If a warning appears under the **Paper Source** setting, it might be because the paper source does not match the calibration setting. You can either select a different calibration setting or a different paper source.
 - If none of the calibration settings matches perfectly to your paper, you may want to experiment with an available setting resembling your paper. If it produces unacceptable results, you should create a new calibration and profile specific for your paper.
- **1** Set the following options:
 - For color printers, select a calibration setting in the Calibrate for list.
 - Select the desired paper source in the **Paper source** list.
 - Select a method in the Measurement method list.
 - Calibrator supports several types of spectrophotometer, including EFI ES-2000 and X-Rite i1Pro2.
 - If measurement options are available for calibration using the selected instrument, a **Settings** button will appear near the instrument.
 - Other types of measurement instruments may be supported by the printer connected to the Fiery server.
- **2** Click **Continue** to print the calibration page and proceed to measurement

Using the spectrophotometer to measure patches

You use the spectrophotometer to manually measure color patches.

Using the spectrophotometer consists of these tasks:

- Calibrate the spectrophotometer.
- Measure the calibration page using the spectrophotometer.
- View and save the measurements.

Calibrator supports several types of spectrophotometer, typically:

- EFI ES-2000
- EFI ES-6000
- X-Rite i1Pro2

Other types of measurement instruments may be supported by the printer connected to the Fiery server.

When the EFI ES-2000 or X-Rite i1Pro2 is used in ES-1000 compatibility mode, its indicator lights may not operate. On-screen messages indicate the state of the spectrophotometer.

Calibrate the spectrophotometer

Calibrate the spectrophotometer to prepare it for measuring the calibration page.

Make sure that both the white tile on the cradle and the instrument aperture are clean. If the white tile has a cover, make sure that the cover is open.

White point calibration is used to compensate for gradual drifts in the spectrophotometer. The spectrophotometer must be placed in its cradle, and the sample aperture must be in full contact with the white tile on the cradle. If you do not place it correctly in the cradle, the spectrophotometer does not return accurate measurements.

The serial numbers of the spectrophotometer and the cradle must match for accurate calibration.

- 1 After printing the calibration page, place the spectrophotometer in its cradle.
- **2** Click **Continue** or press the button on the spectrophotometer.

If the calibration is successful, you can proceed to measure the calibration page.

Measure the calibration page

You use the spectrophotometer to measure color patches by scanning each strip of patches in order.

When a strip is scanned successfully, the display indicator is green, and the arrow in the display moves to the next strip. If the strip is not scanned successfully, the display indicator is red, and a message directs you to try again.

- **1** For more accurate measurement, place several sheets of plain white paper beneath the calibration page or use a backup board if it is available.
- **2** Orient the calibration page so that strips are horizontal and the scan direction (indicated by the arrow at the beginning of the strip shown in the display or on the calibration page) is left to right.
- **3** Hold the spectrophotometer with its length perpendicular to the scan direction, and place the tip of the sample aperture on the white space at the start of the specified strip.
- **4** Press and hold the spectrophotometer button and wait for a signal (an indication on the display or a sound).
- **5** After you see or hear the signal, slide the spectrophotometer at a slow but consistent pace across the strip.
- **6** Take about five seconds to scan the length of the strip.
- **7** Release the button when all the patches in the strip have been scanned and you reach the white space at the end of the strip.

- **8** Repeat for all the strips in the order indicated on the display. For black-and-white printers, there is a single strip.
- **9** When all the strips have been scanned successfully, click **Continue** to view the measurement results.

Using ColorCal to measure patches

ColorCal allows you to calibrate the Fiery server without a measurement instrument. Instead, ColorCal uses the scanner of the printer to measure density values.

For black-and-white printers, ColorCal is not supported as a measurement method.

Note: A measurement instrument can provide more accurate calibration than ColorCal can. Use a measurement instrument, such as a spectrophotometer, if one is available.

ColorCal measurement consists of these tasks:

- Prepare the scanner for ColorCal.
- Measure the calibration page using the scanner.
- View and save the measurements.

Prepare the scanner

When you prepare the scanner for ColorCal, you use the scanner to measure patches on a color control patches strip, a gray scale strip, and the ColorCal Scanner page that you printed. The color control patches and gray scale strips are included in the customer media pack that came with your Fiery server.

Scanner preparation is optional, but we recommend that you prepare the scanner after maintenance or service, or whenever the printer output has been altered.

- Scanner preparation is enabled for ColorCal calibration by default. You can disable scanner preparation for ColorCal calibration by clearing the **Prepare scanner for ColorCal calibration** checkbox in Preferences.
- When you perform ColorCal calibration, you can skip scanner preparation and go directly to measurement by clicking **Skip**.

Note: Some types of Fiery server support the preparation of the scanner even if the gray scale strip is missing. In this case, the Fiery server uses the measurements from the previous scanner preparation or, if this is the first ColorCal calibration, a default set of measurements. However, for best results, prepare the scanner using a gray scale strip.

- 1 Place the gray scale strip, color control patches strip, and ColorCal Scanner page in the correct positions on the glass (platen) as indicated in the instructions displayed on the screen.
 - **a)** Place the gray scale strip face down on the glass (platen) so that it will be centered along the top edge of the ColorCal Scanner page.
 - **b)** Place the color control patches strip face down on the glass (platen) so it is centered below the gray scale strip, keeping a distance of 0.25 inch to 0.5 inch (0.635 cm to 1.27 cm) between the two strips.
 - **c)** Finally, place the ColorCal Scanner page face down over the strips.
- **2** Click **Continue** to start scanner preparation.

3 Click **OK** to proceed to measure the calibration page.

Measure the ColorCal calibration page

When you measure color patches in ColorCal, use the gray scale strip along with the ColorCal calibration page that you printed. The gray scale strip is included in the customer media pack that came with your Fiery server.

Measure the ColorCal calibration page after you prepare the scanner, unless you skipped scanner preparation.

- 1 If you have just prepared the scanner, remove the ColorCal Scanner page and the color control patches strip.
- **2** Place the gray scale strip face down on the glass (platen). Place the strip along the top edge of the glass (platen) and center it along the top edge of the calibration page.
- 3 Place the ColorCal Calibration page face down over the gray scale strip.
 Make sure that the patches on the gray scale strip do not overlap the color patches on the ColorCal Calibration page.
- 4 Close the platen glass cover, being careful not to move the gray scale strip and ColorCal Calibration page.
- **5** Click **Continue** to start the ColorCal measurement.
- **6** When the measurement is complete, click **OK** to view the measurement results.

Import measurements from an alternate measurement instrument

For color printers, you can use your own measurement data from an alternate measurement instrument, record your readings in a text file, and then import the data into Calibrator. Measurement data must be in Simple ASCII File Format (SAIFF).

The file name extension must be .cm0 or cm1.

- 1 In the Calibrator main window, select Load measurements from file from the Measurement method list.
- **2** Browse to the location of the file and click **Open**.

File format for importing measurement data

A specific file format is used to specify the Status T density measurements of a patch page for importing CMYK data into Calibrator. The format has a number of requirements.

- The file format is ASCII.
- The first line must be **#!EFI 3**.
- In between the first line and the data, there must be the line **type: 1DST**.
- For the data, there must be five numbers per line, separated by one or more spaces, in this order: Percentage of toner/ink, Cyan measurement, Magenta measurement, Yellow measurement, Black measurement.
- The percentage is expressed as a decimal number (such as 0.5 or 0,5 for 50%).
- A measurement must be between -0.1 to 3.0 (inclusive)

- The first line of data must contain the measurements for the 0% sample, the last line must contain the measurements for the 100% sample, and the percentages of the lines in between must increase from lowest to highest.
- No more than 256 lines of data are allowed.
- Comment lines must start with a pound sign (#) followed by a space. A comment must be on a line by itself.

The measurement data is treated as absolute and is adjusted to become paper-relative by subtracting the density values of the first line from the remaining patches.

Example:

#!EFI 3

EFI ColorWise 2.0 Data

type: 1DST

percent Cyan Magenta Yellow Black

0.000 0.0300 0.0400 0.0200 0.0400

 $0.003\ 0.0600\ 0.0700\ 0.0800\ 0.0700$

 $0.011\ 0.1000\ 0.1000\ 0.1000\ 0.1000$

(...more data...)

0.980 1.6700 1.3400 0.8900 1.6700

 $1.000\ 1.7200\ 1.4300\ 0.9300\ 1.7500$

View measurement results

After you measure a calibration page or import measurements, the measurement results are ready to be applied. Applying (saving) the measurement data overwrites the existing data. For color data, you can view the measurement data in a graph to check the data before applying it.

Measurement results are shown as a set of density curves for C, M, Y, and K. For comparison, the calibration target data is also shown as a set of thicker density curves in the same graph, and the maximum density values are compared numerically.

- 1 After you have successfully measured the calibration page or imported measurements from a file, click **View Measurements**.
- **2** To hide or show curves, click the cicon next to the appropriate label:
 - Measured Hides or shows the measured density curves.
 - Target Hides or shows the target density curves.
 - Cyan, Magenta, Yellow, or Black Hides or shows the measured and target density curves for the specific
 colorant.

Visual difference

For color measurements, the visual difference percentage is a convenient way to evaluate the calibration accuracy.

Measurement data is displayed in paper relative density units (Status T). The Fiery server calculates the visual difference percentage using the Murray-Davies formula, which takes into account the exponential nature of density measurements.

If the measured maximum density is less than the target maximum density, it means that the printer is currently performing lower than expected using this calibration setting. A printed output at 100% of this colorant does not result in the maximum density that this type of printer is expected to print. This situation is acceptable in many proofing situations, because simulated CMYK color spaces typically do not require the maximum density that the printer is capable of.

If the measured maximum density is more than the target maximum density, it means that the printer is currently performing higher than expected using this calibration setting. To meet the calibration target, the Fiery server does not need to specify 100% of the colorant. However, the full gamut of the printer is not being used.

An application such as Adobe Photoshop uses units of percentage from 0% (paper white) to 100% (maximum density). Assuming the output profile used in Adobe Photoshop matches the calibrated state of the Fiery server, a visual difference of -5% for cyan means that the printer cannot produce the cyan color values specified in Adobe Photoshop between 95% and 100%. A visual difference of +5% for cyan means that the printer can produce all the cyan color values specified in Adobe Photoshop, and could produce up to 5% denser cyan values as well.

Print a test page

For color printers, you can print a test page with latest calibration measurements and optionally a second copy which has the default measurements that were used when the calibration setting was created.

Calibrator test page

The test page lets you verify the output produced with the current calibration and with the default calibration. The default calibration is printed using the measurement data that was captured when the calibration setting was created.

If some images included in the test page do not appear satisfactory, it might be because the output profile associated with the calibration setting is not appropriate for the paper and print settings.

Export measurement data

For color printers, you can export the measurement data for a particular calibration setting to a .cm0 file.

- 1 To export measurement data, do one of the following:
 - In Calibrator, open Calibration Manager.
 - In Command WorkStation, click **Server** > **Device Center**. Under **General**, click **Tools**, and then click **Calibrator** and open Calibration Manager.
- **2** Select the calibration setting and click **View Measurements**.

You can also open **View Measurements** after you have successfully measured the calibration page for the new calibration setting.

- **3** Click Export Measurements.
- **4** Browse to the file location, change the file name if desired, and click **Save**.

Reset measurement data

You can reset the measurement data for a particular calibration setting to the default data (either the factory default data or, for a custom calibration setting, the initial measurement data). This option is not available if the current measurement data is already the default data.

Reset measurement data for color printers

For color printers, there may be one or more calibration settings.

- 1 In Command WorkStation, click Server > Device Center.
- 2 Under General, click Tools, and then click Calibrator.
- 3 In Calibrator, open Calibration Manager.
- **4** Select the calibration setting and click **View Measurements**.
- 5 Click Reset to Default Measurements.
- 6 Click **Yes** to confirm.

Reset measurement data for black-and-white printers

For black-and-white printers, there is a single calibration setting.

- 1 In Command WorkStation, click Server > Device Center.
- **2** Under **General**, click **Tools**, and then click **Calibrator**.
- **3** In Calibrator, open Calibration Manager.
- **4** Select the calibration setting and click **View Measurements**.
- 5 Click Reset to Default Measurements.
- 6 Click **Yes** to confirm.

When is it helpful to Reset to Default Measurements?

There may be times where you want to revert to the default calibration measurements.

Keep the following in mind:

- After service has been done.
 - If the technician made changes to improve the printer's color quality, it is likely that the printer's color is now closer to when the calibration setting was created than it was when the printer was last calibrated before service.
- When the quality of the current measurements is in doubt.

You are getting bad color, even after a fresh calibration. In such situations, it is possible that the last calibration measurements have been corrupted, for instance by a defective calibration instrument or by a measurement mistake the operator made but Calibrator did not detect.

Reverting to the original measurements will produce the exact same color as when the calibration setting was created only if the printer now behaves exactly like it was at the creation time. It is unnecessary to reset measurements before recalibrating, because the recalibration process is not iterative: fresh measurement data is captured, totally ignoring previous calibration sessions.

Calibrator preferences

The settings in the Preferences window affect various aspects of the calibration procedure. You can set the default calibration method and patch layout, the calibration time limit (expiration), and the default profiling method and patch layout.

Note: You must have Administrator privileges to change preferences.

Calibration method and patch layout

For color printers, you can set the default measurement method and patch layout. The patch layouts that are available for printing the calibration page vary by patch order and number of patches.

A greater number of patches yields more measurement data, which may produce better results. However, more patches take longer to measure.

Note: If the preferred calibration patch layout is too large to fit the page size selected at calibration time, the 21-patch layout will be automatically selected.

- Sorted patches are printed on the page in the order of their hue and saturation levels.
- Random, Randomized, or Unsorted patches are printed on the page in random order, to help compensate for
 density inconsistencies on different areas of the page.
- If the **Fixed Pattern** patch layout is available for ColorCal on your Fiery server, it prints the color patches in a randomized pattern that you can specify by number. This layout is useful if you want to reprint the same pattern that you have printed before.

Scanner preparation for ColorCal

If you select ColorCal as the default calibration method, you can require scanner preparation by default before calibrating the Fiery server.

We recommend that you prepare the scanner after maintenance or service, or whenever the printer output has been altered. If you do not select the **Prepare scanner for ColorCal calibration** option in Preferences, scanner preparation is skipped.

Note: Scanner preparation affects ColorCal only. It does not prepare the printer for other types of scanning.

Calibration status (expiration)

If you set a time limit for a calibration, an outdated calibration results in status messages in Command WorkStation and can cause a job to be suspended.

Command WorkStation displays a warning (yellow) for the job in the Job Center when the calibration will be outdated within 30 minutes, and an error (red) when the calibration is outdated.

If the calibration of a job is outdated, the Fiery server can suspend the job when you try to print it. The suspended job is not printed but remains in the Printing queue in a suspended state.

The calibration status is checked just before the job is sent to print. If the calibration becomes outdated while a job is printing, the job will not be suspended. We recommend that you calibrate before printing a long job to minimize the possibility of the calibration becoming outdated while the job is printing.

If you double-click the suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data. Select this option if output consistency is not important for this job.

Types of jobs affected by calibration limit

The Fiery server can determine if the calibration is outdated for most jobs, including:

- Jobs submitted from an application using the Fiery PostScript printer driver or Fiery VUE.
- Imported PDF and TIFF jobs.
- Jobs that have been processed (including processed VPS and VIPP jobs).

The Fiery server cannot determine if the calibration is outdated and therefore will not suspend the following types of jobs:

- PCL and PJL jobs.
- Jobs submitted from an application without using the Fiery PostScript printer driver or Fiery VUE. This includes VPS and VIPP jobs that have not been processed.
- Jobs submitted through the Direct connection. These type of jobs cannot be suspended in any case.

In addition, the Fiery server does not check the calibration of jobs that were printed using the Force Print command. The Force Print command can be used on jobs that were suspended because of a job mismatch (the paper or finishing required for the job was not available). These types of jobs, because they are being forced to print, are not checked for calibration.

Set calibration time limit and job suspension

You can set a calibration time limit and set whether Command Workstation suspends the job if calibration has expired.

- In the Calibration Preferences dialog box, do any of the following:
 - To set an expiration time, select **Set time limit and display status in Job Center** and specify a time interval (1-23 hours or 1-200 days).
 - To enable job suspension, select **Suspend printing when calibration expires**.

Printer Profiler measurement method and patch layout

If the Fiery server supports color printing and Fiery Color Profiler Suite is installed on your computer, you have the option to create a custom output profile after you create a custom calibration setting. You can set the default measurement method and patch layout for Printer Profiler.

The list of measurement methods and the list of available patch layouts are provided by Fiery Color Profiler Suite.

ColorCal is not available as a measurement method for profiling. It does not provide enough accuracy.

Calibration settings

If your Fiery server supports color printing, you can access one or more calibration settings. Typically, calibration settings and output profiles are appropriate for specific paper and printing conditions. A calibration setting can be associated with more than one output profile.

To find out which calibration setting is associated with a particular output profile, check the profile settings in Command WorkStation.

View job properties of a calibration setting

You can view the job properties associated with a calibration setting. The calibration setting is appropriate for printing jobs that have the same job properties. These job properties are used to print the calibration page.

The **Job Properties** window displays all the print settings associated with the calibration setting, whether related to calibration or not. The settings are specified when the calibration setting is created. You cannot modify the settings of an existing calibration setting.

Many print settings have no effect on calibration. However, print settings that affect image quality (such as the halftone screen or resolution) do affect calibration.

Settings in the **Color** tab of the **Job Properties** window are ignored when printing the calibration page.

- 1 In Command WorkStation, click Server > Device Center.
- **2** Under **General**, click **Tools**, and then click **Calibrator**.
- **3** In Calibrator, open Calibration Manager.
- **4** Click the calibration setting to select it.

5 Click **View Properties** to view the job properties of the calibration setting.

View measurement data of a calibration setting

Measurement data is saved when you calibrate for a specific calibration setting. The measurement data can be displayed on a graph with the calibration target data, so that you can see how closely the measured printer output matches the calibration target.

- 1 In Command WorkStation, click Server > Device Center.
- **2** Under **General**, click **Tools**, and then click **Calibrator**.
- **3** In Calibrator, open Calibration Manager.
- 4 Click the calibration setting to select it.
- 5 Click View Measurements.

Create a custom calibration setting

When you create a custom calibration setting, the spectrophotometer is automatically selected as the measurement method. ColorCal is not available as a method because it does not use a colorimetric instrument.

You must have Administrator privileges to create a custom calibration setting.

After you create a new calibration setting, you associate it with an output profile. Depending on your paper, a new calibration setting may not give satisfactory results when used with an existing output profile. If it does not, we recommend that you create a new, custom output profile based on your paper.

- If you select an existing profile, select the profile for the paper that is the most similar to your paper. A copy of this profile with the same name as the calibration setting is created, and the existing calibration target (goal) of the profile is changed to a new target calculated using the calibration measurements. The new calibration setting is associated with this profile.
- If you create a new, custom output profile, a profiling measurement page is printed. You measure the page using Printer Profiler in Fiery Color Profiler Suite, and the resulting profile is imported to the Fiery server and associated with your new calibration setting.
- 1 In Command WorkStation Device Center, click the General tab, click Tools, and then click Manage under Calibrate.
- 2 Click Create New.
- 3 Select the calibration setting that best matches your paper or select Server default, and click OK.
- **4** Type a new name for the calibration setting.
- **5** (Optional) For **Recommended paper**, type the name of your paper.
- **6** (Optional) For **Paper reorder number**, type the product ID number for your paper.
 - This information can usually be found on the paper packaging. To find out more about a recommended paper, perform an Internet search on the paper reorder number.
- 7 (Optional) Type information in the **Comment** field.

- **8** Check the list of properties (print settings) related to calibration.
- **9** If you want to change one or more print settings, click **Properties**, make the changes, and then click **OK**. Do not select any settings (such as finishing options) that will make your calibration page unmeasurable.
- 10 Click Continue.
- **11** Select the **Paper Source** for printing the calibration page and click **Continue**.
- **12** Follow the on-screen instructions to measure the calibration page.
- **13** To print a test page, click **View Measurements**, and then click **Test Print**.

You can print a test page to help you decide whether to associate the calibration setting with an existing output profile or create a new output profile.

- **14** Do one of the following to associate the new calibration setting with an output profile:
 - Select an output profile from the list of profiles that reside on the Fiery server.
 - If Fiery Color Profiler Suite is installed on your computer, click **Create New Profile** to create a new, custom output profile using Fiery Color Profiler Suite.

Edit the calibration target

The maximum densities of the calibration target (D-Max values) that is associated with a specific calibration setting are editable when you create the calibration setting. For each colorant (C, M, Y, and K), you can type a new value, or you can import a calibration target from a file.

The edited target data replaces the target data currently associated with this calibration setting when you apply the current measurement data.

Import the target data from a file if you have an existing profile and calibration target from another Fiery Server that you want to use on this Fiery Server. For best results, however, use profiles and calibration data that have been created specifically for this Fiery Server and its printer.

Even though you can edit the maximum density values, we recommend that you do so with caution. A calibration target represents the ideal values for calibration and should not be changed unnecessarily.

- 1 After you have successfully measured the calibration page for the new calibration setting, click View Measurements.
- **2** Do one of the following:
 - Type new values for the D-Max values under Target.
 - Click **Import Target**, browse to the file location, select the file, and click **Open**.
- **3** Continue creating the calibration setting.

Edit a calibration setting

You can edit the basic information of a custom calibration setting. You cannot edit a factory-supplied calibration setting.

Job properties (print settings) cannot be edited since any measurement data saved with the calibration setting would become invalid. To edit the job properties of a calibration setting, create a new calibration setting based on the existing one.

You must have Administrator privileges to edit a custom calibration setting.

- 1 In Command WorkStation Device Center, click the General tab, click Tools, and then click Manage under Calibrate.
- **2** Select the calibration setting in the list and click **Edit**.
- **3** Specify the following settings:
 - **Name** Type a name that describes the paper name, weight, and type plus any other specific printing conditions (for example, halftone or gloss settings). The name can have a maximum of 70 characters.
 - Recommended paper Type the name of your paper.
 - **Paper reorder number** Type the product ID number for your paper. This information can usually be found on the paper packaging.
 - **Comment** (Optional) Type additional descriptive information. This information appears in the list of calibration settings available on the Fiery server.

Delete a custom calibration setting

You can delete a custom calibration setting if it is not associated with the default output profile. You cannot delete a factory-supplied calibration setting.

You must have Administrator privileges to delete a custom calibration setting.

- 1 To open Calibrator in Command WorkStation, open **Device Center**, click **Tools** under **General**, and then click **Manage** under **Calibrate**.
- **2** Select the calibration setting in the list and click **Delete**.

Calibrator 3

Fiery-driven presses and printers come in different flavors: laser or inkjet; monochrome or CMYK or extended gamut, with or without specialty inks. Calibrator is designed to address the different calibration needs of each technology.

Command WorkStation and Fiery Color Profiler Suite will automatically launch the Calibrator version best suited to your system. Calibrator will self-configure to adapt to the connected Fiery server. Not every press requires every feature. For example, most laser printers do not need to limit the amount of toner for individual colorants, while inkjet presses do, because ink absorption by various substrates typically varies much more with inks than with toners.

Most Fiery-driven monochrome and CMYK presses are calibrated using density measurements. CMYK+ are typically calibrated using $L^*a^*b^*$ measurements.

With Calibrator, you can create a new calibration setting on a Fiery server or update an existing one.

Like Calibrator in Command WorkStation, Calibrator in Fiery Color Profiler Suite can create a new calibration setting and recalibrate an existing one, but with support for a variety of measurement instruments not available in Command WorkStation.

The two main functions of Calibrator are:

- Recalibrate updates a calibration with fresh measurements. The output of many presses will vary over time. For
 the Fiery server to compensate for such fluctuations, its correction tables need to be updated with fresh
 measurements.
- Create calibration creates a new calibration, and if Fiery Color Profiler Suite is installed and licensed, a new profile. This task is needed when none of the existing calibrations delivers acceptable output for a specific printing condition (such as a combination of ink set, halftone, substrate). Examples are poor gradations or bad ink adherence. A new calibration will most frequently require a new profile, for color management to deliver accurate color.

Two administrative functions are accessible from two icons at the bottom left of the window. These settings are specific to and saved in each individual Fiery server. Because they affect every user, these functions are available only when logged as a Fiery administrator from Command WorkStation:

- Calibrator Settings is used to set preferences for individual presses. This is where you can set pre- and postcalibration settings available with some press models. All models also offer to warn or even prevent jobs from
 printing when their applicable calibrations have not been recalibrated within a time frame the administrator
 specified.
- **Calibration Manager** is used to view calibrations available in a Fiery server, see when they were last updated, their measurements and properties. User-added calibrations can be deleted, and their names modified.

Calibrator for the connected Fiery server is available for the following workflows. With conventional CMYK products and calibration sets, Calibrator 3 will automatically select the Density-based calibration workflow. Calibrator 3 will follow the L*a*b*-based calibration workflow whenever imposed by an expanded ink set.

- Density-based calibration workflow on page 160
- L*a*b*-based calibration workflow on page 173
- Toner Delta E-based calibration workflow on page 189
- Inkjet Delta E-based calibration workflow on page 202

Using the spectrophotometer to measure patches

You use the spectrophotometer to manually measure color patches.

Using the spectrophotometer consists of these tasks:

- Calibrate the spectrophotometer.
- Measure the calibration page using the spectrophotometer.
- · View and save the measurements.

Fiery Calibrator typically offer standard support of Fiery-branded measurement instruments, such as:

- EFI ES-2000
- Fiery ES-3000

Other types of measurement instruments may be supported by the printer connected to the Fiery server.

Calibrate the spectrophotometer

Calibrate the spectrophotometer to prepare it for measuring the calibration page.

Make sure that both the white tile on the cradle and the instrument aperture are clean. If the white tile has a cover, make sure that the cover is open.

White point calibration is used to compensate for gradual drifts in the spectrophotometer. The spectrophotometer must be placed in its cradle, and the sample aperture must be in full contact with the white tile on the cradle. If you do not place it correctly in the cradle, the spectrophotometer does not return accurate measurements.

The serial numbers of the spectrophotometer and the cradle must match for accurate calibration.

- **1** After printing the calibration page, place the spectrophotometer in its cradle.
- **2** Click **Continue** or press the button on the spectrophotometer.

If the calibration is successful, you can proceed to measure the calibration page.

Measure the calibration page

You use the spectrophotometer to measure color patches by scanning each strip of patches in order.

When a strip is scanned successfully, the display indicator is green, and the arrow in the display moves to the next strip. If the strip is not scanned successfully, the display indicator is red, and a message directs you to try again.

- 1 For more accurate measurement, place several sheets of plain white paper beneath the calibration page or use a backup board if it is available.
- 2 Orient the calibration page so that strips are horizontal and the scan direction (indicated by the arrow at the beginning of the strip shown in the display or on the calibration page) is left to right.
- **3** Hold the spectrophotometer with its length perpendicular to the scan direction, and place the tip of the sample aperture on the white space at the start of the specified strip.
- **4** Press and hold the spectrophotometer button and wait for a signal (an indication on the display or a sound).
- **5** After you see or hear the signal, slide the spectrophotometer at a slow but consistent pace across the strip.
- **6** Take about five seconds to scan the length of the strip.
- **7** Release the button when all the patches in the strip have been scanned and you reach the white space at the end of the strip.
- **8** Repeat for all the strips in the order indicated on the display. For black-and-white printers, there is a single strip.
- **9** When all the strips have been scanned successfully, click **Continue** to view the measurement results.

Density-based calibration workflow

When you calibrate a Fiery server, you perform the following tasks.

- Print a calibration page, which contains patches of various colors (or shades of gray, for black-and-white printers) in a specific layout. You use this page to measure the current output of the printer.
 - The output of the printer changes with time and usage. For the most current data, always measure a newly printed calibration page.
- Measure the color values of the patches on the calibration page using a spectrophotometer.
- Apply the measurements.

The measurement data is saved with the specific calibration setting. When you print a job with the calibration setting, the measurement data is used to calculate the calibration adjustment that is needed to produce the desired output (the calibration target).

Select a task

Start the Calibrator to create a new calibration setting or update an existing one for a Fiery server.

- **1** Start Calibrator.
- **2** If Calibrator is started from Fiery server, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.
- **3** Select one of the following tasks:
 - Recalibrate: Update a calibration using the selected calibration setting.
 - **Create calibration**: Create a new calibration and profile to define a new color printing condition on the Fiery server.
- 4 Click Next.

Note: The number of steps required to complete the selected task depends on the connected printer. Some settings or options may not be available for your printer model.

Create calibration for the server

To create a calibration, enter a name and other details, as required.

The required information is dependent on the Fiery server and printer that you are calibrating. For instance, you may not see the color mode field or the G7 gray balance check box.

1 Enter a calibration name of your choice.

Note: The calibration name should be unique for each server. The name you type must not already be used by a calibration setting or profile on the server.

- 2 (Optional) Select G7 calibration options.
- **3** (Optional) Choose from one of the following calibration targets:
 - Select G7 gray balance calibration.

G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (patch page).

• Select G7+ gray balance calibration.

After selecting **G7+ gray balance calibration**, you can optionally select the **High density smoothing** check box.

When a density value of 2.2 or more is achieved, the High Density Smoothing feature can help minimize banding and improve calibration. Using the feature with a density value of 2.2 or less may produce unexpected results in the output.

Note: To use G7 and G7+ gray balance calibration, Fiery Color Profiler Suite must be installed and licensed. The option is otherwise graved out.

4 (Optional) In the **Comments** field, enter details about your calibration, such as media name, media type, special settings or instructions.

Note: When you create a calibration setting, we recommend that you document in the notes field the media type, printer used, and any special instructions should you need to recalibrate.

- **5** (Optional) Select the down arrow by the **Next** button and choose **Load measurements from file** to allow you to bypass the print and measure workflows. This option is reserved for expert users who already have measurements for their printer. It is recommended that you always print and measure your actual printer.
- 6 Click Next.

G7 calibration workflow

G7 calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7 calibration is applied on the top of the Fiery server calibration. Entering the G7 calibration process, you will select the patch layout for the P2P target you wish to use, measure them, inspect the results, and make adjustments to the settings, if needed.

The G7 specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (P2P target). Fiery Color Profiler Suite supports printing and measuring different P2P targets that are used for G7 calibration. You can measure with any supported measurement instrument, including inline measurement instruments, in which case the process can become automated without user interaction.

- 1 In the **Patch layout** window, select the **G7 patch set** you want to use:
 - P2P51 (the newer target, a revision of the original)
 - P2P25Xa (the original target)

Note: The actual values used in the targets are similar, but the newer version is a more precise version of the G7 specification.

- **2** Click **Print** and measure the patch page.
- 3 Review the G7 gray balance measurement results.

Because this is the G7 calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7 calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

4 (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.

You can choose to keep the defaults or change them.

- **5** Click **OK** to print the P2P patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7 results.
- **7** If the G7 result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

G7+ calibration workflow

G7+ calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7+ calibration is applied on the top of the Fiery server calibration. Entering the G7+ calibration process, you will select the patch layout for the P2P75+ target, measure it, inspect the results, and make adjustments to the settings, if needed.

The G7+ specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7+ calibration adjusts the color output of a printer to the G7+ specification, using measurement data from a P2P75+ target. Fiery Color Profiler Suite supports printing and measuring a P2P75+ target that is used for G7+ calibration. You can measure with any supported measurement instrument, including inline measurement instruments, in which case the process can become automated without user interaction.

- 1 In the Patch layout window, select P2P75+ from the G7+ patch set list.
- **2** Click **Print** and measure the patch page.
- **3** Review the **G7+ gray balance measurement results**.

Because this is the G7+ calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7+ calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

4 (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.

You can choose to keep the defaults or change them.

- **5** Click **OK** to print the P2P75+ patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7+ results.

7 If the G7+ result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

Print a calibration page

When you print a calibration page, first specify the calibration setting (color printers), paper source, and measurement method.

Note: Calibrate the spectrophotometer to prepare it for measuring the calibration page.

- When you start calibration for a specific job, only calibration setting(s) used to print the job is shown. Multiple calibration settings are commonly used by mixed-media jobs.
 - The recommended paper and the date and time of the most recent calibration measurements associated with the selected calibration setting are displayed. If no date and time are given, the Fiery server has not been calibrated (for this calibration setting).
- Be sure the paper source contains paper that is appropriate for the calibration setting. If a warning appears under the **Paper Source** setting, it might be because the paper source does not match the calibration setting. You can either select a different calibration setting or a different paper source.
 - If none of the calibration settings matches perfectly to your paper, you may want to experiment with an available setting resembling your paper. If it produces unacceptable results, you should create a new calibration and profile specific for your paper.
- **1** Set the following options:
 - For color printers. select a calibration setting in the **Calibrate for** list.
 - Select the desired paper source in the **Paper source** list.
 - Select a method in the **Measurement method** list.
 - Calibrator supports several types of spectrophotometer, including Fiery ES-3000 and X-Rite i1Pro3.
 - If measurement options are available for calibration using the selected instrument, a **Settings** button will appear near the instrument.
 - Other types of measurement instruments may be supported by the printer connected to the Fiery server.
- **2** Click **Continue** to print the calibration page and proceed to measurement.

Create a color output profile for a calibration setting

To be able to create a color output profile, Fiery Color Profiler Suite must be installed and licensed on the same computer as Calibrator. When you create a custom calibration setting, you must specify a measurement instrument as the measurement method. ColorCal uses a photocopier scanner to make measurements. Therefore, ColorCal is not available as a method to create calibrations and profiles due to scanner limitations.

You must have Administrator privileges to create a custom calibration setting.

After you create a new calibration setting, you associate it with an output profile. Depending on your paper, a new calibration setting may not give satisfactory results when used with an existing output profile. If it does not, we recommend that you create a new, custom output profile based on your paper.

- If you select an existing profile, select the profile for the paper that is the most similar to your paper. A copy of this profile with the same name as the calibration setting is created, and the existing calibration target (goal) of the profile is changed to a new target calculated using the calibration measurements. The new calibration setting is associated with this profile.
- If you create a new, custom output profile, a profiling measurement page is printed. You measure the page using Printer Profiler in Fiery Color Profiler Suite, and the resulting profile is imported to the Fiery server and associated with your new calibration setting.
- 1 Select an output profile from the list of profiles that reside on the Fiery server.
 - Calibrator will duplicate the output profile and rename it.
- 2 Click Test Page.

You can print a test page to help you decide whether to associate the calibration setting with a copy of the currently selected output profile or create a new output profile.

Without a licensed copy of Fiery Color Profiler Suite, you can do test prints with a few output profiles to help you determine which one gives the best results. For best results, use a licensed Fiery Color Profiler Suite application to create an output profile optimized for the calibration just created.

The test page is printed using the currently selected output profile.

3 If Fiery Color Profiler Suite is installed on your computer, click **Create New Profile** to create a new, custom output profile.

View measurement results

After you measure a calibration page or import measurements, the measurement results are ready to be applied. Applying (saving) the measurement data overwrites the existing data. For color data, you can view the measurement data in a graph to check the data before applying it.

Measurement results are shown as a set of density curves for C, M, Y, and K. For comparison, the calibration target data is also shown as a set of thicker density curves in the same graph, and the maximum density values are compared numerically.

- 1 In Calibration Manager, select a calibration and click View Measurements.
- **2** To hide or show curves, click the ricon next to the appropriate label:
 - Measured Hides or shows the measured density curves.
 - Target Hides or shows the target density curves.
 - Cyan, Magenta, Yellow, or Black Hides or shows the measured and target density curves for the specific colorant.

Note: When Fiery server is installed and licensed, Calibrator offers the option to create G7 calibration. With G7 calibration, transfer curves are applied over a Fiery server calibration target to reach G7 gray balance. The Calibration Manager displays the underlying regular Fiery server calibration target, not the temporary G7 transfer curves. Similarly, transfer curves used to reach the calibrated state for regular Fiery server targets are not displayed by the Calibration Manager. These transfer curves are temporary because they are recomputed with every recalibration.

- **3** Optional: Click **Save measurement** to save the measurement data of an existing calibration setting.
- 4 Optional: If you are not satisfied with the results produced by the latest measurements, click **Reset to Default**Measurements to reset the calibration data. When you perform this action, the last set of calibrator measurements is deleted. The button is displayed only when recalibration has been performed.

Print a test page

For color printers, you can print a test page with latest calibration measurements and optionally a second copy which has the default measurements that were used when the calibration setting was created.

Calibrator test page

The test page lets you verify the output produced with the current calibration and with the default calibration. The default calibration is printed using the measurement data that was captured when the calibration setting was created.

If some images included in the test page do not appear satisfactory, it might be because the output profile associated with the calibration setting is not appropriate for the paper and print settings.

Export measurement data

For color printers, you can export the measurement data for a particular calibration setting to a .cm0 file.

- 1 To export measurement data, do one of the following:
 - In Calibrator, open Calibration Manager.
 - In Command WorkStation, click **Server** > **Device Center**. Under **General**, click **Tools**, and then click **Calibrator** and open Calibration Manager.
- **2** Select the calibration setting and click **View Measurements**.

You can also open **View Measurements** after you have successfully measured the calibration page for the new calibration setting.

- **3** Click Export Measurements.
- **4** Browse to the file location, change the file name if desired, and click **Save**.

Reset measurement data

You can reset the measurement data for a particular calibration setting to the default data (either the factory default data or, for a custom calibration setting, the initial measurement data). This option is not available if the current measurement data is already the default data.

Reset measurement data for color printers

For color printers, there may be one or more calibration settings.

- 1 In Command WorkStation, click Server > Device Center.
- 2 Under General, click Tools, and then click Calibrator.
- **3** In Calibrator, open Calibration Manager.
- **4** Select the calibration setting and click **View Measurements**.
- 5 Click Reset to Default Measurements.
- 6 Click Yes to confirm.

Calibrator Settings

The settings in the **Calibrator Settings** window affect various aspects of the calibration procedure. You can set the calibration status (expiration), calibration time limit, and job suspension.

Note: You must have Administrator privileges to change preferences.

In Command WorkStation, Fiery Calibrator can be opened with one of the following methods:

- Click the **Calibrate** toolbar icon in Job Center.
- Click Server > Calibrate.
- Click Server > Device Center. Under General, click Tools, and then click Calibrator.

In the Fiery Calibrator window, click the Calibrator Settings (gear) icon located in the lower-left corner.

To use dark mode, make a setting in Set Command WorkStation preferences on page 29.

Calibration status (expiration)

If you set a time limit for a calibration, an outdated calibration results in status messages in Command WorkStation and can cause a job to be suspended.

Command WorkStation displays a warning (yellow) for the job in the Job Center when the calibration will be outdated within 30 minutes, and an error (red) when the calibration is outdated.

If the calibration of a job is outdated, the Fiery server can suspend the job when you try to print it. The suspended job is not printed but remains in the Printing queue in a suspended state.

The calibration status is checked just before the job is sent to print. If the calibration becomes outdated while a job is printing, the job will not be suspended. We recommend that you calibrate before printing a long job to minimize the possibility of the calibration becoming outdated while the job is printing.

If you double-click the suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data. Select this option if output consistency is not important for this job.

Types of jobs affected by calibration limit

The Fiery server can determine if the calibration is outdated for most jobs, including:

- Jobs submitted from an application using the Fiery PostScript printer driver or Fiery VUE.
- Imported PDF and TIFF jobs.
- Jobs that have been processed (including processed VPS and VIPP jobs).

The Fiery server cannot determine if the calibration is outdated and therefore will not suspend the following types of jobs:

- PCL and PJL jobs.
- Jobs submitted from an application without using the Fiery PostScript printer driver or Fiery VUE. This includes VPS and VIPP jobs that have not been processed.
- Jobs submitted through the Direct connection. These type of jobs cannot be suspended in any case.

In addition, the Fiery server does not check the calibration of jobs that were printed using the Force Print command. The Force Print command can be used on jobs that were suspended because of a job mismatch (the paper or finishing required for the job was not available). These types of jobs, because they are being forced to print, are not checked for calibration.

Set calibration time limit and job suspension

You can set a calibration time limit and set whether Fiery Command WorkStation suspends the job if calibration has expired.

1 In the **Calibrator Settings** window, do any of the following:

If you choose to set an expiration time, you can set one of the following:

- To show expiration status, select **Show status in Job Center**.
- To enable job suspension, select **Suspend job printing when calibration expires**.

For a suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data if output consistency is not important for the job.

- **2** Optionally, select the **Create G7 calibrations** check box to calibrate and print profiling measurement patches. G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (patch page).
- **3** Click **Factory Defaults** to reset the settings to their original defaults.
- **4** Click **Save** to save the settings.

Calibration settings for output profiles

If your Fiery server supports color printing, you can access one or more calibration settings. Typically, calibration settings and output profiles are appropriate for specific paper and printing conditions. A calibration setting can be associated with more than one output profile.

To find out which calibration setting is associated with a particular output profile, check the profile settings in Command WorkStation.

View measurement data of a calibration setting

Measurement data is saved when you calibrate for a specific calibration setting. The measurement data can be displayed on a graph with the calibration target data, so that you can see how closely the measured printer output matches the calibration target.

- 1 In Command WorkStation, click Server > Device Center.
- 2 Under General, click Tools, and then click Calibrator.
- 3 In Calibrator, open Calibration Manager.
- **4** Click the calibration setting to select it.
- 5 Click View Measurements.

Edit the calibration target

The maximum densities of the calibration target (D-Max values) that is associated with a specific calibration setting are editable when you create the calibration setting. For each colorant (C, M, Y, and K), you can type a new value, or you can import a calibration target from a file.

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

The edited target data replaces the target data currently associated with this calibration setting when you apply the current measurement data.

Import the target data from a file if you have an existing profile and calibration target from another Fiery server that you want to use on this Fiery server. For best results, however, use profiles and calibration data that have been created specifically for this Fiery server and its printer.

Even though you can edit the maximum density values, we recommend that you do so with caution. A calibration target represents the ideal values for calibration and should not be changed unnecessarily.

- 1 After you have successfully measured the calibration page for the new calibration setting, click View Measurements.
- **2** Do one of the following:
 - Type new values for the D-Max values under Target.
 - Click Import Target, browse to the file location, select the file, and click Open.
 Only files containing monotonic measurements are acceptable as imported targets.
- **3** Continue creating the calibration setting.

Recalibrate

After you have calibration data for the Fiery server, you can recalibrate it at any time. The existing calibration will be updated to match the color benchmark produced for the Fiery server when this calibration was created.

- 1 Start Calibrator.
- **2** If Calibrator is started from Fiery Color Profiler Suite, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.

- **3** Select one of the following tasks:
 - Recalibrate Update the calibration using the selected calibration setting.
 - **Create calibration** Create a new calibration and profile to establish color behavior or a new printing condition on the Fiery server.
- 4 Click Next.

Update calibration for the server

To recalibrate, start with the previously saved calibration data.

- 1 Choose an existing calibration set from the list.
 - Based on the calibration you selected, the color mode is displayed. If color mode is not displayed, it is not supported on the printer you calibrated.
 - The comments shown are those that were added at the time the calibration was created.
- **2** Optional: Select the down arrow by the **Next** button and choose **Load measurements from file** to allow you to bypass the print and measure workflows. This option is reserved for expert users who already have measurements for their printer. It is recommended that you always print and measure your actual printer.
- 3 Click Next.

Print a calibration page for measurement

When you print a calibration page for recalibration, specify the measurement method, patch set, and paper source.

Note: Calibrate the spectrophotometer to prepare it for measuring the calibration page.

- 1 In the **Patch Layout** window, set the following options:
 - Select a measurement instrument in the Measurement method list.
 - Select a patch set in the Patch set list.
 - Select the desired paper source in the **Paper source** list.

Note: Be sure that the paper source contains paper that is appropriate for the calibration setting. If a warning appears under the **Paper source** setting, it might be because the paper source does not match the calibration setting. You can either select a different calibration setting or a different paper source.

2 Click **Next** and proceed to measurement.

Follow the on-screen instructions to measure the calibration page.

View calibration results

A new calibration produces a reference color state, a "target", that each recalibration will attempt to reach.

The target is the color response expected from your printer when properly calibrated to the printing conditions you have just defined (media, resolution, halftone, etc.). An output profile describing the color space produced by this calibrated state will be needed by the server to correctly color manage your printer. If you are not satisfied with the calibration, review the previous steps.

When recalibrating, you want the recalibration results to confirm if your printer is still performing to the original target for the specified calibration setting.

Note: Less options are offered when you use the load measurements from file.

- 1 Click **Test Print**. You can print a test page to help you decide whether to use the calibration setting or create a new one.
- **2** Optional: Select the down arrow by the **Test Print** button and choose **With default calibration** to print a test print using the default measurements for comparison.
- **3** Do one of the following:
 - Click **Apply & Close** to save the calibration settings.
 - Click **Cancel** to cancel the recalibration. When you perform this action, the calibration settings will not be updated.

Print a test page

For color printers, you can print a test page with latest calibration measurements and optionally a second copy which has the default measurements that were used when the calibration setting was created.

Calibration Manager

Calibration Manager allows you to view and delete calibration settings. Comments can also be added to or deleted from individual calibrations.

Typically, calibration settings and output profiles are appropriate for specific paper and printing conditions. A calibration setting can be associated with more than one output profile.

Open Calibration Manager from Calibrator by clicking \blacksquare in the lower-left corner of the window. The window displays all the calibrations for the selected server. The following categories are shown:

- **Calibration**: Completed calibrations for the server listed by name.
- **Last calibrated**: The time of the last calibration.
- **Color mode**: The color mode is the color space of the output profiles that the calibration set supports.

You can perform a number of actions for the calibration you select in the list. Not all actions are available for all calibrations. If an action is not available, it is grayed out. The actions are:

- Edit opens a window where you can edit the basic information of a custom calibration setting.
- View measurements opens a window providing more details about the highlighted calibration.

The information displayed in the window is determined by the measurement space.

• **Delete** removes the selected calibration set.

Profiles relying on this calibration will also be deleted, after confirmation from the operator. Factory calibration sets, such as Plain, cannot be deleted.

Edit calibration setting

You can edit the basic information of a custom calibration setting. You cannot edit a factory-supplied calibration setting.

You must have Administrator privileges to edit a custom calibration setting.

Job properties (print settings) cannot be edited since any measurement data saved with the calibration setting would become invalid. To edit the job properties of a calibration setting, create a new calibration setting based on the existing one.

- 1 In Calibration Manager, select the calibration setting in the list and click Edit.
- **2** Specify the following settings:
 - **Name** Type a name that describes the paper name, weight, and type plus any other specific printing conditions (for example, halftone or gloss settings). The name can have a maximum of 70 characters.
 - **Comment** (Optional) Type additional descriptive information. This information appears in the list of calibration settings available on the Fiery server.

View measurement results

After you measure a calibration page or import measurements, the measurement results are ready to be applied. Applying (saving) the measurement data overwrites the existing data. For color data, you can view the measurement data in a graph to check the data before applying it.

Measurement results are shown as a set of density curves for C, M, Y, and K. For comparison, the calibration target data is also shown as a set of thicker density curves in the same graph, and the maximum density values are compared numerically.

- 1 In Calibration Manager, select a calibration and click View Measurements.
- **2** To hide or show curves, click the circon next to the appropriate label:
 - Measured Hides or shows the measured density curves.
 - Target Hides or shows the target density curves.
 - Cyan, Magenta, Yellow, or Black Hides or shows the measured and target density curves for the specific
 colorant.

Note: When Fiery server is installed and licensed, Calibrator offers the option to create G7 calibration. With G7 calibration, transfer curves are applied over a Fiery server calibration target to reach G7 gray balance. The Calibration Manager displays the underlying regular Fiery server calibration target, not the temporary G7 transfer curves. Similarly, transfer curves used to reach the calibrated state for regular Fiery server targets are not displayed by the Calibration Manager. These transfer curves are temporary because they are recomputed with every recalibration.

- **3** Optional: Click **Save measurement** to save the measurement data of an existing calibration setting.
- 4 Optional: If you are not satisfied with the results produced by the latest measurements, click **Reset to Default**Measurements to reset the calibration data. When you perform this action, the last set of calibrator measurements is deleted. The button is displayed only when recalibration has been performed.

L*a*b*-based calibration workflow

When you calibrate a Fiery server, you perform the following tasks.

- Print a calibration page, which contains patches of various colors in a specific layout. You use this page to measure the current output of the press.
 - The output of the press changes with time and usage. For the most current data, always measure a newly printed calibration page.
- Measure the color values of the patches on the calibration page using a supported measurement instrument.
- Apply the measurements.

The measurement data is saved with the specific calibration setting. When you print a job with the calibration setting, the measurement data is used to calculate the calibration adjustment that is needed to produce the desired output (the calibration target).

Select a task

Start the Calibrator to create a new calibration setting or update an existing one for a Fiery server.

- 1 Start Calibrator.
- **2** If Calibrator is started from Fiery server, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.
- **3** Select one of the following tasks:
 - **Recalibrate**: Update a calibration using the selected calibration setting.
 - **Create calibration**: Create a new calibration and profile to define a new color printing condition on the Fiery server.
- 4 Click Next.

Note: The number of steps required to complete the selected task depends on the connected printer. Some settings or options may not be available for your printer model.

Calibrator Settings

The settings in the **Calibrator Settings** window affect various aspects of the calibration procedure. You can set the calibration status (expiration), calibration time limit, and job suspension.

Note: You must have Administrator privileges to change preferences.

In Command WorkStation, Fiery Calibrator can be opened with one of the following methods:

- Click the **Calibrate** toolbar icon in Job Center.
- Click Server > Calibrate.
- Click Server > Device Center. Under General, click Tools, and then click Calibrator.

In the Fiery Calibrator window, click the Calibrator Settings (gear) icon located in the lower-left corner.

Calibration status (expiration)

If you set a time limit for a calibration, an outdated calibration results in status messages in Command WorkStation and can cause a job to be suspended.

Command WorkStation displays a warning (yellow) for the job in the Job Center when the calibration will be outdated within 30 minutes, and an error (red) when the calibration is outdated.

If the calibration of a job is outdated, the Fiery server can suspend the job when you try to print it. The suspended job is not printed but remains in the Printing queue in a suspended state.

The calibration status is checked just before the job is sent to print. If the calibration becomes outdated while a job is printing, the job will not be suspended. We recommend that you calibrate before printing a long job to minimize the possibility of the calibration becoming outdated while the job is printing.

If you double-click the suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data. Select this option if output consistency is not important for this job.

Types of jobs affected by calibration limit

The Fiery server can determine if the calibration is outdated for most jobs, including:

- Jobs submitted from an application using the Fiery PostScript printer driver or Fiery VUE.
- Imported PDF and TIFF jobs.
- Jobs that have been processed (including processed VPS and VIPP jobs).

The Fiery server cannot determine if the calibration is outdated and therefore will not suspend the following types of jobs:

- PCL and PJL jobs.
- Jobs submitted from an application without using the Fiery PostScript printer driver or Fiery VUE. This includes VPS and VIPP jobs that have not been processed.
- Jobs submitted through the Direct connection. These type of jobs cannot be suspended in any case.

In addition, the Fiery server does not check the calibration of jobs that were printed using the Force Print command. The Force Print command can be used on jobs that were suspended because of a job mismatch (the paper or finishing required for the job was not available). These types of jobs, because they are being forced to print, are not checked for calibration.

Set calibration time limit and job suspension

You can set a calibration time limit and set whether Fiery Command WorkStation suspends the job if calibration has expired.

1 In the **Calibrator Settings** window, do any of the following:

If you choose to set an expiration time, you can set one of the following:

- To show expiration status, select **Show status in Job Center**.
- To enable job suspension, select **Suspend job printing when calibration expires**.

For a suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data if output consistency is not important for the job.
- To enable Zero-touch recalibration, select Calibrate job with inline sensor automatically.
- **2** Click **Factory Defaults** to reset the settings to their original defaults.
- **3** Click **Save** to save the settings.

Create calibration for the server

To create a calibration, enter a name and other details, as required.

The required information is dependent on the Fiery server and printer that you are calibrating. For instance, you may not see the color mode field or the G7 gray balance check box.

1 Enter a calibration name of your choice.

Note: The calibration name should be unique for each server. The name you type must not already be used by a calibration setting or profile on the server.

2 (Optional) Select G7 calibration options.

- **3** (Optional) Choose from one of the following calibration targets:
 - Select G7 gray balance calibration.

G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (patch page).

• Select G7+ gray balance calibration.

After selecting **G7+ gray balance calibration**, you can optionally select the **High density smoothing** check box.

When a density value of 2.2 or more is achieved, the High Density Smoothing feature can help minimize banding and improve calibration. Using the feature with a density value of 2.2 or less may produce unexpected results in the output.

Note: To use G7 and G7+ gray balance calibration, Fiery Color Profiler Suite must be installed and licensed. The option is otherwise grayed out.

4 (Optional) In the **Comments** field, enter details about your calibration, such as media name, media type, special settings or instructions.

Note: When you create a calibration setting, we recommend that you document in the notes field the media type, printer used, and any special instructions should you need to recalibrate.

- **5** (Optional) Select the down arrow by the **Next** button and choose **Load measurements from file** to allow you to bypass the print and measure workflows. This option is reserved for expert users who already have measurements for their printer. It is recommended that you always print and measure your actual printer.
- 6 Click Next.

G7 calibration workflow

G7 calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7 calibration is applied on the top of the Fiery server calibration. Entering the G7 calibration process, you will select the patch layout for the P2P target you wish to use, measure them, inspect the results, and make adjustments to the settings, if needed.

The G7 specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (P2P target). Fiery Color Profiler Suite supports printing and measuring different P2P targets that are used for G7 calibration. You can measure with any supported measurement instrument.

- 1 In the Patch layout window, select the G7 patch set you want to use:
 - P2P51 (the newer target, a revision of the original)
 - P2P25Xa (the original target)

Note: The actual values used in the targets are similar, but the newer version is a more precise version of the G7 specification.

2 Click **Print** and measure the patch page.

3 Review the G7 gray balance measurement results.

Because this is the G7 calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7 calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

4 (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.

You can choose to keep the defaults or change them.

- **5** Click **OK** to print the P2P patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7 results.
- **7** If the G7 result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

G7+ calibration workflow

G7+ calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7+ calibration is applied on the top of the Fiery server calibration. Entering the G7+ calibration process, you will select the patch layout for the P2P75+ target, measure it, inspect the results, and make adjustments to the settings, if needed.

The G7+ specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7+ calibration adjusts the color output of a printer to the G7+ specification, using measurement data from a P2P75+ target. Fiery Color Profiler Suite supports printing and measuring a P2P75+ target that is used for G7+ calibration. You can measure with any supported measurement instrument, including inline measurement instruments, in which case the process can become automated without user interaction.

- 1 In the Patch layout window, select P2P75+ from the G7+ patch set list.
- **2** Click **Print** and measure the patch page.
- 3 Review the G7+ gray balance measurement results.

Because this is the G7+ calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7+ calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

4 (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.

You can choose to keep the defaults or change them.

- 5 Click **OK** to print the P2P75+ patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7+ results.

7 If the G7+ result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

Obtain measurement for ink limit per channel

The measurements taken for calibration provide suggested ink limits for each channel. Measure the patch pages for the ink limit per channel.

- **1** Choose one of the following:
 - · Print measurement chart

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Set ink limit per channel

After you have successfully measured the patch page provided for the ink limit per channel, the results are displayed and you can make some adjustments.

For each channel, the ink limit is displayed.

Click the arrow beside the name of each channel to display a slider. To change the ink limit, move the slider.

Click **Next** to measure for linearization.

Obtain measurement for linearization

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your printer.

1 Choose one of the following:

· Print measurement chart

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer response may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Note: When you are recalibrating, be sure to select a source tray containing the same media type, or a media type very similar to the media type that was used to create the calibration. Do not change settings from the **Color** tab and the **Image** tab because these settings were automatically set by the calibration software.

Obtain measurement for total ink limit

The measurement for total ink limit helps to ensure that the printer does not use more ink than the media can handle or too much ink for your intended jobs.

1 Choose one of the following to specify the total ink limit:

· Print measurement chart

The **Initial ink limit** displayed is the default value suggested for your printer. You can enter a new value to overwrite the suggested value, and then print the chart. The chart you are about to print will not contain patches specifying more ink than this value.

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages, measure them, and to have the system propose a value optimized for your actual media type. You can change settings for the selected patch measurement instrument and specify a custom page size for the chart before printing the patch pages.

• Enter numerical value

The value displayed is the default value suggested for your printer without additional measurements required. This value is not optimized for your specific media. If set too high, your media may have trouble handling that much ink. If set too low, you are limiting the gamut of your printer for your specific media.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the Calibrator window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

If you select this option, the value is loaded from previously saved measurement data.

If you choose this option, proceed to obtaining measurement for the color benchmark.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Set total ink limit

After you have successfully measured the patch page provided for the total ink limit, the results are displayed and you can make some adjustments.

1 Choose one of the following:

· Use measured result

The value displayed is the value suggested for your printer. This value is calculated from your latest measurements.

Enter numerical value

The value displayed is the value suggested for your printer without additional measurements required. You can enter a numerical value of your choosing should you decide not to use the suggested value.

• Select value from printed visual chart

This option only displays if you selected **Include visual chart** when printing the measurement chart. The value displayed is the value suggested for your printer based on a specific column number in the chart. You can select a column number of your choosing should you decide not to use the suggested value. The printed visual chart may reveal issues that measurements alone cannot detect. For instance, ink might seep through the media if too much is allowed. In this case, you will want to use a lower value than the suggested one.

2 Click Next.

Obtain measurement for G7 gray balance

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your printer.

1 Choose one of the following:

· Print measurement chart

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument, one of the G7 targets, and the chart size. Click **Print** to continue.

G7 gray balance measurement summary

View the summary of the G7 gray balance measurement.

- 1 Review the G7 gray balance measurement summary.

 The NPDC (Neutral Print Density Curve) is displayed separately for CMV (composite Curve).
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- **3** Click **Back** to discard your initial measurements.
- **4** Click **Iterate** to repeat the process.

G7+ gray balance measurement summary

View the summary of the G7+ gray balance measurement.

- **1** Review the G7+ gray balance measurement summary.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- **3** Click **Back** to discard your initial measurements.
- **4** Click **Iterate** to repeat the process.

Correction Options

Review the output correction curve.

- 1 You can set various correction options.
 - **Fade gray balance**: reduces the gray balance correction applied by the G7 NPDC correction curves above the fade adjustment value.
 - **Fade tone adjustment**: reduces the tone adjustments applied by the G7 NPDC correction curves above the fade adjustment value.
 - Fade adjustment value: reduces adjustment of tone and/or gray balance above specified percent dot value.
 - Add smoothing: smooths calibration curves for noisy or irregular calibration data.
- **2** Select **OK** to accept changes or **Default** to return to the default values.

G7 gray balance measurement results

View the results of the G7 gray balance measurement.

- 1 Review the G7 gray balance measurement results.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- 3 Click **Iterate** to print the patches with the G7 calibration curves to see if the results are passing.
- **4** Click **Back** to discard your iteration measurements.
- **5** If the results are acceptable, click **Accept** to continue the calibration process.

G7+ gray balance measurement results

View the results of the G7+ gray balance measurement.

- **1** Review the G7+ gray balance measurement results.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- **3** Click **Iterate** to print the patches with the G7+ calibration curves to see if the results are passing.
- **4** Click **Back** to discard your iteration measurements.
- **5** If the results are acceptable, click **Accept** to continue the calibration process.

Obtain measurement for color benchmark

These final measurements establish the target gamut for the printer.

Note: Options vary depending on the Fiery server. Some Fiery servers will automatically calculate the color benchmark during the profile creation step. For other Fiery servers, you will need to print and measure patches to set the color benchmark.

- **1** Choose one of the following:
 - · Print measurement chart

Select Include visual chart to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

Set color benchmark

A new calibration produces a reference color state, a "benchmark", that each recalibration will attempt to reach.

The benchmark is the color response expected from your printer when properly calibrated to the printing conditions you have just defined (for example, media, resolution, and halftone). An output profile describing the color space produced by this calibrated state will be needed by the server to correctly color manage your printer. If you are not satisfied with the calibration, review the previous steps.

When recalibrating, you want the recalibration results to confirm if your printer is still performing to the original benchmark for the specified calibration set.

Note: Options vary depending on the Fiery server. Some Fiery servers will automatically calculate the color benchmark during the profile creation step. For other Fiery servers, you will need to print and measure patches to set the color benchmark.

A straight diagonal line on the graph represents the theoretical target color benchmark, with each CMYK measurement represented as the actual color produced by the printer. Slight deviations are expected. They represent the actual calibrated response of the profiled condition. Two Fiery Color Profiler Suite modules, Fiery Profile Inspector and Fiery Verify, can be used to view more detailed information.

Set an output profile

You can proceed to Printer Profiler to create the output profile, or save the results for later.

- Choose to create a profile.
 - a) Choose Create output profile.
 - b) Click Next.

Fiery Printer Profiler will create an output profile for use with the calibration you have just completed.

Or choose to save the calibration results for later.

- a) Choose Save calibration now and create output profile later.
- b) Click Done.

Calibration is saved with a temporary output profile visible in Command WorkStation Profile Manager. For color management to be accurate, a custom profile must be created for use with the calibration.

Recalibrate

After you have calibration data for the Fiery server, you can recalibrate it at any time. The existing calibration will be updated to match the color benchmark produced for the Fiery server when this calibration was created.

- 1 Start Calibrator.
- 2 If Calibrator is started from Fiery Color Profiler Suite, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.
- **3** Select one of the following tasks:
 - Recalibrate Update the calibration using the selected calibration setting.
 - **Create calibration** Create a new calibration and profile to establish color behavior or a new printing condition on the Fiery server.
- 4 Click Next.

Update calibration for the server

To recalibrate, start with the previously saved calibration data.

- 1 Choose an existing calibration set from the list.
 - Based on the calibration you selected, the color mode is displayed. If color mode is not displayed, it is not supported on the printer you calibrated.
 - The comments shown are those that were added at the time the calibration was created.
- **2** Optional: Select the down arrow by the **Next** button and choose **Load measurements from file** to allow you to bypass the print and measure workflows. This option is reserved for expert users who already have measurements for their printer. It is recommended that you always print and measure your actual printer.
- 3 Click Next.

Obtain measurement for linearization

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your printer.

- **1** Choose one of the following:
 - · Print measurement chart

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument, one of the G7 targets, and the chart size. Click **Print** to continue.

Note: When you are recalibrating, be sure to select a source tray containing the same media type, or a media type very similar to the media type that was used to create the calibration. Do not change settings from the **Color** tab and the **Image** tab because these settings were automatically set by the calibration software.

Obtain measurement for verifying calibration

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your printer.

- **1** Choose one of the following:
 - · Print measurement chart

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

When you select this option, you are automatically taken to the location where the measurements files are stored

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Verify calibration

A new calibration produces a reference color state, a "benchmark", that each recalibration will attempt to reach.

The benchmark is the color response expected from your printer when properly calibrated to the printing conditions you have just defined (media, resolution, halftone, etc.). An output profile describing the color space produced by this calibrated state will be needed by the server to correctly color manage your printer. If you are not satisfied with the calibration, review the previous steps.

When recalibrating, you want the recalibration results to confirm if your printer is still performing to the original benchmark for the specified calibration set.

1 View the results.

You can compare the color benchmark and calibrated results. You can also view individual channels by clicking the eye icon beside each channel icon.

2 Click **Apply & close** to apply the calibration set to printer and close Calibrator.

Calibration is ready to be applied

When you have a set of measurements, the calibration is ready to be applied. You can choose to verify the calibration or apply the calibration setting to the printer.

Click Verify and follow the online instructions.
 When you verify the calibration of the printer, you will compare how close the calibrated state is to the color benchmark of the current calibration setting.

Calibration Manager

Calibration Manager allows you to view and delete calibration settings. Comments can also be added to or deleted from individual calibrations.

Typically, calibration settings and output profiles are appropriate for specific paper and printing conditions. A calibration setting can be associated with more than one output profile.

Open Calibration Manager from Calibrator by clicking in the lower-left corner of the window. The window displays all the calibrations for the selected server. The following categories are shown:

- **Calibration**: Completed calibrations for the server listed by name.
- Last calibrated: The time of the last calibration.
- **Color mode**: The color mode is the color space of the output profiles that the calibration set supports.

You can perform a number of actions for the calibration you select in the list. Not all actions are available for all calibrations. If an action is not available, it is grayed out. The actions are:

- Edit opens a window where you can edit the basic information of a custom calibration setting.
- View measurements opens a window providing more details about the highlighted calibration.

The information displayed in the window is determined by the measurement space.

• **Delete** removes the selected calibration set.

Profiles relying on this calibration will also be deleted, after confirmation from the operator. Factory calibration sets, such as Plain, cannot be deleted.

Edit calibration setting

You can edit the basic information of a custom calibration setting. You cannot edit a factory-supplied calibration setting.

You must have Administrator privileges to edit a custom calibration setting.

Job properties (print settings) cannot be edited since any measurement data saved with the calibration setting would become invalid. To edit the job properties of a calibration setting, create a new calibration setting based on the existing one.

1 In Calibration Manager, select the calibration setting in the list and click Edit.

- **2** Specify the following settings:
 - Name Type a name that describes the paper name, weight, and type plus any other specific printing conditions (for example, halftone or gloss settings). The name can have a maximum of 70 characters.
 - **Comment** (Optional) Type additional descriptive information. This information appears in the list of calibration settings available on the Fiery server.

View measurements

View details of calibration in a L*a*b* measurement space.

You can reset the measurement data for a particular calibration setting to the default data (either the factory default data or, for a custom calibration setting, the initial measurement data). This option is not available if the current measurement data is already the default data.

- 1 In Calibration Manager, select a calibration and click View measurements. Details of the calibration are displayed.
- **2** To reset the calibration data, click **Reset to Default Measurements**. When you perform this action, the last set of calibrator measurements is deleted.

Toner Delta E-based calibration workflow

When you calibrate a Fiery server, you perform the following tasks.

- Print a calibration page, which contains patches of various colors in a specific layout. You use this page to measure the current output of the press.
 - The output of the press changes with time and usage. For the most current data, always measure a newly printed calibration page.
- Measure the color values of the patches on the calibration page using a supported measurement instrument.
- Apply the measurements.

The measurement data is saved with the specific calibration setting. When you print a job with the calibration setting, the measurement data is used to calculate the calibration adjustment that is needed to produce the desired output (the calibration target).

Select a task

Start the Calibrator to create a new calibration setting or update an existing one for a Fiery server.

- 1 Start Calibrator.
- **2** If Calibrator is started from Fiery server, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.

- **3** Select one of the following tasks:
 - **Recalibrate**: Update a calibration using the selected calibration setting.
 - **Create calibration**: Create a new calibration and profile to define a new color printing condition on the Fiery server.
- 4 Click Next.

Note: The number of steps required to complete the selected task depends on the connected printer. Some settings or options may not be available for your printer model.

Calibrator Settings

The settings in the **Calibrator Settings** window affect various aspects of the calibration procedure. You can set the calibration status (expiration), calibration time limit, and job suspension.

Note: You must have Administrator privileges to change preferences.

In Command WorkStation, Fiery Calibrator can be opened with one of the following methods:

- Click the **Calibrate** toolbar icon in Job Center.
- Click Server > Calibrate.
- Click Server > Device Center. Under General, click Tools, and then click Calibrator.

In the Fiery Calibrator window, click the Calibrator Settings (gear) icon located in the lower-left corner.

To use dark mode, make a setting in Set Command WorkStation preferences on page 29.

Calibration status (expiration)

If you set a time limit for a calibration, an outdated calibration results in status messages in Command WorkStation and can cause a job to be suspended.

Command WorkStation displays a warning (yellow) for the job in the Job Center when the calibration will be outdated within 30 minutes, and an error (red) when the calibration is outdated.

If the calibration of a job is outdated, the Fiery server can suspend the job when you try to print it. The suspended job is not printed but remains in the Printing queue in a suspended state.

The calibration status is checked just before the job is sent to print. If the calibration becomes outdated while a job is printing, the job will not be suspended. We recommend that you calibrate before printing a long job to minimize the possibility of the calibration becoming outdated while the job is printing.

If you double-click the suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data. Select this option if output consistency is not important for this job.

Types of jobs affected by calibration limit

The Fiery server can determine if the calibration is outdated for most jobs, including:

- Jobs submitted from an application using the Fiery PostScript printer driver or Fiery VUE.
- Imported PDF and TIFF jobs.
- Jobs that have been processed (including processed VPS and VIPP jobs).

The Fiery server cannot determine if the calibration is outdated and therefore will not suspend the following types of jobs:

- PCL and PJL jobs.
- Jobs submitted from an application without using the Fiery PostScript printer driver or Fiery VUE. This includes VPS and VIPP jobs that have not been processed.
- Jobs submitted through the Direct connection. These type of jobs cannot be suspended in any case.

In addition, the Fiery server does not check the calibration of jobs that were printed using the Force Print command. The Force Print command can be used on jobs that were suspended because of a job mismatch (the paper or finishing required for the job was not available). These types of jobs, because they are being forced to print, are not checked for calibration.

Set calibration time limit and job suspension

You can set a calibration time limit and set whether Fiery Command WorkStation suspends the job if calibration has expired.

1 In the Calibrator Settings window, do any of the following:

If you choose to set an expiration time, you can set one of the following:

- To show expiration status, select **Show status in Job Center**.
- To enable job suspension, select **Suspend job printing when calibration expires**.

For a suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data if output consistency is not important for the job.
- To enable Zero-touch recalibration, select Calibrate job with inline sensor automatically.
- **2** Optionally, select the **Create G7 calibrations** check box to calibrate and print profiling measurement patches. G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (patch page).
- **3** Click **Factory Defaults** to reset the settings to their original defaults.
- **4** Click **Save** to save the settings.

Create calibration for the server

To create a calibration, enter a name and other details, as required.

The required information is dependent on the Fiery server and printer that you are calibrating.

1 Type a calibration name of your choice.

Note: The calibration name should be unique for each server. The name you type must not already be used by a calibration setting or profile on the server.

- 2 (Optional) Select G7 calibration options.
- **3** (Optional) Choose from one of the following calibration targets:
 - Select G7 gray balance calibration.

G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (patch page).

• Select **G7+ gray balance calibration**.

After selecting **G7+ gray balance calibration**, you can optionally select the **High density smoothing** check box.

When a density value of 2.2 or more is achieved, the High Density Smoothing feature can help minimize banding and improve calibration. Using the feature with a density value of 2.2 or less may produce unexpected results in the output.

Note: To use *G*7 and *G*7+ gray balance calibration, Fiery Color Profiler Suite must be installed and licensed. The option is otherwise grayed out.

4 Click Next.

G7 calibration workflow

G7 calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7 calibration is applied on the top of the Fiery server calibration. Entering the G7 calibration process, you will select the patch layout for the P2P target you wish to use, measure them, inspect the results, and make adjustments to the settings, if needed.

The G7 specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (P2P target). Fiery Color Profiler Suite supports printing and measuring different P2P targets that are used for G7 calibration. You can measure with any supported measurement instrument, including inline measurement instruments, in which case the process can become automated without user interaction.

- 1 In the Patch layout window, select the G7 patch set you want to use:
 - P2P51 (the newer target, a revision of the original)
 - P2P25Xa (the original target)

Note: The actual values used in the targets are similar, but the newer version is a more precise version of the G7 specification.

- **2** Click **Print** and measure the patch page.
- 3 Review the G7 gray balance measurement results.

Because this is the G7 calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7 calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

4 (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.

You can choose to keep the defaults or change them.

- **5** Click **OK** to print the P2P patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7 results.
- **7** If the G7 result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

G7+ calibration workflow

G7+ calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7+ calibration is applied on the top of the Fiery server calibration. Entering the G7+ calibration process, you will select the patch layout for the P2P75+ target, measure it, inspect the results, and make adjustments to the settings, if needed.

The G7+ specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7+ calibration adjusts the color output of a printer to the G7+ specification, using measurement data from a P2P75+ target. Fiery Color Profiler Suite supports printing and measuring a P2P75+ target that is used for G7+ calibration. You can measure with any supported measurement instrument, including inline measurement instruments, in which case the process can become automated without user interaction.

- 1 In the Patch layout window, select P2P75+ from the G7+ patch set list.
- **2** Click **Print** and measure the patch page.
- **3** Review the **G7+ gray balance measurement results**.

Because this is the G7+ calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7+ calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

4 (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.

You can choose to keep the defaults or change them.

- **5** Click **OK** to print the P2P75+ patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7+ results.
- **7** If the G7+ result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

Create a color output profile for a calibration setting

To be able to create a color output profile, Fiery Color Profiler Suite must be installed and licensed on the same computer as Calibrator. When you create a custom calibration setting, you must specify a measurement instrument as the measurement method. ColorCal uses a photocopier scanner to make measurements. Therefore, ColorCal is not available as a method to create calibrations and profiles due to scanner limitations.

You must have Administrator privileges to create a custom calibration setting.

After you create a new calibration setting, you associate it with an output profile. Depending on your paper, a new calibration setting may not give satisfactory results when used with an existing output profile. If it does not, we recommend that you create a new, custom output profile based on your paper.

- If you create a new, custom output profile, printing test pages with existing output profiles is not needed. A profiling page is printed. You measure the page using Printer Profiler in Fiery Color Profiler Suite, and the resulting profile is imported to the Fiery server and associated with your new calibration setting.
- If you select an existing profile, select the profile for the paper that is the most similar to your paper. A copy of this profile with the same name as the calibration setting is created, and the existing calibration target (goal) of the profile is changed to a new target calculated using the calibration measurements. The new calibration setting is associated with this profile.
- 1 Select an output profile from the list of profiles that reside on the Fiery server.
 - Calibrator will duplicate the output profile and rename it.

2 Click Test Page.

You can print a test page to help you decide whether to associate the calibration setting with a copy of the currently selected output profile or create a new output profile.

Without a licensed copy of Fiery Color Profiler Suite, you can do test prints with a few output profiles to help you determine which one gives the best results. For best results, use a licensed Fiery Color Profiler Suite application to create an output profile optimized for the calibration just created.

The test page is printed using the currently selected output profile.

3 If Fiery Color Profiler Suite is installed on your computer, click **Create New Profile** to create a new, custom output profile.

Set calibration settings

When you print a calibration page, first specify the calibration settings by specifying the inks used and other details, as required.

Note: If G7 or G7+ calibration is applied, a message appears showing the validity of your calibration measurements.

- 1 In the **Color** tab in the **Job Properties** window, choose the color mode that is required for your production output:
 - CMYK
 - CMYK + N

Note: Where N is an additional color mode available for the printer, if supported.

2 Specify an output profile in the **Color** tab in the **Job Properties** window.

The only additional setting to modify in the **Color** tab is the output profile.

Select an output profile from the available list that closely matches your paper properties. Although Calibrator will not use the output profile for color management, Calibrator and Fiery Color Profiler Suite use proprietary information in output profiles to optimize their internal settings.

3 On a printer that requires Media Catalog, define the media from **Media Catalog** and the media size from **Size ID** on the **Media** tab in the **Job Properties** window.

On a printer where Media Catalog is optional or is not available, make sure the paper source (tray) contains the paper properties you are selecting in **Job Properties**, for example, weight, type, coating, and size. Do not use settings such as "any" or "automatic", because the calibration you are creating must be for the exact print conditions. Generic settings do not guarantee optimal results.

- 4 (Optional) Specify other job properties if you choose not to use the default settings for printing a job.
- **5** Click **Print Pages** to print the calibration page and proceed to measurement.

Print a calibration page for measurement

When you print a calibration page, specify the measurement instrument and chart size.

Calibrate the spectrophotometer to prepare it for measuring the calibration page.

Note:

At least one manual spectrophotometer is always offered, for example the Fiery ES-3000. Spectrophotometer measurement instruments are the most precise.

Some inline instruments are based on scanners needing their inks to be calibrated against the paper for best results. This is often referred to as "training". When a pair of measurement instruments is listed in the menu, the inline instrument and the inline instrument with the spectrophotometer. The setting with both instruments will create more accurate color thereafter by reusing a table optimized for your paper and inks.

- 1 In the **Patch Layout** window, set the following options:
 - Select a measurement instrument in the **Instrument** list.
 - Select a patch page size in the **Chart size** list.

Click **Custom** to specify a custom patch page size.

2 Click **Print** to print patch pages and proceed to measurement.

Follow the on-screen instructions to measure the calibration page.

Using an existing output profile

You can use an existing output profile if a matching output profile is detected on the Fiery server.

- Do one of the following:
 - Click **Continue** to create a custom output profile.
 - Click **Done** to use the existing output profile.

Obtain measurement for G7 gray balance

You can print a patch page to measure. These measurements must accurately represent the current performance of your printer.

- 1 Select **G7 calibration options** and choose one of the following options:
 - G7 gray balance calibration
 - G7+ gray balance calibration

After selecting **G7+ gray balance calibration**, you can optionally select the **High density smoothing** check box.

When a density value of 2.2 or more is achieved, the High Density Smoothing feature can help minimize banding and improve calibration. Using the feature with a density value of 2.2 or less may produce unexpected results in the output.

2 In the Set total ink limit window, click Next.

The **Patch Layout** window in FieryMeasure is displayed.

- **3** Click **Print** to continue.
- 4 Click Next.

G7 gray balance measurement summary

View the summary of the G7 gray balance measurement.

- **1** Review the G7 gray balance measurement summary.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- **3** Click **Back** to discard your initial measurements.
- **4** Click **Iterate** to repeat the process.

G7+ gray balance measurement summary

View the summary of the G7+ gray balance measurement.

- 1 Review the G7+ gray balance measurement summary.

 The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- **3** Click **Back** to discard your initial measurements.
- **4** Click **Iterate** to repeat the process.

Correction Options

Review the output correction curve.

- 1 You can set various correction options.
 - **Fade gray balance**: reduces the gray balance correction applied by the G7 NPDC correction curves above the fade adjustment value.
 - **Fade tone adjustment**: reduces the tone adjustments applied by the G7 NPDC correction curves above the fade adjustment value.
 - Fade adjustment value: reduces adjustment of tone and/or gray balance above specified percent dot value.
 - Add smoothing: smooths calibration curves for noisy or irregular calibration data.
- **2** Select **OK** to accept changes or **Default** to return to the default values.

G7 gray balance measurement results

View the results of the G7 gray balance measurement.

- **1** Review the G7 gray balance measurement results.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- 3 Click **Iterate** to print the patches with the G7 calibration curves to see if the results are passing.
- **4** Click **Back** to discard your iteration measurements.
- **5** If the results are acceptable, click **Accept** to continue the calibration process.

G7+ gray balance measurement results

View the results of the G7+ gray balance measurement.

- **1** Review the G7+ gray balance measurement results.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- **3** Click **Iterate** to print the patches with the G7+ calibration curves to see if the results are passing.
- 4 Click **Back** to discard your iteration measurements.
- **5** If the results are acceptable, click **Accept** to continue the calibration process.

Set an output profile

Before setting an output profile, Calibrator automatically validates your calibration measurements.

If your calibration measurements are unacceptable, click **Back** to remeasure.

If your calibration measurements are successful or acceptable, you can proceed to Fiery Printer Profiler to create the output profile or save the results for later.

- Choose to create a profile.
 - a) Choose Create output profile with Fiery Color Profiler Suite.
 - b) Click Next.

Fiery Printer Profiler will create an output profile for use with the calibration you have just completed.

Or choose to save the calibration results for later.

- a) Choose Save calibration now and create output profile later.
- b) Click Done.

Calibration is saved with a temporary output profile visible in Command WorkStation Profile Manager. For color management to be accurate, a custom profile must be created for use with the calibration.

Recalibrate

After you have calibration data for the Fiery server, you can recalibrate it at any time. The existing calibration will be updated to match the color benchmark produced for the Fiery server when this calibration was created.

Note: Recalibration is available only for presses without light inks or duplicate inks.

1 Start Calibrator.

- **2** If Calibrator is started from Fiery server, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.
- **3** Select one of the following tasks:
 - Recalibrate Update a calibration using the selected calibration setting.
 - Create calibration Create a new calibration and profile to define a new color printing condition on the Fiery server.
- 4 Click Next.

Note: The number of steps required to complete the selected task depends on the connected press. Some settings or options may not be available for your press model.

Update calibration for the server

To recalibrate, start with the previously saved calibration data.

- 1 Choose an existing calibration set from the list.
 - Based on the calibration you selected, the color mode is displayed. If color mode is not displayed, it is not supported on the press you calibrated.
 - The comments shown are those that were added at the time the calibration was created.
- **2** Optional: Select the down arrow by the **Next** button and choose **Load measurements from file** to allow you to bypass the print and measure workflows. This option is reserved for expert users who already have measurements for their press. It is recommended that you always print and measure your actual press.
- 3 Click Next.

Obtain measurement for linearization

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your press.

Note: This procedure applies to presses without light inks and duplicate inks.

- **1** Choose one of the following:
 - Print measurement chart
 - Select **Include visual chart** to print the measurement patches for visual inspection.
 - If you choose this option, follow the online instructions to print patch pages and measure them.
 - Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the press may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Note: When you are recalibrating, be sure to a substrate type very similar to the substrate type that was used to create the calibration. Do not change settings from the **Color** tab and the **Image** tab because these settings were automatically set by the calibration software.

Obtain measurement for verifying calibration

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your printer.

- **1** Choose one of the following:
 - · Print measurement chart

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Calibration Manager

Calibration Manager allows you to view and delete calibration settings. Comments can also be added to or deleted from individual calibrations.

Typically, calibration settings and output profiles are appropriate for specific paper and printing conditions. A calibration setting can be associated with more than one output profile.

Open Calibration Manager from Calibrator by clicking \blacksquare in the lower-left corner of the window. The window displays all the calibrations for the selected server. The following categories are shown:

- **Calibration**: Completed calibrations for the server listed by name.
- **Last calibrated**: The time of the last calibration.
- **Color mode**: The color mode is the color space of the output profiles that the calibration set supports.

You can perform a number of actions for the calibration you select in the list. Not all actions are available for all calibrations. If an action is not available, it is grayed out. The actions are:

- Edit opens a window where you can edit the basic information of a custom calibration setting.
- View measurements opens a window providing more details about the highlighted calibration.

The information displayed in the window is determined by the measurement space.

• **Delete** removes the selected calibration set.

Profiles relying on this calibration will also be deleted, after confirmation from the operator. Factory calibration sets, such as Plain, cannot be deleted.

Edit calibration setting

You can edit the basic information of a custom calibration setting. You cannot edit a factory-supplied calibration setting.

You must have Administrator privileges to edit a custom calibration setting.

Job properties (print settings) cannot be edited since any measurement data saved with the calibration setting would become invalid. To edit the job properties of a calibration setting, create a new calibration setting based on the existing one.

- 1 In **Calibration Manager**, select the calibration setting in the list and click **Edit**.
- **2** Specify the following settings:
 - Name Type a name that describes the paper name, weight, and type plus any other specific printing conditions (for example, halftone or gloss settings). The name can have a maximum of 70 characters.
 - **Comment** (Optional) Type additional descriptive information. This information appears in the list of calibration settings available on the Fiery server.

View measurements

View details of calibration in a DeltaE measurement space.

You can reset the measurement data for a particular calibration setting to the default data (either the factory default data or, for a custom calibration setting, the initial measurement data). This option is not available if the current measurement data is already the default data.

- 1 In Calibration Manager, select a calibration and click View measurements. Details of the calibration are displayed.
- **2** To reset the calibration data, click **Reset to Default Measurements**. When you perform this action, the last set of calibrator measurements is deleted.

Inkjet Delta E-based calibration workflow

When you calibrate a Fiery server, you perform the following tasks.

- Print a calibration page, which contains patches of various colors in a specific layout. You use this page to measure the current output of the press.
 - The output of the press changes with time and usage. For the most current data, always measure a newly printed calibration page.
- Measure the color values of the patches on the calibration page using a supported measurement instrument.
- Apply the measurements.
 - The measurement data is saved with the specific calibration setting. When you print a job with the calibration setting, the measurement data is used to calculate the calibration adjustment that is needed to produce the desired output (the calibration target).

Select a task

Start the Calibrator to create a new calibration setting or update an existing one for a Fiery server.

- 1 Start Calibrator.
- **2** If Calibrator is started from Fiery server, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.
- **3** Select one of the following tasks:
 - Recalibrate: Update a calibration using the selected calibration setting.
 - Create calibration: Create a new calibration and profile to define a new color printing condition on the Fiery server.
- 4 Click Next.

Note: The number of steps required to complete the selected task depends on the connected printer. Some settings or options may not be available for your printer model.

Calibrator Settings

The settings in the **Calibrator Settings** window affect various aspects of the calibration procedure. You can set the calibration status (expiration), calibration time limit, and job suspension.

Note: You must have Administrator privileges to change preferences.

In Command WorkStation, Fiery Calibrator can be opened with one of the following methods:

- Click the **Calibrate** toolbar icon in Job Center.
- Click Server > Calibrate.
- Click Server > Device Center. Under General, click Tools, and then click Calibrator.

In the Fiery Calibrator window, click the Calibrator Settings (gear) icon located in the lower-left corner.

To use dark mode, make a setting in Set Command WorkStation preferences on page 29.

Calibration status (expiration)

If you set a time limit for a calibration, an outdated calibration results in status messages in Command WorkStation and can cause a job to be suspended.

Command WorkStation displays a warning (yellow) for the job in the Job Center when the calibration will be outdated within 30 minutes, and an error (red) when the calibration is outdated.

If the calibration of a job is outdated, the Fiery server can suspend the job when you try to print it. The suspended job is not printed but remains in the Printing queue in a suspended state.

The calibration status is checked just before the job is sent to print. If the calibration becomes outdated while a job is printing, the job will not be suspended. We recommend that you calibrate before printing a long job to minimize the possibility of the calibration becoming outdated while the job is printing.

If you double-click the suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data. Select this option if output consistency is not important for this job.

Types of jobs affected by calibration limit

The Fiery server can determine if the calibration is outdated for most jobs, including:

- Jobs submitted from an application using the Fiery PostScript printer driver or Fiery VUE.
- Imported PDF and TIFF jobs.
- Jobs that have been processed (including processed VPS and VIPP jobs).

The Fiery server cannot determine if the calibration is outdated and therefore will not suspend the following types of jobs:

- PCL and PJL jobs.
- Jobs submitted from an application without using the Fiery PostScript printer driver or Fiery VUE. This includes VPS and VIPP jobs that have not been processed.
- Jobs submitted through the Direct connection. These type of jobs cannot be suspended in any case.

In addition, the Fiery server does not check the calibration of jobs that were printed using the Force Print command. The Force Print command can be used on jobs that were suspended because of a job mismatch (the paper or finishing required for the job was not available). These types of jobs, because they are being forced to print, are not checked for calibration.

Set calibration time limit and job suspension

You can set a calibration time limit and set whether Fiery Command WorkStation suspends the job if calibration has expired.

1 In the Calibrator Settings window, do any of the following:

If you choose to set an expiration time, you can set one of the following:

- To show expiration status, select **Show status in Job Center**.
- To enable job suspension, select **Suspend job printing when calibration expires**.

For a suspended job, you can do one of the following:

- Calibrate the Fiery server for the job's calibration setting(s). After you update the calibration measurements, select the suspended job and print it.
- Continue printing the job using the outdated measurement data if output consistency is not important for the job.
- To enable Zero-touch recalibration, select Calibrate job with inline sensor automatically.

- **2** Optionally, select the **Create G7 calibrations** check box to calibrate and print profiling measurement patches. G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (patch page).
- **3** Click **Factory Defaults** to reset the settings to their original defaults.
- **4** Click **Save** to save the settings.

Create calibration for the server

To create a calibration, enter a name and other details, as required.

The required information is dependent on the Fiery server and printer that you are calibrating.

1 Type a calibration name of your choice.

Note: The calibration name should be unique for each server. The name you type must not already be used by a calibration setting or profile on the server.

- 2 (Optional) Select G7 calibration options.
- **3** (Optional) Choose from one of the following calibration targets:
 - Select G7 gray balance calibration.

G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (patch page).

• Select G7+ gray balance calibration.

After selecting **G7+ gray balance calibration**, you can optionally select the **High density smoothing** check box.

When a density value of 2.2 or more is achieved, the High Density Smoothing feature can help minimize banding and improve calibration. Using the feature with a density value of 2.2 or less may produce unexpected results in the output.

Note: To use G7 and G7+ gray balance calibration, Fiery Color Profiler Suite must be installed and licensed. The option is otherwise grayed out.

4 Click Next.

G7 calibration workflow

G7 calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7 calibration is applied on the top of the Fiery server calibration. Entering the G7 calibration process, you will select the patch layout for the P2P target you wish to use, measure them, inspect the results, and make adjustments to the settings, if needed.

The G7 specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7 calibration adjusts the color output of a printer to the G7 specification, using measurement data from a specific G7 target (P2P target). Fiery Color Profiler Suite supports printing and measuring different P2P targets that are used for G7 calibration. You can measure with any supported measurement

instrument, including inline measurement instruments, in which case the process can become automated without user interaction.

- 1 In the Patch layout window, select the G7 patch set you want to use:
 - P2P51 (the newer target, a revision of the original)
 - P2P25Xa (the original target)

Note: The actual values used in the targets are similar, but the newer version is a more precise version of the G7 specification.

- **2** Click **Print** and measure the patch page.
- 3 Review the G7 gray balance measurement results.

Because this is the G7 calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7 calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

- **4** (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.
 - You can choose to keep the defaults or change them.
- **5** Click **OK** to print the P2P patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7 results.
- **7** If the G7 result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

G7+ calibration workflow

G7+ calibration is conducted between the Fiery server calibration and printing of profiling measurement patches.

G7+ calibration is applied on the top of the Fiery server calibration. Entering the G7+ calibration process, you will select the patch layout for the P2P75+ target, measure it, inspect the results, and make adjustments to the settings, if needed.

The G7+ specification defines standard grayscale curves that can be used to create a common neutral appearance of output on different printers. G7+ calibration adjusts the color output of a printer to the G7+ specification, using measurement data from a P2P75+ target. Fiery Color Profiler Suite supports printing and measuring a P2P75+ target that is used for G7+ calibration. You can measure with any supported measurement instrument, including inline measurement instruments, in which case the process can become automated without user interaction.

- 1 In the Patch layout window, select P2P75+ from the G7+ patch set list.
- **2** Click **Print** and measure the patch page.

3 Review the G7+ gray balance measurement results.

Because this is the G7+ calibration run, it is expected that the results are failing. It is the measurements from this target that will be used to calculate the NPDC curves necessary for G7+ calibration.

The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.

- **4** (Optional) Click **Correction options** to display the correction curve, and expose advanced options applied to the formation of the correction curves.
 - You can choose to keep the defaults or change them.
- **5** Click **OK** to print the P2P75+ patch page again with the NPDC curves applied.
- **6** Measure the patch pages and view the G7+ results.
- 7 If the G7+ result is passing (all results show in green), click **Next**. If the result is failing (any result highlighted in red), then click **Iterate** to repeat the process. Additional iterations will not lead to better results. Additional iterations will not lead to better results. You can perform a maximum of four iterations.

Create a color output profile for a calibration setting

To be able to create a color output profile, Fiery Color Profiler Suite must be installed and licensed on the same computer as Calibrator. When you create a custom calibration setting, you must specify a measurement instrument as the measurement method. ColorCal uses a photocopier scanner to make measurements. Therefore, ColorCal is not available as a method to create calibrations and profiles due to scanner limitations.

You must have Administrator privileges to create a custom calibration setting.

After you create a new calibration setting, you associate it with an output profile. Depending on your paper, a new calibration setting may not give satisfactory results when used with an existing output profile. If it does not, we recommend that you create a new, custom output profile based on your paper.

- If you create a new, custom output profile, printing test pages with existing output profiles is not needed. A profiling page is printed. You measure the page using Printer Profiler in Fiery Color Profiler Suite, and the resulting profile is imported to the Fiery server and associated with your new calibration setting.
- If you select an existing profile, select the profile for the paper that is the most similar to your paper. A copy of this profile with the same name as the calibration setting is created, and the existing calibration target (goal) of the profile is changed to a new target calculated using the calibration measurements. The new calibration setting is associated with this profile.
- 1 Select an output profile from the list of profiles that reside on the Fiery server.
 - Calibrator will duplicate the output profile and rename it.

2 Click Test Page.

You can print a test page to help you decide whether to associate the calibration setting with a copy of the currently selected output profile or create a new output profile.

Without a licensed copy of Fiery Color Profiler Suite, you can do test prints with a few output profiles to help you determine which one gives the best results. For best results, use a licensed Fiery Color Profiler Suite application to create an output profile optimized for the calibration just created.

The test page is printed using the currently selected output profile.

3 If Fiery Color Profiler Suite is installed on your computer, click **Create New Profile** to create a new, custom output profile.

Set calibration settings

When you print a calibration page, first specify the calibration settings by specifying the inks used, preset, and other details, as required.

Note: If G7 or G7+ calibration is applied, a message appears showing the validity of your calibration measurements.

- 1 In the **Color** tab in the **Job Properties** window, choose the color mode that is required for your production output:
 - CMYK
 - CMYK + N

Note: Where N is an additional color mode available for the press, if supported.

- **2** Specify an output profile in the **Color** tab in the **Job Properties** window.
 - The only additional setting to modify in the **Color** tab is the output profile.
 - Select an output profile from the available list that closely matches your substrate properties. Although Calibrator will not use the output profile for color management, Calibrator and Fiery Color Profiler Suite use proprietary information in output profiles to optimize their internal settings.
- **3** On a press that requires Substrate Catalog, define the substrate from **Substrate Catalog** and the substrate size from **Size ID** on the **Substrate** tab in the **Job Properties** window.
 - On a press where Substrate Catalog is optional or is not available, make sure the substrate source (tray) contains the substrate properties you are selecting in **Job Properties**, for example, weight, type, coating, and size. Do not use settings such as "any" or "automatic", because the calibration you are creating must be for the exact print conditions. Generic settings do not guarantee optimal results.
- 4 (Optional) Specify other job properties if you choose not to use the default settings for printing a job.
- **5** For presses requiring manual ink limiting, select the **Apply preliminary ink values** check box, click **Settings** to define the ink limits, and then click **OK**.
 - Click **Link** to link all the ink limits together and then you can change only one ink value. If only 100% of ink on substrate gives an issue, then use this option, otherwise you can skip this step. Reprint with option turned on.
 - Click **Reset** to reset to the default ink values.

Note: If the Fiery server supports light inks, then the light ink limits are calculated automatically depending on the normal ink limits.

6 Click **Print Pages** to print the calibration page and proceed to measurement.

Print a calibration page for measurement

When you print a calibration page, specify the measurement instrument and chart size.

Calibrate the spectrophotometer to prepare it for measuring the calibration page.

Note:

At least one manual spectrophotometer is always offered, for example the Fiery ES-3000. Spectrophotometer measurement instruments are the most precise.

Some inline instruments are based on scanners needing their inks to be calibrated against the paper for best results. This is often referred to as "training". When a pair of measurement instruments is listed in the menu, the inline instrument and the inline instrument with the spectrophotometer. The setting with both instruments will create more accurate color thereafter by reusing a table optimized for your paper and inks.

- 1 In the Patch Layout window, set the following options:
 - Select a measurement instrument in the **Instrument** list.
 - Select a patch page size in the Chart size list.
 Click Custom to specify a custom patch page size.
- **2** Click **Print** to print patch pages and proceed to measurement.

Follow the on-screen instructions to measure the calibration page.

Using an existing output profile

You can use an existing output profile if a matching output profile is detected on the Fiery server.

- Do one of the following:
 - Click **Continue** to create a custom output profile.
 - Click **Done** to use the existing output profile.

Set ink controls

After you have measured the patches, you can view the ink usage and consumption that will be applied to linearize your press.

The Set ink controls feature is available for presses requiring manual ink limiting.

You can view individual channels by clicking the tab for each color channel.

- 1 Optional: Specify the ink usage values for settings shown.
 - Click **Reset** to return to the original ink values.
- **2** Click **Next** to continue the calibration process.

User-selectable ink splitting using presets

Calibrator supports double-hit of ink when a printer has two containers of the same colorant. This technique allows for much denser saturation than a single hit can produce.

The Ink splitting feature may be available depending on the press.

A Calibrator preset lets you control how the requested amount of ink is distributed between the two containers.

In Calibrator, you can define the ink split method for duplicated inks at the start of the calibration process using one of the available presets. The presets offered in the **Select the ink split method for duplicate inks** list are as follows:

- Second ink starts at 30% The second ink will not be used until the requested amount reaches 30%.
- Second ink starts at 38% The second ink will not be used until the requested amount reaches 38%.
- Second ink starts at 46% (default) The second ink will not be used until the requested amount reaches 46%.
- Second ink starts at 55% The second ink will not be used until the requested amount reaches 55%.
- Second ink starts at 2% The second ink will not be used until the requested amount reaches 2%.
- **Equal ink split** Both inks start at 0% and are equally split.
- Equal ink split, -10% dot gain Both inks start at 0% and are equally split. There is approximately a 10% ink reduction in mid-tones.
- Equal ink split, -20% dot gain Both inks start at 0% and are equally split. There is approximately a 20% ink reduction in mid-tones.

Set total ink limit for linearization

After you have successfully measured the patch page provided for the total ink limit, the results are displayed and you can make some adjustments.

The total ink limit feature is available for presses requiring manual ink limiting.

- **1** Choose one of the following:
 - Choose a value for the total ink limit.
 - The value displayed is the value suggested for your press without additional measurements required. You can enter a numerical value of your choosing should you decide not to use the suggested value.
 - Choose a value from a printed visual chart.
 - The value displayed is the value suggested for your press based on a specific column number in the chart. You can select a column number of your choosing should you decide not to use the suggested value. The printed visual chart may reveal issues that measurements alone cannot detect. For instance, ink might seep through the substrate if too much is allowed. In this case, you will want to use a lower value than the suggested one.
- 2 Optional: Print a visual chart.
 - The Patch Layout window in FieryMeasure is displayed. Click Print to continue.
- 3 Click Next.

Now watch the video on how to set the total ink limit here.

Obtain measurement for G7 gray balance

You can print a patch page to measure. These measurements must accurately represent the current performance of your printer.

- 1 Select **G7 calibration options** and choose one of the following options:
 - G7 gray balance calibration
 - G7+ gray balance calibration

After selecting **G7+ gray balance calibration**, you can optionally select the **High density smoothing** check box.

When a density value of 2.2 or more is achieved, the High Density Smoothing feature can help minimize banding and improve calibration. Using the feature with a density value of 2.2 or less may produce unexpected results in the output.

2 In the Set total ink limit window, click Next.

The Patch Layout window in FieryMeasure is displayed.

- **3** Click **Print** to continue.
- 4 Click Next.

G7 gray balance measurement summary

View the summary of the G7 gray balance measurement.

- 1 Review the G7 gray balance measurement summary.

 The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- **3** Click **Back** to discard your initial measurements.
- **4** Click **Iterate** to repeat the process.

G7+ gray balance measurement summary

View the summary of the G7+ gray balance measurement.

- 1 Review the G7+ gray balance measurement summary.

 The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.

- **3** Click **Back** to discard your initial measurements.
- **4** Click **Iterate** to repeat the process.

Correction Options

Review the output correction curve.

- 1 You can set various correction options.
 - **Fade gray balance**: reduces the gray balance correction applied by the G7 NPDC correction curves above the fade adjustment value.
 - **Fade tone adjustment**: reduces the tone adjustments applied by the G7 NPDC correction curves above the fade adjustment value.
 - Fade adjustment value: reduces adjustment of tone and/or gray balance above specified percent dot value.
 - Add smoothing: smooths calibration curves for noisy or irregular calibration data.
- **2** Select **OK** to accept changes or **Default** to return to the default values.

G7 gray balance measurement results

View the results of the G7 gray balance measurement.

- **1** Review the G7 gray balance measurement results.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.
- 3 Click **Iterate** to print the patches with the G7 calibration curves to see if the results are passing.
- **4** Click **Back** to discard your iteration measurements.
- **5** If the results are acceptable, click **Accept** to continue the calibration process.

G7+ gray balance measurement results

View the results of the G7+ gray balance measurement.

- **1** Review the G7+ gray balance measurement results.
 - The NPDC (Neutral Print Density Curve) is displayed separately for CMY (composite) and K (black). Gray balance is plotted as a*b*. In the table, the weighted average must be less than 1.5 to show as green. The weighted maximum must be less than 3 to show as green.
- **2** Click **Correction Options** to display the correction curve, and expose advanced options applied to the formation of the correction curves. You can choose to keep the defaults or change them.

- **3** Click **Iterate** to print the patches with the G7+ calibration curves to see if the results are passing.
- **4** Click **Back** to discard your iteration measurements.
- **5** If the results are acceptable, click **Accept** to continue the calibration process.

Set an output profile

You can proceed to Fiery Printer Profiler to create the output profile, or save the results for later.

- Choose to create a profile.
 - a) Choose Create output profile with Fiery Color Profiler Suite.
 - b) Click Next.

Fiery Printer Profiler will create an output profile for use with the calibration you have just completed.

Or choose to save the calibration results for later.

- a) Choose Save calibration now and create output profile later.
- b) Click Done.

Calibration is saved with a temporary output profile visible in Command WorkStation Profile Manager. For color management to be accurate, a custom profile must be created for use with the calibration.

Recalibrate

After you have calibration data for the Fiery server, you can recalibrate it at any time. The existing calibration will be updated to match the color benchmark produced for the Fiery server when this calibration was created.

Note: Recalibration is available only for presses without light inks or duplicate inks.

- **1** Start Calibrator.
- **2** If Calibrator is started from Fiery server, click **Select Fiery server** in the **Select a task** window, and select the Fiery server from the list. If the Fiery server is not in the list, click the plus sign to add it using the IP address, DNS name, or by searching.
- **3** Select one of the following tasks:
 - Recalibrate Update a calibration using the selected calibration setting.
 - Create calibration Create a new calibration and profile to define a new color printing condition on the Fiery server.
- 4 Click Next.

Note: The number of steps required to complete the selected task depends on the connected press. Some settings or options may not be available for your press model.

Update calibration for the server

To recalibrate, start with the previously saved calibration data.

- 1 Choose an existing calibration set from the list.
 - Based on the calibration you selected, the color mode is displayed. If color mode is not displayed, it is not supported on the press you calibrated.
 - The comments shown are those that were added at the time the calibration was created.
- **2** Optional: Select the down arrow by the **Next** button and choose **Load measurements from file** to allow you to bypass the print and measure workflows. This option is reserved for expert users who already have measurements for their press. It is recommended that you always print and measure your actual press.
- 3 Click Next.

Obtain measurement for linearization

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your press.

Note: This procedure applies to presses without light inks and duplicate inks.

- **1** Choose one of the following:
 - Print measurement chart

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the press may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Note: When you are recalibrating, be sure to a substrate type very similar to the substrate type that was used to create the calibration. Do not change settings from the **Color** tab and the **Image** tab because these settings were automatically set by the calibration software.

Obtain measurement for verifying calibration

You can print a patch page to measure, or import measurements from a recent calibration. These measurements must accurately represent the current performance of your printer.

- **1** Choose one of the following:
 - · Print measurement chart

Select **Include visual chart** to print the measurement patches for visual inspection.

If you choose this option, follow the online instructions to print patch pages and measure them.

• Import measurements from file

Note: Loading measurements from file is most useful for tests and demonstrations. It is otherwise generally not recommended. Best results are obtained when measurement pages for all calibration creation steps are printed and measured in a single session.

Keep in mind the following:

- The response of the printer may have changed since the measurement file was saved.
- Measurement files do not contain information on how the measurement pages were printed. Default job properties are assumed.
- Depending on your Calibrator version, the option to import measurements from a file is available in the **Calibrator** window or the measurement instruments list.
- When calibration settings are created, the **Job Properties** window opens and allows you to specify how the measured samples are printed.

When you select this option, you are automatically taken to the location where the measurements files are stored.

If you choose this option, the measurements will be displayed in the next window.

2 Click Next.

If you selected **Print measurement chart** in the first step, the **Patch Layout** window in FieryMeasure is displayed. In the **Patch Layout** window, select the instrument and the chart size. Click **Print** to continue.

Calibration Manager

Calibration Manager allows you to view and delete calibration settings. Comments can also be added to or deleted from individual calibrations.

Typically, calibration settings and output profiles are appropriate for specific paper and printing conditions. A calibration setting can be associated with more than one output profile.

Open Calibration Manager from Calibrator by clicking \blacksquare in the lower-left corner of the window. The window displays all the calibrations for the selected server. The following categories are shown:

- **Calibration**: Completed calibrations for the server listed by name.
- **Last calibrated**: The time of the last calibration.
- **Color mode**: The color mode is the color space of the output profiles that the calibration set supports.

You can perform a number of actions for the calibration you select in the list. Not all actions are available for all calibrations. If an action is not available, it is grayed out. The actions are:

- Edit opens a window where you can edit the basic information of a custom calibration setting.
- View measurements opens a window providing more details about the highlighted calibration.

The information displayed in the window is determined by the measurement space.

Delete removes the selected calibration set.

Profiles relying on this calibration will also be deleted, after confirmation from the operator. Factory calibration sets, such as Plain, cannot be deleted.

Edit calibration setting

You can edit the basic information of a custom calibration setting. You cannot edit a factory-supplied calibration setting.

You must have Administrator privileges to edit a custom calibration setting.

Job properties (print settings) cannot be edited since any measurement data saved with the calibration setting would become invalid. To edit the job properties of a calibration setting, create a new calibration setting based on the existing one.

- 1 In **Calibration Manager**, select the calibration setting in the list and click **Edit**.
- **2** Specify the following settings:
 - **Name** Type a name that describes the paper name, weight, and type plus any other specific printing conditions (for example, halftone or gloss settings). The name can have a maximum of 70 characters.
 - **Comment** (Optional) Type additional descriptive information. This information appears in the list of calibration settings available on the Fiery server.

View measurements

View details of calibration in a DeltaE measurement space.

You can reset the measurement data for a particular calibration setting to the default data (either the factory default data or, for a custom calibration setting, the initial measurement data). This option is not available if the current measurement data is already the default data.

- 1 In Calibration Manager, select a calibration and click View measurements. Details of the calibration are displayed.
- 2 To reset the calibration data, click Reset to Default Measurements.
 When you perform this action, the last set of calibrator measurements is deleted.

Black-and-white calibration workflow

When you calibrate a Fiery server, you perform the following tasks.

- Print a calibration page, which contains patches of various shades of gray in a specific layout. You use this page to measure the current output of the printer.
 - The output of the printer changes with time and usage. For the most current data, always measure a newly printed calibration page.
- Measure the gray values of the patches on the calibration page using a spectrophotometer.
- Apply the measurements.

The measurement data is saved with the specific calibration setting. When you print a job with the calibration setting, the measurement data is used to calculate the calibration adjustment that is needed to produce the desired output (the calibration target).

Update calibration for the server using a measurement instrument

After you have calibration data for the Fiery server, you can recalibrate it at any time. The existing calibration will be updated to match the black-and-white benchmark produced for the Fiery server when this calibration was created.

- Start Calibrator.
- **2** Select a measurement instrument in the **Measurement method** list.
- **3** Select the desired paper source in the **Paper source** list.

Note: Be sure that the paper source contains paper that is appropriate for the calibration setting. If a warning appears under the **Paper source** setting, it might be because the paper source does not match the calibration setting. You can either select a different calibration setting or a different paper source.

4 Click **Next** and proceed to measurement.

Follow the on-screen instructions to measure the calibration page.

Update calibration for the server

To recalibrate, start with the previously saved calibration data.

- **1** Choose an existing calibration set from the list.
 - The comments shown are those that were added at the time the calibration was created.
- **2** Optional: Select the down arrow by the **Next** button and choose **Load measurements from file** to allow you to bypass the print and measure workflows. This option is reserved for expert users who already have measurements for their printer. It is recommended that you always print and measure your actual printer.
- 3 Click Next.

View calibration summary

After you measure a calibration page, the measurement results are ready to be applied. Applying the measurement data overwrites the existing data.

- Do one of the following:
 - Click **Apply & Close** to save the calibration settings.
 - Click **Cancel** to cancel the calibration. When you perform this action, the calibration settings will not be updated.

Use 1-step color management to calibrate and profile from a tray

The 1-step color management feature allows you to assign a custom calibration and baseline profile for the selected paper in the specified tray.

Note: The 1-step color management feature is supported on a Fiery server with Fiery system software FS600/600 Pro and later. Please refer to the product-specific user documentation to determine if your Fiery server supports it.

Only the calibration is refreshed if a profile is already associated with the paper. Otherwise, a custom calibration and profile will be created and associated with the paper in the Paper Catalog or Media Catalog.

When the printer has a built-in compatible color measurement instrument, such as an inline sensor, you can automatically create a calibration and profile using the inline sensor in one step.

A baseline calibration and color output profile are automatically optimized to the color produced when the default print settings in the **Job Properties** window are used with the specified media. You can use the Set Defaults feature to customize the Fiery server by modifying the default job properties settings.

For custom calibrations and profiles used for non-default imaging settings and options, you must use the Fiery Color Profiler Suite.

When the inline embedded measurement instrument cannot handle a media size, you can use a high-quality handheld spectrophotometer. The process is the same, except that you measure the color manually instead of automatically.

You can calibrate a tray for a specific media using the inline sensor or handheld spectrophotometer, such as the ES-3000 or X-Rite i1Pro3.

Keep in mind the following when managing the number of custom color output profiles needed to reach a level of color quality acceptable for your applications. A reduced number of output profiles results in less calibration maintenance.

- When you print jobs, make the following selections in the Job Properties window:
 - Select a paper from the **Paper Catalog** or **Media Catalog** list on the **Media** tab.
 - Select **Use job-defined settings** for the **Output profile** print option on the **Color** tab.
 - The Fiery server color management will automatically use the output profile associated with your paper in Paper Catalog or Media Catalog.
- When you add a new paper to your inventory, add it to the Paper Catalog or Media Catalog. Insert the paper in a
 tray, associate the paper with its Paper Catalog or Media Catalog entry, and then right-click the tray to select
 Calibrate to run 1-step color management. A custom baseline calibration and output profile will be created and
 installed in the Fiery server for the Paper Catalog or Media Catalog paper.
- Use the 1-step color management for only one paper, specifying a tray compatible with the inline sensor. Larger sheets in the landscape orientation often require less paper than smaller sheets in the portrait orientation.
- When papers are available in many weights and sizes and produce the same color, you can avoid the creation of multiple profiles and future maintenance of multiple calibrations.
 - Manually set every similar paper in Paper Catalog or Media Catalog to the same output profile. The same calibration and profile will be applied to all papers. To test if the color of two papers is close enough to justify if only one calibration and profile are sufficient, right-click each tray in Command WorkStation Job Center, perform a calibration and compare the color output of each paper.
- You can force the creation of a new calibration and color output profile by changing the association in Paper Catalog or Media Catalog from a specific output profile to using **Server's default** before performing the 1-step color management.
- You can set the Fiery server for Zero-touch recalibration. For more information, see Zero-touch recalibration on page 220. The custom calibration produced by 1-step color management is automatically maintained by the inline sensor whenever a job relies on a calibration not recently refreshed.

Assign a custom calibration and baseline profile for the selected paper in a tray

The 1-step color management feature allows you to assign a custom calibration and baseline profile for the selected paper in the specified tray.

- 1 In Command WorkStation, right-click a tray and select 1-step color management.
- **2** Select the measurement instrument from the list and click **Next**.

Do one of the following:

• For a printer with an inline sensor, the printer prints and measures the calibration automatically. If you calibrate the media for the first time, the printer prints and measures the profile following the calibration.

Keep in mind the following:

- This workflow is more efficient if you right-click on a tray with the same media in a size and orientation that is compatible with the inline sensor.
- Only recalibration is done when a custom profile is already assigned in Paper Catalog or Media Catalog.
 A new calibration is not created.
- If the inline sensor does not support the selected media size or a comparable paper is not available, choose a different measurement instrument to continue.
- For a handheld spectrophotometer, follow the online instructions to measure the printed color patches.
- **3** If a matching output profile is detected, do one of the following:
 - Click Continue to create a custom output profile.
 - Click **Done** to use the existing output profile.

4 Click Done.

The printer calibrates the color for the selected media for use with the newly created color profile, or the printer refreshes the calibration for the chosen media if a profile already exists.

If you measured the color patches manually, you can create a custom profile to get more accurate color. To create a custom profile, click **Create new profile** and follow the online instructions.

If two papers are similar enough that they do not justify a custom profile for each, you can manually assign an existing profile in Paper Catalog or Media Catalog. For example, Hammermill 20 and Hammermill 24 can use the same profile.

Now watch the video here.

Zero-touch recalibration

The Zero-touch recalibration feature checks that jobs use an up-to-date calibration. If the calibration is outdated, Zero-touch recalibration will automatically calibrate the job with the inline sensor.

Note: The Zero-touch recalibration feature is supported on a Fiery server with Fiery system software FS600/600 Pro and later. Please refer to the product-specific user documentation to determine if your Fiery server supports it.

For information about turning on the Zero-touch calibration feature in the **Calibrator Settings** window, see the *Fiery Calibrator Help*.

Zero-touch recalibration is triggered when a job is released to the printer, and a check is made for outdated calibrations.

The Job Summary Pane in Command WorkStation Job Center displays a calibration warning (red) when a job has an outdated calibration.

The Fiery server checks the calibration status before the job is sent to print. If the calibration becomes outdated while a job is printing, the job will not be suspended. We recommend that you calibrate before printing a long job to minimize the possibility of the calibration becoming outdated while the job is printing.

Because Zero-touch recalibration is limited to CMYK and grayscale color modes, jobs with CMYK+ and calibratable specialty colors will only be suspended.

Note: If other jobs were already suspended by the Calibrator Settings **Suspend job printing when calibration expires**, prior to changing the Calibrator Settings to **Calibrate job with inline sensor automatically**, these previously suspended jobs will not be released automatically. After the Calibrator setting is changed, you can release all the suspended jobs at once to engage the automatic recalibration process.

Zero-touch recalibration will be more efficient if a tray always contains an appropriate quantity of paper the inline spectrophotometer can measure. When Zero-touch recalibration starts, the software can automatically find the best match between a paper the inline spectrophotometer supports and the paper requested by your jobs. The inline spectrophotometer is not always compatible with the paper used by your jobs.

Zero-touch recalibration will not be able to determine accurately the calibration used by a job unless one of the two conditions are specified in the **Job Properties** window:

- Job Properties specifies any media type and an explicit tray associated with Paper Catalog or Media Catalog
- A specific Paper Catalog or Media Catalog entry

If none of the previous conditions is met, the job is suspended and not automatically calibrated.

Keep in mind the following for better automatic control by the Zero-touch recalibration feature:

- Zero-touch recalibration will use the tray specified by your job if the inline spectrophotometer supports the requested paper. Otherwise, an alternate tray is automatically selected.
- Use the 1-step color management feature for every new paper at least once to prevent situations where the output profile for the new paper is set to its factory value, "Printer's default." Color quality control is more precise when a specific output profile is assigned.
- In the Media tab of the Job Properties window, set Paper Catalog or Media Catalog to the name of your paper, and in the Color tab, set the Output profile to Use job defined settings.
- Calibration with the inline spectrophotometer consumes less paper for some paper sizes and orientations. The landscape orientation is typically more efficient. Sometimes, it is possible to save supplies by proactively calibrating using the 1-Step color management feature, for instance, at the beginning of a day or when loading papers in the printer trays. In Command WorkStation Job Center, make sure to associate each tray with a Paper Catalog or Media Catalog entry.

Types of jobs affected by calibration limit

The Fiery server can determine if the calibration is outdated for most jobs, including:

- Jobs submitted from an application using the Fiery PostScript printer driver.
- Only printed PostScript; imported PostScript, PDF, and TIFF jobs.
- Jobs that have been processed (including processed VPS and VIPP jobs).

The Fiery server cannot determine if the calibration is outdated and therefore will not suspend the following types of jobs:

- Jobs submitted from an application without using the Fiery PostScript printer driver. This includes VPS and VIPP jobs that have not been processed.
 - It is recommended that you use the 1-step color management feature to calibrate the papers used by the VDP jobs.
- Jobs submitted through the Direct connection. These type of jobs cannot be suspended in any case.

In addition, the Fiery server does not check the calibration of jobs that were printed using the Force Print command. The Force Print command can be used on jobs that were suspended because of a job mismatch (the paper or

finishing required for the job was not available). These types of jobs, because they are being forced to print, are not checked for calibration.

Now watch the video here.

Image enhancement

The Fiery server supports two image enhancement methods to adjust tone, color, sharpness, and red-eye in images.

- Use the **Apply image enhancement** print option to make simple, quick adjustments that do not require visual inspection before printing.
- Use Image Enhance Visual Editor (IEVE) to make specific adjustments that require fine-tuning and visual inspection before printing.

Although IEVE and **Apply image enhancement** are independent of each other, you should not use IEVE and **Apply image enhancement** to adjust images in a job at the same time. Using both at the same time applies settings from both, which may have unexpected effects on the appearance and quality of images.

Customize Image Enhance settings

The default settings for the **Apply Image Enhancement** print option automatically optimize the exposure, color, shadows, highlights, and sharpness of each specified image in a job. If the default settings do not provide satisfactory results, you can customize the Apply Image Enhancement settings for properties such as brightness, contrast, and red-eye correction.

The **Apply Image Enhancement** print option applies photo finishing enhancement to color images on specified pages or sheets of a job when printed. This option affects only photographic images, but does not affect graphics such as logos, charts, or text.

The **Apply Image Enhancement** print option is located in the **Image** tab of the printer drivers and Job Properties. For more information about this print option, see *Printing*, which is part of the user documentation set.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 In Device Center, click Image Enhance > Workflows.
- 3 Click Edit.

- 4 Click **Custom Settings**, modify the settings, and then click **OK**.
 - Exposure Enables the Dynamic Correction, Brightness, and Contrast controls.

When **Dynamic Correction** is selected, the Fiery server analyzes each image and automatically applies the correct contrast and brightness values. Dynamic correction attempts to fill the full dark to light range.

You can also specify contrast and brightness adjustments manually. When **Dynamic Correction** is selected, any manual adjustments that you make to the **Brightness** and **Contrast** controls are applied in addition to **Dynamic Correction**. If **Dynamic Correction** is not selected, only the manual **Brightness** and **Contrast** adjustments are applied to the original image.

• Color - Enables the Cast Correction, Tone, and Saturation controls.

When **Cast Correction** is selected, the Fiery server analyzes each image and automatically corrects the tone and saturation.

You can also specify tone and saturation adjustments manually. When **Cast Correction** is selected, any manual adjustments that you make to the **Tone** and **Saturation** controls are applied in addition to automatic **Cast Correction**. If **Cast Correction** is not selected, only the manual **Tone** and **Saturation** adjustments are applied to the original image.

Shadows & Highlights - Enables the Auto Correction, Shadows, and Highlights controls.

When **Auto Correction** is selected, the Fiery server analyzes each image and attempts to correct for shadows that are too dark and highlights that are too light. You can specify **Shadows** and **Highlights** enhancements manually if you clear the **Auto Correction** option first.

• Sharpness - Enables the Non-skin Sharpness and Skin Sharpness controls.

The **Non-skin Sharpness** control affects the colors besides flesh tones in the image. The **Skin Sharpness** control affects flesh tones in an image. The range for each control is from -100 (softening) to 100 (sharpening).

• **Red-Eye Correction** - Red-eye is the condition in which a light source, usually a flash built into a camera, reflects from the retina in the subject's eye, causing a red pupil in the photo.

When **Red-Eye Correction** is selected, the Fiery server analyzes the image and attempts to identify and correct the red-eye condition. You can adjust the size of the correction area using the Region control, where 100 corresponds to just the area of the red pupil.

Image Enhance Visual Editor

Image Enhance Visual Editor (IEVE) is an image enhancing application that provides a visual workspace for adjusting individual images in PDF or PostScript jobs submitted to the Fiery server, including jobs submitted through Fiery JDF workflows.

Adjustments made in IEVE only affect images in the job on the Fiery server. Adjustments do not apply to the original source document.

With IEVE, you can:

- Apply enhancements to one or more images on one or more pages.
- See the effects of settings on images as you apply the settings and fine-tune images before printing.
- Save sets of settings as presets, which you can later apply to other jobs.

Limitations

- Edit a job in IEVE on one client computer at a time. Editing on multiple client computers can give unexpected
 results.
- If you edit and save a job in IEVE and then open the job in an earlier version of IEVE, some edits may be removed.
- IEVE is limited to opening files that have 100 pages or fewer.
- IEVE is limited to extracting 50 images from a single page.
- If the edges of an image are not at right angles to the other edges of that image and the edges of the page, the image cannot be selected for editing. This applies to images rotated at non-right angles from the base of the page and images that are not square or rectangular.
- If a job has an image that is split into tiles with mixed orientations or dimensions, IEVE will not stitch these tiles together and consider them as separate images, especially when one tile is in portrait and the adjacent tile is in landscape. The printed output is not affected.

Start Image Enhance Visual Editor

You open Image Enhance Visual Editor (IEVE) from jobs in Command WorkStation.

• In the **Hold** queue, right-click the job and then select **Image Enhance Visual Editor**.

Open a large job

Sometimes, a large job may not open or display correctly if you install Image Enhance Visual Editor (IEVE) on a Fiery server with a monitor, keyboard, and mouse kit. Increasing the hard disk space available on the Fiery server may correct this problem.

- 1 Close IEVE and Command WorkStation.
- **2** Create a folder for the temporary files on the E: drive. Name the folder **Temp**.
- **3** On the Windows Start menu, click **Control Panel**.
- 4 In Control Panel, double-click System.
- 5 In the System Properties window, click the Advanced tab. Click Environment Variables.
- **6** In the **Environment Variables** window, at the top, select the **TEMP** variable. Click **Edit**.
- 7 In the Edit User Variable window, enter the path to the Temp folder you created in step 2. Click OK.
- **8** Repeat steps 6-7 for the TMP variable. Use the same path as in step 7 on page 224.

Note: The next time you open a large job, IEVE will use this temporary folder and the job should render correctly.

Adjusting an image

To adjust images, use the features in the **Adjustments** pane available in the **Preview** tab or the **Split** tab. Several tools are provided to help you make adjustments.

When making adjustments, you can either:

- Apply a preset to the image.
- Edit the settings in the Adjustments pane as you want. Not all settings may be available for your image.

Note: Some job properties that do not affect the appearance of images, such as finishing options, might not be applied to the proof print.

The most common settings for image enhancement are:

- **Brightness** Increases or decreases the brightness of an image.
- **Contrast** Increases or decreases the contrast of an image.
- **Definition** Increases or decreases the amount of definition (detail) in an image without affecting the amount of contrast in the image.

Adjust highlights & shadows

To enhance visibility in highlight or shadow areas that are hard to see because of exposure or lighting problems, you can use the following **Highlights & Shadows** settings to make them more visible:

• Auto enhance highlights and shadows - Calculates optimal highlights and shadows values and automatically applies the values to the image, updating the Highlights and Shadows settings.

Note: If the image is already optimized or nearly optimized, you may not notice a difference.

- **Highlights** Enhances the details in highlighted portions of an image to make the details more visible.
- Shadows Enhances the details in areas of shadow to make the details more visible.

Adjust color

To correct an imbalance in the colors of an image, you can use the following **Color** settings to affect the overall color balance and saturation:

• **Auto adjust color balance** - Automatically corrects the **Temperature** and **Tint** of the image to achieve the best appearance.

Note: If the image is already optimized or nearly optimized, you may not notice a difference.

- **Temperature** Sets the blue-yellow color balance (the b* channel in L*a*b* color space).
- **Tint** Sets the red-green color balance (the a* channel in L*a*b* color space).
- Saturation Increases or decreases the saturation of all colors in an image.

- **Fleshtone Saturation** Increases or decreases the saturation of only fleshtones in an image, rather than the saturation of the entire image.
- Lock saturation and fleshtone saturation together When selected, increasing or decreasing a Saturation setting increases or decreases other Saturation settings the same amount. For example, if Saturation is 10, Fleshtone Saturation is 20, and the lock is on, then increasing Saturation to 15 increases Fleshtone Saturation to 25 at the same time.

Adjust sharpness

To soften or add clarity to an image, you can use the following **Sharpness** settings to decrease or increase the sharpness of your image:

- **Sharpness** Affects the non-fleshtone colors in an image.
- Fleshtone Sharpness Affects fleshtones in an image.

Note: Setting **Sharpness** and **Fleshtone Sharpness** to the same value can cause undesirable results. This is because the level of sharpness that produces clear rendering of objects can cause people in an image to appear to have pitted or textured skin. In most cases, setting **Sharpness** higher than **Fleshtone Sharpness** yields the best results.

• Lock sharpness and fleshtone sharpness together - If selected, increasing or decreasing a Sharpness setting increases or decreases the other Sharpness setting by the same amount. For example, with the lock on, if Sharpness is 15, Fleshtone Sharpness is 0, then increasing Sharpness to 30 increases Fleshtone Sharpness to 15 at the same time.

Correct red eye

Red-Eye Correction analyzes the image and attempts to identify and correct red-eye.

You can select an area to correct and adjust the area by increasing or decreasing its tolerance. To correct red-eye in your image, follow these steps:

- 1 Select the image that you want to adjust.
- 2 Under Red-Eye Correction, click On.

The application analyzes the image and displays a rectangular marquee around the areas that it determines to contain a red eye.

- **3** Do one of the following:
 - To delete a **Red-Eye Correction** area, click the red X at the corner of the marquee.
 - To manually create a **Red-Eye Correction** area, make sure **Red-Eye Correction** is **On** and then click and drag in the image to create a marquee.
 - To resize a **Red-Eye Correction** area, drag a handle on the marquee.

- **4** Adjust the degree of **Red-Eye Correction** by increasing or decreasing the **Tolerance** to a value that just eliminates the red eye. **Tolerance** applies to all **Red-Eye Correction** areas in an image.
 - Increase Tolerance to make the red-eye mask larger.
 - Decrease **Tolerance** to make the red-eye mask smaller.
- 5 To hide the marquees after you finish **Red-Eye Correction**, select **Hide Marquees**.

Note: Red-Eye Correction is still applied when the marquees are hidden.

Adjust the special effects layer

This feature may not be supported on every Fiery server. If your Fiery server supports specialty colors, you can use the following **Special Effects Layer** settings to apply specialty inks and special effects to individual images:

- **Type** Selects the type of ink. Only licensed inks are shown here.
- **Ink Level** Selects the ink percentage.
- **Style** Chooses from the following options: **Posterize**, **Emboss**, **Hue Select**, and **Highlight Select**. These options will create different patterns on the image depending on the option selected.
- **Invert** Inverts the effect of the applied style.
- **Amplitude** Displaces the hue angle, allowing you to apply color to different ranges of a hue by modifying the distance from the hue color on the color wheel.
- **Hue** Selects the hue angle on which the special effects layer will be applied. Enabled only if you select **Hue Select** in the **Style** menu.
- **Saturation** Increases or decreases the intensity and purity of a color in an image. Enabled only if you select **Hue Select** or **Highlight Select** in the **Style** menu.
- **Expand** Condenses or expands the area within the image where the hue or highlight is applied. Enabled only if you select **Hue Select** or **Highlight Select** in the **Style** menu.
- Mode (Preview) Lets you preview the image in different modes, including Lighting, Specular, and Overlay. This effect will not be saved in the job or printed.

Note: You cannot apply a specialty color layer to an X-object image in a PDF.

Saving edits to a job

Saving edits has different results for PDF and PostScript jobs.

- If you edit and save a PDF job, your adjustments are preserved in the saved job. If you close IEVE and subsequently open the same job in IEVE, the controls are set as you saved them. You can manually fine-tune the settings or undo any changes that did not have the desired effect.
- If you edit and save a PostScript job, the edits are incorporated into the job and can no longer be undone. If you
 close IEVE and subsequently open the same job in IEVE, the images appear as edited but all controls are at their
 default settings.

Presets

You can apply presets to one or more pages or to one or more images on one or more pages.

The following predefined presets are available:

- Automatic Enables Auto enhance highlights and shadows and Auto adjust color balance; and sets Definition, Saturation, Fleshtone Saturation, Sharpness, and Fleshtone Sharpness to optimal levels.
- **No Correction** Sets all controls to their original, unmodified settings and returns images to their original state. For PDF files, all adjustments to the selected images are removed. For PostScript files, all adjustments to the selected images made since the last time you saved the file are removed.

You can also create custom presets by saving a set of settings as a preset.

Note: When you change settings in the Adjustments pane while a preset is selected, a preset named **Custom** displays in the **Preset** list. You can choose to create a new preset with the changed settings.

Use presets

You can create and apply presets. You can also delete custom presets, but you cannot delete the **Automatic** and **No Correction** presets. If you delete a custom preset for a job that is open, IEVE applies the **No Correction** preset. Deleting a preset does not affect settings of images that already have the preset applied.

Create a preset

You can create a preset using existing settings or create your own settings.

- 1 Either select an image that already has the settings you want to save or make the desired adjustments to the selected image.
- 2 In the Preset list, choose Save As.
- **3** Type a name for the preset and click **OK**.

Delete a preset

You can delete a preset from the **Preset** list. Deleting a preset applies the **No Correction** preset to any image using the deleted preset.

- 1 In the **Preset** list, choose the preset to delete.
- 2 Click **Delete** and click **Yes** to confirm.

Apply a preset to an image

You can apply a preset to one or more images.

- **1** Select the image.
- **2** In the **Preset** list, select a preset.

Apply a preset to a page

You can apply a preset to one or more pages.

- 1 In the **Preset** list, click the preset.
- **2** Click **Apply to** next to the **Preset** list.
- **3** Select **Pages** and enter a page range or select **All pages**.

Reset an image

Applying the **No Correction** preset resets images to their original state. For PDF files, all adjustments to the selected images are removed. For PostScript files, all adjustments to the selected images made since the last time you saved the file are removed.

- **1** Select the image.
- **2** Do one of the following:
 - Under Adjustments, click Revert.
 - In the **Presets** list, choose **No Correction**.

Print a proof

You can print a single copy or iterative proof of a job directly from Image Enhance Visual Editor to verify the output. A proof print will create a copy of the selected page with the current edits and send it as a new job directly to the Printed queue. The Fiery server will delete the proof after printing has finished.

- 1 To print a proof, select **File** > **Proof Print**.
- 2 Choose to Print Current Page or Print All Pages.

Spot colors

The Spot Colors feature is a spot color (named color) manager in Command WorkStation that allows you to edit spot color definitions on the Fiery server and create custom spot color definitions. Spot Colors is a part of the Spot-On feature. If Spot-On is available for your Fiery server and is enabled, you can adjust and manage lists of spot colors and their CMYK equivalents.

Spot Colors comes pre-loaded with libraries of named colors such as those from PANTONE, HKS, TOYO, and DIC. The spot color libraries store the original colors with their device-independent definitions (L*a*b values). For each output profile on the Fiery server, Spot Colors computes the best available CMYK reproduction of each spot color. Each time a new profile is generated or updated, Spot Colors automatically recalculates the best CMYK equivalents.

You can create a list of substitute colors. These are colors that, when called for in a document by their RGB or CMYK values, are substituted with a different color having the CMYK values from the Spot Colors color definition. This permits exact color control and overrides individual RGB and CMYK colors.

Spot colors also allows you to assign spot colors and process colors to the generic colors that are used in a job. The 2-color print mapping feature is designed for print shop operators to simulate a two-color press. You can print a two-color job to a two-color printer by mapping the colors in a job to the colors that are already created on the printer.

Note: If 2-color print mapping is available for your Fiery server with Fiery system software FS350/350 Pro or earlier, it is enabled with Fiery Graphic Arts Package, Premium Edition.

Spot color groups and definitions

Using the Spot Colors feature in Command WorkStation, you can edit spot color definitions on the Fiery server and create custom spot color definitions. Only one user at a time can use Spot Colors.

The **Spot Colors** window consists of three parts:

- The left side displays a list of color groups.
- The middle displays a list of spot colors included in the currently selected color group.
- The right side displays the definition of the currently selected spot color as well as swatches showing the original L*a*b value and the CMYK value after conversion by the output profile.

An exclamation point icon in the spot color definition indicates that one or more colorants have reached their maximum values.

By default, the Fiery server has several PANTONE color group, including possibly DIC, HKS, and TOYO color groups. These standard groups are locked. You cannot delete, rename, or export a locked group, and you cannot add, rename, or delete the spot colors in a locked group or change the priority order of the spot colors.

Select the output profile for spot color edits

The Fiery server maintains a spot color dictionary for each output profile. When you edit spot colors, your edits are applied to spot colors in jobs that are printed using the specified output profile.

Depending on your Fiery server, you either select a specific output profile or you specify the print settings (job properties) of a job that will use the spot colors that you are editing. The Fiery server determines the output profile from the print settings.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.

- 2 Click Spot Colors under Resources.
- **3** If **Output profile** appears at the top of the **Spot Colors** pane, select the output profile from the list.
- **4** If **Properties** appears at the top of the **Spot Colors** pane, click **Properties**, select the print settings for the job that will use the edited spot colors, and click **OK**.

The print settings in the **Job Properties** window are the current default settings on the Fiery server.

Note: Print settings that are not related to color management are ignored.

In the case of a mixed media job, the print settings for the first page are used.

The **Spot Colors** pane is updated with the **Paper source** and **Output profile** settings.

Change the order of spot colors or groups

To find a spot color definition, the Fiery server searches the colors in the color groups in the order that they are displayed under Spot Colors. When multiple spot colors have the same name, priority is given to the one that the Fiery server finds first when searching from the top of the list. You might find it necessary to change the order of color groups, or of spot colors within a group, to give priority to a particular spot color definition.

Note: You cannot change the order of colors within a locked color group.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 Click Spot Colors under Resources.
- **3** Select the color group or color.
- 4 Drag it to a new location in the list.

Find a spot color

You can search for a spot color by name. The Fiery server searches the colors in the color groups in the order that they are displayed in Spot Colors. When multiple spot colors have the same name, priority is given to the first name found in the list.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.

- 2 Click Spot Colors under Resources.
- 3 Click Find.
- **4** Type all or part of the spot color name and click **Next**.

Note: The search is case-sensitive.

To search backward, click **Previous**.

Edit a spot color

You can define the CMYK values of a spot color by typing the numerical values, by selecting a visual match from a pattern of color swatches, or by measuring the color of a physical object using a measurement device.

The Spot color matching print option automatically matches spot colors with their best CMYK equivalents so that spot colors can be simulated using the CMYK colorants. However, you may want to adjust the default CMYK equivalents to achieve a better match for your specific printing conditions. You can modify spot color definitions using Spot Colors.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- **3** Find and double-click the spot color.
- **4** Do one of the following:
 - To edit the CMYK percentage values directly, click in the C, M, Y, or K field and type a new value. Use the **Tab** key to move from one field to the next. The new color is displayed next to **Current Pick**.
 - To select a new color visually, click a color patch in the lower area of the window.

The selected color becomes the new **Current Pick** and is displayed in the center patch of the center cluster. Neighboring patches show updated hue variations from the center patch, in the hue directions indicated by the colored arrows. The left and right clusters show variations of saturation or brightness (whichever is selected for **Tuning mode**) from the center cluster. To control the degree of variation in the neighboring patches, move the slider closer to **Fine** (for smaller variation) or **Coarse** (for larger variation).

Note: When you select certain colors, an exclamation point icon may appear in the upper-right corner of the window. This icon indicates that one or more colorants have reached their maximum values.

- To select a new color using a measurement instrument, see Measure and import spot color values on page 238.
- **5** To print a test page, click **Print**.

6 Click **OK** to save your edits.

Optimize spot colors

If Fiery Color Profiler Suite is installed on your computer, you can use spot color optimization in Fiery Device Linker to optimize spot color definitions. With optimization, you can measure printed samples of spot colors and use the measurement data to adjust the spot color definitions.

For more information about using Device Linker to optimize spot colors, click the **Help** icon in Device Linker.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- **3** Do one of the following:
 - Select one or more spot colors (press the Control key to select each additional color), right-click a selected color, and select Spot Color Optimizer.
 - Click **Edit** and select **Spot Color Optimizer**. You can then select spot colors in Device Linker.
- **4** When the optimization in Device Linker is complete, click **Done** to return to the **Spot Colors** window.

Create, rename, or delete a spot color or color group

You can create, rename, or delete spot colors or color groups. You cannot make changes to a spot color or color group that is locked.

Create a spot color or color group

You can create a new spot color in an existing or new spot color group.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.

- 2 Click Spot Colors under Resources.
- **3** Select the location in the spot color list or color group list where you want to place the new spot color or color group and click **New**.
- **4** Select **Spot Color** or **Group** and type a name for the spot color or color group.
- **5** For a spot color, specify the definition.
 - To define the CMYK values of a spot color, either type numerical values, select a visual match from a pattern of color swatches, or measure the color of a physical object using a measurement device. In addition, you can define the spot color by its $L^*a^*b^*$ values.
- **6** To save and add another spot color or group, click **Add Another**.
- **7** Click **OK** to save the new spot colors or groups.

Rename a spot color or color group

You can change the name of an existing spot color or color group if it is not locked. If you match the name of a spot color to the name used in a particular job, be sure to match the name exactly, including uppercase or lowercase letters and spaces.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- **3** Right-click the spot color or group and select **Rename**.
- **4** Type a new name and press the **Enter** key or the **Return** key.

Delete a spot color or color group

You can delete a spot color or color group (and the spot colors in the group) if it is not locked.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- **3** Right-click the spot color or group and select **Delete**.

4 Click Yes to confirm.

Import and export custom color groups

You can export custom color groups from the Fiery server to your computer as ICC files. You can import custom color groups from your computer to the Fiery server.

Imported color groups are added to the spot color group list and are immediately available for use on the Fiery server.

Import a custom color group

To support spot color definitions in addition to those provided on the Fiery server, you can import a named color profile from your computer as a custom color group.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- **3** Select the location in the color group list where you want to add the imported color group.
- 4 Click Import.
- **5** Locate and select the desired color group.

You can only import ICC files that were exported from Spot Pro.

6 Click Open.

The imported group is added to the color group list above the previously selected group, where it has priority over the groups below it. If the imported group shares a name with an existing group in the list, you will be prompted to rename the imported group.

Export a custom color group

To share a custom color group with another Fiery server, you can export the group to a local copy that you can import to another Fiery server. You cannot export a locked color group.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.

- Click Server > Device Center.
- Right-click the server name and select **Device Center**.
- 2 Click Spot Colors under Resources.
- **3** Select the color group that you want to export.
- 4 Click Export.
- **5** Type a name for the file and select a file type.
- **6** Browse to the location where you want to save the file and click **Save**.

View the gamut of a color group

If Fiery Color Profiler Suite is installed on your computer, you can use Fiery Profile Inspector to view a model of the spot colors in a group compared to the gamut of the selected output profile.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- **3** Select the color group that you want to view and click **Inspect**.

Fiery Profile Inspector opens in a separate window. Click the Help icon in Fiery Profile Inspector to learn more about using Fiery Profile Inspector to compare spot colors to the output profile.

Color swatch pages and swatch books

You can print a swatch page for an individual spot color containing all its neighboring spot colors. You can also print a swatch book for a color group containing all the spot colors in the group or selected colors in the group.

Spot color matching

When you print a swatch page or a swatch book, Spot Colors prints the job with the following job properties:

- If the Fiery server lets you select an output profile in the Spot Colors pane, Spot Colors prints a swatch book or swatch page using the specified output profile and the default job properties of the Fiery server.
- If the Fiery server lets you select **Properties** in the Spot Colors pane, Spot Colors prints a swatch book or swatch page using the job properties you select. If you do not select any job properties in Spot Colors, Spot Colors uses the default job properties of the Fiery server.

In this case, if the **Spot color matching** option is disabled in the job properties, a message notifies you of this setting. Because **Spot color matching** must be enabled for the spot color definitions in Spot Colors to be used, Spot Colors always prints swatch books and swatch pages with the **Spot color matching** option enabled, regardless of the job properties set in Spot Colors or on the Fiery server.

Calibration

Calibrating the Fiery server ensures consistent and reliable color output. Calibration adjusts for variations in the color output of the printer, which changes over time and under different printing conditions.

When you print a swatch page or a swatch book, if a warning appears indicating that the calibration is outside of the limits, it means that the Fiery server is configured to detect when a job will be printed using an out-of-date calibration. (Not all types of Fiery server support this feature.) You can ignore the warning and continue to print, but for consistent color, print pages from Spot Colors using only calibrations that are up to date.

Print a color swatch page or swatch book

You can print a color swatch page for a single spot color, or you can print a swatch book for a group of spot colors.

Print a spot color swatch page

When you print a swatch page, you select a spot color and a pattern.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 Click Spot Colors under Resources.
- **3** Double-click the spot color and click **Print**.
- 4 Select a layout.
 - Color Search Pattern Prints patches with the same pattern as displayed in the Edit Spot Color or New Spot Color window.
 - Color Neighbor Pattern Prints the patches in the Edit Spot Color or New Spot Color window in a 3-column by 8-row format.

- **5** If you did not already specify the Paper Source in the **Job Properties** window, select a paper size and a paper source for printing.
- **6** Click **Print** or **OK** to print the swatch page.

Print a color swatch book

When you print a swatch book, you select a spot color group and a layout.

- 1 In the **Spot Colors** window, select a color group and do one of the following:
 - To print a swatch book of all of the spot colors in a color group, select the group and click **Print**.
 - To print a swatch book of selected colors in a color group, select the group in the Spot Colors window, ctrlclick to select the spot colors, and then click **Print**.

Color Swatches 8X8 prints patches in an 8-column by 8-row format.

On a Fiery server running a Fiery system software earlier than FS200/200 Pro, you can choose the **Color Swatches 8X4** layout.

- **2** If you did not already specify the **Paper source** in the **Job Properties** window, select a paper size and a paper source for printing.
- **3** Click **Print** or **OK** to print the swatch page.

Measure and import spot color values

If you have a measurement instrument that can measure a single color sample, you can import a measured color value directly into a spot color definition. This feature allows you to match spot colors based on the actual colors of physical objects, such as the red of a printed logo or the yellow of a packaging envelope.

Note: To use an X-Rite i1Pro or i1Pro 2, you must use an instrument obtained from Fiery. An instrument obtained from another source will not work with Spot Colors.

- Install and set up the spectrophotometer for use with your computer.
 For installation and setup instructions, see the documentation that accompanies the instrument.
- **2** Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 3 Click Spot Colors under Resources.
- **4** Make sure that the instrument is connected and click **Instrument**.
- **5** Place the spectrophotometer in its calibration cradle and click **Calibrate**. Calibration improves the accuracy of measurements.

- **6** Select the desired color group and click **New** > **Spot Color**, or double-click the spot color to edit.
- 7 Place the spectrophotometer over the target color, making sure to center the sample aperture over the color.
- **8** Press the button on the spectrophotometer to take the measurement. The Fiery server imports the measured CMYK values into Spot Colors as follows:
 - If you select an individual color in the color list, the Fiery server updates its definition to the measured color.
 - If you open the **Edit Spot Color** or **New Spot Color** window, the Fiery server updates the **Current Pick** to the measured color.
 - If you select a group in the color group list, the Fiery server creates a new color with the measured values within the group.

Substitute colors

The Substitute Colors feature maps a color in a job to a different color in the printed output.

Color substitutions affect only text, vector graphics, and line art. Color substitutions have no effect on raster images.

When you define a color as a substitute color, the settings for an RGB color or CMYK color have no effect. The Fiery server converts the color with a process similar to spot color conversion.

Note: You cannot use the Substitute Colors and Postflight features at the same time. These print options are constrained.

Using the Substitute Colors feature involves the following tasks:

- Configure the substitute color values in Command WorkStation.
- Print a document with the Substitute colors print option turned on.

Configure substitute colors

A substitute color resides in a special type of spot color group called a substitute group. For a substitute color, you specify the CMYK value of the original color and the CMYK value of the color that substitutes for the original color.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- **3** If a substitute group already exists, select the substitute group and skip to 6 on page 240. Otherwise, to create a substitute group, select the location in the color group list where you want to place the new substitute group.
- 4 Click **New** and select **Substitute Group**.
- **5** Type a name for the group and click **OK**.

- **6** Select the location in the color list where you want to place the new substitute color.
- 7 Click New and select Substitute Color.
- **8** Select a color mode for specifying the original color value.
- **9** Type the values for the original color. Use the Tab key to move from one field to the next.
- 10 Under Converted, click Edit.
- **11** Type the values for the converted color and click **OK**.
- **12** Select a tolerance degree for the original color.

Tolerance determines how close a particular color must be to the original color to match. Small and Large are defined as follows:

Color mode	Small tolerance range	Large tolerance range
CMYK (0-100%)	+/- 0.25%	+/- 0.5%
RGB (Device Code 0-255)	+/- 0.25	+/- 1
RGB (0-100%)	+/- 0.25%	+/- 0.5%

Note: Tolerance does not affect the substituted color.

13 Click OK.

2-color print mapping

With 2-color print mapping, you can map the process colors in a job to the process colors on a two-color printer (Cyan, Magenta, Yellow, Black, or a spot color). Print shop operators can utilize the 2-color print mapping feature for proofing a two-color printer.

You can print a two-color job to a two-color printer by mapping the process colors in the job to the colors that are on the printer.

Note: 2-color print mapping is different from Substitute colors. 2-color print mapping converts the process colors used in a job. Substitute colors converts one color in a job to a different color.

Using the 2-color print mapping feature involves the following tasks:

- Configure the 2-color print mapping values in Command WorkStation.
- Print a document with the **2-color print mapping** print option turned on.

The following limitations apply when you use this feature:

- The Fiery server ignores 2-color print mapping when you select Composite overprint and Combine separations.
- Postflight does not report on 2-color print mapping, because Postflight reports the source state of a document before any color conversions.
- You cannot select **2-color print mapping** and **Substitute colors** for a job at the same time. Also, you cannot select a substitute color when you configure 2-color print mapping.

Configure 2-color print mapping

To configure 2-color print mapping, you specify an output color for each original color in a job.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the Servers pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 2 Click Spot Colors under Resources.
- 3 Click 2-color print mapping.
- **4** For each of the two process colors, select the original process color used in the job.
 - Initially, Black and Magenta are displayed as the original process colors. When you change the color selection, the **Print as** process color selection changes to the same process color. This is to avoid accidentally mapping one process color to a different process color.
- 5 Under **Print as**, select a process color or a spot color to map the process color to. To select a spot color, select a color group and color name from the lists.
- **6** Click **OK**. The 2-color print mapping group is saved and it is added to the groups listed in the **Spot Colors** window.

Spot colors in Spot Pro

Spot Pro is a comprehensive program for creating, managing, and editing spot colors. Spot Pro allows you to edit spot color definitions on the Fiery server and create custom spot color definitions. Spot colors are a part of the Spot Pro feature. If Spot Pro is available for your Fiery server and is enabled, you can adjust and manage lists of spot colors and their alternate color space equivalents.

The Fiery server has an internal spot color library that automatically manages the spot colors of all major spot color manufacturers. If you load a job containing a spot color unknown to the Fiery server, you must define it before you can print the job correctly.

Spot Pro preloads the Fiery server libraries of named spot colors, such as those from PANTONE, HKS, TOYO, and DIC. The spot color libraries store the original spot colors with their device-independent definitions ($L^*a^*b^*$ values). For each output profile on the Fiery server, Spot Pro computes the best available output device color space for each spot color. Each time a new profile is generated or updated, Spot Pro automatically recalculates the best output device color space and converted $L^*a^*b^*$ values.

You can create a list of substitute colors. Substitute colors are colors that, when called for in a document by their RGB or CMYK values, are substituted with a different color having the CMYK values from the Spot Pro color definition. Using substitute colors in this way permits exact color control and overrides individual RGB and CMYK colors.

You can access Spot Pro training materials by clicking Fiery Learning on the Spot Pro toolbar.

Start Spot Pro

You can start Spot Pro from Device Center in Command WorkStation.

You can add spot colors to a new or existing custom spot color group. You cannot add new spot colors to a system spot color group.

- Start Spot Pro in one of the following ways:
 - In Job Center, click **Spot Pro** on the toolbar.
 - Click Server > Spot Pro.
 - Click the More icon (three vertical dots) next to the server name in the Servers pane and then click Spot Pro.
 - In Device Center, click **Resources** > **Spot Pro**, and then click **Launch Spot Pro**.

Note: When connected to one or multiple Fiery servers in Command WorkStation, only one instance of Spot Pro can be opened. This allows you to continue working with jobs in Command WorkStation Job Center or Device Center.

The Spot Pro workspace

The main window displays a list of spot color groups and a list of named spot colors within each spot color group. When you select a named spot color, Spot Pro shows a preview of the selected spot color.

The Spot Pro main window includes the following areas:

• Spot Pro group pane

The order of the spot color groups defines the search order for the spot color on the Fiery server.

Spot Pro spot color groups cannot be automatically sorted by name, type, or lock status.

Spot Pro lists the newest spot color group first.

By default, the Fiery server searches for a color starting from the top of the list and applies the first matching named spot color definition to the job. You can override this search setting on a job-by-job basis by selecting a different group in Job Properties.

You can manually move each spot color group up or down to change the color search sequence.

• Spot Pro colors pane

You can adjust the column width.

Spot Pro lists the newest color first.

You can manually move each spot color up or down to change the color search sequence. Spot colors in spot color groups can be sorted by name, ΔE , color accuracy, separation values, and locked or unlocked status.

• Spot Pro color preview pane

For the selected spot color, the color preview pane shows a preview of the spot color, the gamut warning, ΔE , and separation values. The color preview pane also has controls for editing and duplicating spot colors.

You can right-click one or multiple spot colors and select **Duplicate** to duplicate them.

• Spot Pro color editor pane

You can edit the selected spot color by modifying the L*a*b* values, LCH values, or device separation based on the selected output profile, or you can print variations of the spot color and choose a variation.

Spot Pro group types

Spot Pro has several color group types, including spot color groups, substitute color groups, and specialty color groups. There are two types of spot color groups, system colors and custom colors.

Spot color groups - system colors

System spot color groups and the colors within them are locked. System spot color groups can be edited, but they cannot be deleted or renamed. To rename a spot color, duplicate the color and save it into a custom spot color group.

Spot color groups - custom colors

You can create one or more custom spot color groups.

All spot colors in a custom spot color group can be edited, copied, cut, deleted, or renamed. The colors in the same custom spot color group must have a unique name. Colors in different custom spot color groups may have the same name.

Substitute color groups

You can create substitute color groups for custom substitute colors.

Specialty color groups

One or more specialty color groups are available by default depending on the supported specialty colors for the printer.

Spot Pro has an alternative way to link or associate different or multiple spot colors to one spot color through the alias feature.

Spot Pro color types

Spot Pro uses the user-defined output profile to display color separation values and color swatches.

Spot Pro generates all separation values automatically when you create or duplicate a color. You can select a different output profile to see its respective separation values or choose to change the separation values of one or more output profiles. You can also apply the color separation of one output profile to multiple or all output profiles.

Apply separation values of one output profile to other output profiles

Keep in mind the following:

- Applying separation values to other output profiles may result in an inaccurate colorimetric spot color reproduction.
- Applying separation values to a dissimilar color space or a dissimilar media or substrate may result in an inaccurate or undesired color output.
- **1** In Spot Pro, do one of the following:
 - Right-click a group and select **Apply to**.
 - Right-click a color or shift-click multiple colors and select **Apply to**.
 - Click the **Apply to** icon next to the output profile field.
- **2** Select the output profiles to apply the separation values.
- 3 Click Save.

Customizing Spot Pro

Spot Pro Preferences

You can set preferences for Spot Pro.

- 1 To open the **Spot Pro Preferences** window, click the **Preferences** toolbar icon.
- **2** Specify the ΔE tolerance.
- **3** Specify ΔE format.
 - **dE 2000** A variant of CIELAB that CIE recommended in 2000. This method uses KL = KC = KH = 1.0.
 - **dE CIE76** A distance-based formula for color difference, defined by CIE (International Commission on Illumination) in 1976.
 - **dE CMC** The ratio of differences in lightness to chroma and to hue calculated using the ISO standard ISO 105-J03. Values for lightness and chroma weights are 1.0 for use with perceptibility data.
 - **dE 94** A variant of CIELAB that CIE TC1-29 recommends as the color difference formula. For graphic arts applications, this method uses K1 = 0.045 and K2 = 0.015.
- **4** Specify the **Preferred measurement mode** by selecting one of the following:
 - M0 UV included
 - M1 D50 UV included
 - M2 UV cut
- 5 To enable Fiery Edge spot color processing, select the check box.

Fiery Edge spot color processing is enabled by default and provides for greater control over spot color recipes to improve spot color accuracy, especially for out-of-gamut colors. Disabling Fiery Edge spot color processing recalculates all spot color recipes on your system. This will affect the ΔE values of all spot color recipes on the Fiery server. For a Fiery server with extended gamut profiles (with colors beyond CMYK), this recalculation of spot color recipes will limit the output values to four colors (including black).

With Fiery Edge spot color processing, you can:

- Specify the maximum ΔE deviation allowed for **Fiery Edge** settings.
 - Increasing the allowed ΔE deviation may allow for cleaner spot color recipes that are more visually appealing.
- Specify Remove contamination to remove a color with very low values from a spot color recipe.
 - Small amounts of a process color in a spot color recipe can create a speckled appearance. Removing low value colorants from a spot color recipe can result in cleaner looking spot colors.
- Specify **Fill tone values above 95%** to use 100% of a color in a spot color recipe when it is already 95% or higher.
 - Spot color recipes using colorants with values slightly less than 100% can show a pattern of fine white speckles. Increasing the colorant value to 100% eliminates this problem.
- Specify Override Maximum Black settings from the output profile for more consistent grays and to reduce the amount of CMY ink or toner used in spot color recipes.

Note: For Fiery system software FS600/600 Pro, disabling **Fiery Edge spot color processing** will replace your existing Fiery Edge spot color recipes. To preserve your Fiery Edge spot color recipes and any edits you have made, back up your Fiery Edge spot color groups in the .icc file format prior to disabling **Fiery Edge spot color processing**. You can switch between **Fiery Edge spot color processing** technology and **Standard Fiery spot color processing** at any time.

Note: For Fiery system software FS500/500 Pro, enabling **Fiery Edge spot color processing** will replace your existing standard spot color recipes. To preserve your standard spot color recipes and any edits you have made, back up your standard spot color groups in the .icc file format prior to enabling **Fiery Edge spot color processing**. You can switch between **Standard Fiery spot color processing** technology and **Fiery Edge spot color processing** at any time.

- **6** Specify input settings.
 - · Remove contamination.
 - Fill tone values above 95%.
 - Override the maximum black settings from the output profile.
- **7** Click **Factory Default** to use the default preference settings.

To use dark mode, make a setting in Set Command WorkStation preferences on page 29.

Supported measurement devices

Spot Pro supports the following measurement devices:

- ES-3000/i1Pro3/i1Pro3 Plus
- ES-2000/i1Pro2
- ES-1000/i1Pro
- MYIRO-1
- FD-5BT
- TECHKON SpectroDens

Manage Spot Pro columns

You can customize column headings for the system spot color or custom spot color groups. You can reorder, add, or delete column headings to present information relevant to the spot colors in a group.

Change the column display

You can add or remove columns.

- 1 Right-click any column in the Spot Pro colors pane.
- 2 Select a column from the menu to add or remove it the Spot Pro colors pane.

Note: When the ΔE column is added, a warning icon shows when a ΔE value exceeds the tolerance set in the Spot Pro **Preferences** window.

Note: The patch and name columns cannot be removed or moved.

Adjust the width of a column

You can change the width of a Spot Pro column.

• Drag a column border to the left or right.

Change the order of the columns

You can change the order of Spot Pro columns.

• Right-click a column and drag it to change the position of the column in the Spot Pro colors pane.

Change the order of spot colors or spot color groups

You can manually change the order of spot color groups and spot colors in a custom spot color group to change the color search sequence.

By default, the Fiery server searches for a spot color starting from the top of the list and applies the first matching named spot color definition to the job. You can override this search setting on a job-by-job basis by selecting a different group in Job Properties.

• In Spot Pro, right-click a spot color group or spot color and select **Move Up** or **Move Down** to move one step at a time. Select **Move to Top** or **Move to Bottom** to move the spot color or spot color group to the top or bottom of the list.

Enable or disable spot color libraries

You can show or hide spot color groups in Spot Pro.

Note: You can enable or disable spot color libraries only on a Fiery server only with Fiery system software FS600/600 Pro or later.

- Click the **Enable/Disable spot color groups icon** (\bigcirc) at the top of the **Spot Pro** group pane.
- **2** Select the check boxes for the spot color groups you want to enable and clear the check boxes for the spot color groups you want to disable in the **Enable/Disable spot color groups** window.

Note: Disabled spot color groups are not shown anywhere in Command WorkStation and will not be used by any Fiery applications for spot color processing.

3 Click **OK** to save.

queue

Spot Pro toolbar icons

The Spot Pro toolbar displays a standard set of icons.

New	Creates a new spot color group, spot color, substitute color group, or substitute color. Spot Pro adds new spot colors and substitute colors to the selected group.
Delete	Deletes the selected color group or named spot colors from the color group.
Print/Ready to Print/Send to Print	Initiates Print, Send to Ready to Print, or Send to Print queue for the

Optimize Optimizes the selected colors or all colors in a selected group for a selected

media or substrate and output profile.

Open Opens a spot color or spot color group from a user-specified location. It also

allows opening custom or user-created libraries to and from Adobe

selected spot colors or spot color group depending on the Fiery server.

applications.

Save As Saves a spot color or spot color group from the Fiery server to another user-

specified location. It also allows saving custom or user-created libraries to

and from Adobe applications.

Preferences Opens the Spot Pro **Preferences** window.

2-Color print mapping Allows you to select a process color to map, and search and select a device

color or a spot color.

Alias Maps one or more spot colors to an alias to ensure they use the same color

values, even if they have different names.

Checkup Performs a health check on spot colors in a spot color group to check how

accurately they are printed.

Search for a spot color

You can easily search for a spot color and show the various libraries where the spot color is present.

You can use the **Search color** field to find a named spot color or a list of spot colors based on the search criteria. The spot color results are shown under the group names with small swatches next to spot color names.

Search for spot colors

You can search for custom spot colors and spot colors from the internal spot color library.

- 1 Type your search criteria in the **Search** field located next to the Spot Pro toolbar icons.
 - You can search for parts of a named spot color. For example, if you search for **red**, Spot Pro will find all spot colors with "red" anywhere in their name.
- **2** Press **Enter** or click the magnifying glass icon (Search icon) to locate the spot colors that meet the specified search criteria. The typed text is not case-sensitive.
 - If the search term is less than three characters, the search results are limited to the currently selected group. You may search in all the groups by clicking the **Search all Spot Color Libraries** link. If the search term is three or more characters, the search is executed throughout all the spot color groups. The results are displayed in pages limited to 500 results at a time.
- **3** Select a spot color from the search results. The search term remains in the **Search color** field.
 - If you click the **Search color** field area again, the search result will show again. You can choose to narrow the search or select another result from the list.
- **4** After searching, you can clear the current search criteria by clicking the clear button to clear the search field and the search results. The search result will be cleared automatically when you perform another major action, such as clicking a tool on the toolbar, editing a spot color, or closing the **Spot Pro** window. This allows you to search by different criteria.

Create a new spot color

You can define the L*a*b* values or the CMYK values of a spot color by typing the numerical values, by selecting a visual match from a pattern of color swatches, or by measuring the color of a physical object using a measurement device.

The **Spot color matching** print option automatically matches spot colors with their best CMYK equivalents or $L^*a^*b^*$ values, so spot colors can be simulated using the CMYK colorants. However, you may want to adjust the default CMYK equivalents or $L^*a^*b^*$ values to achieve a better match for your specific printing conditions. You can modify spot color definitions using Spot Pro.

- 1 In **Spot Pro**, select a spot color group or create a new spot color group for the new spot color.
 - To create a new spot color group, click **New** > **Group**.
 - To create a new spot color, click New > Spot Color.
- **2** Type a name for your spot color in the **Spot color name** field.
- **3** Do any of the following:
 - To enter the L*a*b* values directly, click in the L*, a*, or b* field and type a new value. Use the **Tab** key to move from one field to the next.

Note: You can click the arrow next to $L^*a^*b^*$ to switch the editing mode to CIE LCH to enter the LCH values directly. In the LCH mode, you may modify lightness, hue, or chroma for the selected spot color.

• Click **Measure** to measure the L*a*b* values and follow the on-screen instructions.

Select a measurement instrument from the available list.

• To enter the CMYK percentage values directly, click in the C, M, Y, or K field and type a new value. Use the **Tab** key to move from one field to the next.

The separation values are computed based on the selected output profile for the given media or substrate. This may be particularly useful to remove contaminants or visual artifacts, such as spotting, or a cloudy appearance caused by black or cyan dots. For CMYK+ profiles, the respective ink separation is available for entry. For example, CMYK and Orange and Violet separation values may be entered when a CMYKOV output profile is selected.

4 To print a test page, click the arrow next to **Variations** and select **Print**.

You may choose the patch layout for the variations, and select the media or substrate source.

- **5** Do one of the following:
 - Click **Cancel** to abort creating a new spot color, exit the **Spot Pro** color editor pane, and return to the **Spot Pro** color preview pane.
 - Click **Save** to save your spot color, without leaving the **Spot Pro** color editor pane.
 - Click **Done** to finish creating a new spot color and to exit the **Spot Pro** color editor pane.

Edit a spot color

You can define the L*a*b* values or the CMYK values of a spot color by typing the numerical values, by selecting a visual match from a pattern of color swatches, or by measuring the color of a physical object using a measurement device.

The **Spot color matching** print option automatically matches spot colors with their best CMYK equivalents or $L^*a^*b^*$ values, so spot colors can be simulated using the CMYK colorants. However, you may want to adjust the default CMYK equivalents or $L^*a^*b^*$ values to achieve a better match for your specific printing conditions. You can modify spot color definitions using Spot Pro.

Both system and custom spot colors may be edited. You cannot rename or delete system spot colors.

- 1 In **Spot Pro**, select the spot color you wish to edit and click the Edit icon (). You can rename a custom spot color or a custom spot color group.
- **2** Do any of the following:
 - To edit the L*a*b* values directly, click in the L*, a*, or b* field and type a new value. Use the **Tab** key to move from one field to the next.

Note: You can click the arrow next to $L^*a^*b^*$ to switch the editing mode to CIE LCH to edit the LCH values directly. In the LCH mode, you may modify lightness, hue, or chroma for the selected spot color.

- Click **Measure** to measure the $L^*a^*b^*$ values and follow the on-screen instructions.
 - Select a measurement instrument from the available list.
- To edit the CMYK percentage values directly, click in the C, M, Y, or K field and type a new value. Use the **Tab** key to move from one field to the next.
 - The separation values are computed based on the selected output profile for the given media or substrate. This may be particularly useful to remove contaminants or visual artifacts, such as spotting, or a cloudy appearance caused by black or cyan dots. For CMYK+ profiles, the respective ink separation is available for editing. For example, CMYK and Orange and Violet separation values may be edited when a CMYKOV output profile is selected.
- To edit a spot color visually, you can create and print spot color variations on the **Variations** tab. For more information, see Spot color variations on page 251.
- **3** To print a test page, with a single spot color selected, click **Print** on the **Variations** tab.

You can choose the media or substrate source and the number of variations.

- **4** Do one of the following:
 - Click **Done** to finish editing and to exit the **Spot Pro** color editor pane.
 - Click **Cancel** to abort editing, exit the **Spot Pro** color editor pane, and return to the **Spot Pro** color preview pane.
 - Click **Save** to save your edits and switch to a different spot color, without leaving the **Spot Pro** color editor pane.
 - On the **Color Definition** tab, click the Reset icon () to undo your changes.

Spot color variations

You can print a selected spot color and a number of neighboring colors with hues that vary slightly from the original spot color. You can choose a spot color variation that better matches the desired visual appearance of the spot color to replace the original spot color in your jobs.

You can use spot color variations to make a better visual match and correct for deviations from the current calibration and limitations of the output profile.

When you create spot color variations, Spot Pro displays an octagon of the original spot color with color arrows you can click to adjust the original spot color in the hue directions of cyan, green, yellow, orange, red, magenta, violet, and blue. You can click the black and white arrows to adjust the lightness of the original spot color.

Create spot color variations

You can modify the appearance of a spot color, print and compare the color reproduction of variations of a spot color, and choose which spot color variation to use.

When you print variations, select a media size that is at least Letter or A4 size.

By default, spot color variations are sent directly to the **Printing** queue, and the job prints automatically on import.

1 In Spot Pro, with a Group selected, click to select a custom spot color, and click the **Edit** icon to open the Spot Pro color editor.

2 Click Variations.

The active controls for changing the color in eight hue directions are the color arrows. The color variations arrows (red, green, blue, cyan, magenta, yellow, orange, violet, black, white) show the direction of the color hue and lightness shift from the center patch. Clicking on an arrow adjusts the targeted color in the direction of the arrow.

Note: Click the Reset icon () on the **Color Definition** tab to return to the original spot color and its variations.

- **3** To control the magnitude of variation per click and in the printed variations patches, move the slider closer to **Fine** (for smaller variation) or **Coarse** (for larger variation). The default setting is in the middle.
- **4** To print a test page, do one of the following:
 - With a single spot color selected, click **Print** on the **Variations** tab.
 - To print variations for multiple spot colors, ctrl-click or cmd-click to select multiple spot colors, click **Print** in the menu bar, and then select **Variations**.
 - To print variations for a spot color group, click the More icon (three vertical dots) next to the group, then select **Print** > **Variations**.

- **5** Select the media or substrate source.
- **6** Select the number of variations, either 25 or 49.

- 7 Select Measure Variations Patches if you want to use your measurement device to measure the variations swatches.
 - Measuring the patches allows you to complement the visual editing process with quantitative analysis, or simply use the measurements to pick the variation patch resulting in the smallest ΔE .
- **8** If you have more than one spot color selected, adjust the **Fine** or **Coarse** slider to control the magnitude of variation in the neighboring patches. For more information, see step 3.
- 9 Click OK.
- **10** If you selected **Measure Variation Patches**, follow the on-screen instructions to calibrate your measurement device, if necessary, and measure the patches.
- 11 Identify the spot color patch with the best color reproduction and do one of the following:
 - Type the color values of the corresponding patch in the **Color Definition** tab.
 - Enter the patch ID of the spot color patch from the variations page into the **Printed Variation ID** box in the **Variations** tab to automatically populate the device values for that patch.

Note: The patch ID is valid as long as the variations page was printed in the same session of Spot Pro. If you quit Spot Pro, Spot Pro discards the patch ID numbers for the variations.

Delete a spot color or color group

You can delete a spot color or color group (and the spot colors in the group) if the spot color or color group is not locked.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 Click Spot Pro under Resources, and click Launch Spot Pro.
- **3** Right-click the spot color or color group and select **Delete**.
- 4 Click Yes to confirm.

Duplicating or exporting spot colors or spot color groups

When you duplicate a spot color group, only the original $L^*a^*b^*$ values and converted values for the selected output profile are duplicated. Spot Pro recalculates the duplicated group using the original $L^*a^*b^*$ values for any other output profile. When you duplicate a system spot color to a custom spot color group, the $L^*a^*b^*$ values correspond to predicted $L^*a^*b^*$ values. Spot Pro predicts these values using the selected output profile and the original $L^*a^*b^*$ values of the spot color.

Changes made to a spot color or spot color group are not duplicated in the following scenarios:

- Another output profile is selected after you make changes to the spot color or spot color group.
- The spot color or the group containing the spot color is duplicated.

Working with an individual spot color has the same recalculation behavior as working with a spot color group. This behavior also applies to exporting spot color and spot color groups.

Edit a spot color in a job

You can edit a spot color in a job from the Command WorkStation Held list.

The Fiery server will detect that a job includes spot colors.

- 1 Select a spooled job in the Held list and do one of the following:
 - Right-click the job and select **Edit Spot Color**.
 - Click Actions > Edit Spot Color.
 - Click the **Edit** icon () in the **Summary** tab of the Job Summary Pane.

Note: The **Edit Spot color** option is available only for a PDF job that contains spot colors.

The **Summary** tab in the Job Summary Pane lists the number of available spot colors in the job under **Spot colors**. The list of available spot colors shows the ΔE value for all supported ΔE formats, for every available spot color. Available spot colors show a warning icon when the ΔE value exceeds the tolerance set in the **Spot Pro Preferences** window.

In the **Edit Spot Color** window, the available spot colors in the job are listed and have been associated to the correct spot color library, spot color group, or the named ICC profile.

- 2 In the Edit Spot Color window, do any of the following:
 - Resolve a missing spot color by adding it to the Fiery server or aliasing it to an existing spot color on the Fiery server.

Add a missing spot color by defining the L*a*b*, LCH, or device CMYK values and adding it to a new or existing spot color group.

Note: For printers that support CMYK+ configurations, you can define CMYK colorants plus additional colorants.

- Add all spot colors in the job to a new or existing custom group. You can add missing spot colors one at a time by defining or aliasing.
- Resolve duplicate spot colors.
 - Two spot colors in the same spot color group cannot have the same name. If one of the spot colors in the job has the same name as an existing spot color, you can choose not to replace the existing spot color with the new spot color.
- Manage alias-linked spot colors. Spot Pro shows all aliases mapped on the Fiery server. Alias edits on the Fiery server need time to update and may take a while to refresh.

- Add specialty colors to spot colors for printers that support specialty color.
 - **Note:** Specialty colors cannot be turned on or off using the job-based spot color editor. You can turn specialty colors on or off in Job Properties.
- Print a swatch book by printing all the spot colors in the job. Spot Pro indicates missing spot colors as empty patches with a cross symbol when printed.
- **3** Click **Save** to save your changes, click **Save & Close** to save and apply the changes to the job, or click **Close** to exit without saving.

Spot Pro aliasing spot colors

Spot Pro supports creating aliases for spot colors on the Fiery server. An alias creates a symbolic link from any original spot color to a target spot color installed on the Fiery server in a spot color group. The Fiery server uses the target spot color values when printing an original spot color with an alias link to a target spot color. You can alias multiple original spot colors to a target spot color.

With the Alias feature in Spot Pro, you can do the following:

- Create an alias link from one or more original spot colors to any target spot color installed on the Fiery server.
- Edit a target spot color to update all original spot color alias links to that target spot color.
- Delete an alias link or a target spot color without deleting the original spot color from the Fiery server.
- View the target spot color linked to an original spot color, and view the names and number of original spot colors linked to a target spot color.

Note: The Fiery ColorRight Package or Fiery Graphic Arts Pro Package must be installed on a Fiery server with Fiery system software FS400/400 Pro or later.

Alias spot colors

You can create an alias link from an original spot color to a target spot color on the Fiery server.

Keep in mind the following when creating an alias link to a target spot color:

- A spot color you wish to alias must have a unique name across all spot color groups.
- A target spot color must be installed on the Fiery server.
- Original spot colors with an alias link will be updated if you change their target spot color, or edit the color values of the target spot color.
- Two original spot colors with the same name cannot be alias linked to two different target spot colors. When you create an alias link to a target spot color, any original spot colors with the same name will be linked to the target spot color. When you delete an alias link, the alias links for all original spot colors with the same name will also be deleted.
- It takes time to refresh the alias information if you change the selected output profile. You will see the updated alias information after the refresh operation completes.
- Alias links are not included when exporting or importing spot colors.

Create an alias link for an original spot color

An alias creates a symbolic link between two spot colors with different names, and ensures that the original spot color uses the color values of the target spot color.

- 1 In Spot Pro, click the **Alias** icon $\begin{pmatrix} -1 \\ 1 \end{pmatrix}$ on the toolbar.
- 2 Type the name of the original color in the Original color field and click the Add original color button to add it.
 - You can add more than one original color at a time. An original color does not need to be present on the Fiery server to create an alias for it.
 - Original colors that are present on the Fiery server are shown with the **Present** tag and a light green background color. Original colors that are not present on the Fiery server are shown with the **Not Present** tag and a light red background color.
- 3 In the Alias to search field, type a name of a spot color and click the Search alias color icon (\mathbb{Q}) to search.
- 4 In the results list, choose a target spot color.
 - Print jobs containing the original spot colors will print with the separation values of the linked target spot color.
 - **Note:** The information and fields associated with $L^*a^*b^*$, separation, and variations are disabled for the original spot colors.
- 5 After selecting the alias color, click Add Alias.
 - The original color will show the linked target spot color in the table.
- **6** Click **Apply & Close** to save the information on the Fiery server.

Viewing a spot color with an alias

Spot Pro can show you if an original spot color has an alias link to a target spot color, and can show you if a target spot color is linked to any original spot colors.

When you select an original spot color, Spot Pro displays in the **Alias** column if there is target spot color linked to the original spot color and shows a preview of the target spot color. When a spot color does not have an alias, Spot Pro lists **None** in the **Alias** column.

When you select a target spot color, Spot Pro displays in the **Alias** column how many original spot colors are linked to the target spot color. Click or hover on the info button (\bigcirc) to display a list of the linked original spot colors.

Edit an alias link

You can edit an alias link to add or remove original spot colors, or change the alias target spot color.

1 In Spot Pro, click the **Alias** icon (on the toolbar.

- **2** To edit an alias link, click **Edit Alias** (**∠**) next to the linked target spot color, then do one of the following:
 - To add an original spot color to the list of original spot colors, type the spot color name in the **Original color** field and click the **Add original color** button.
 - To remove an original spot color from the **Original color** list, click the clear button next to the name of the original spot color.
 - To change the target spot color, type a name of a spot color in the **Alias to** search field, and click **Search alias color** (**Q**) to search. Choose a new target spot color from the search results.
- **3** Click **Apply & Close** to save the information on the Fiery server.

Delete an alias link

You can delete alias links to restore printing the original spot colors from their original L*a*b* values.

- 1 In Spot Pro, click the **Alias** icon $\begin{pmatrix} -1 \\ 1 \end{pmatrix}$ on the toolbar.
- **2** To delete an alias link, click **Delete Alias** (**1** next to the linked target spot color, then click **OK** to confirm your choice.
- **3** Click **Apply & Close** to save the information on the Fiery server.

Note: Spot Pro recalculates the original spot color using the original L*a*b* values.

Specialty colors and alias spot colors

With Spot Pro, you can create an alias to a target spot color that uses specialty colors.

For example, you might create an alias to a target spot color that uses white specialty color in addition to CMYK.

Specialty color and spot color mixing

Spot Pro supports adding, editing, or mixing specialty colors to process spot colors. Specialty colors are not supported for every Fiery server. You can add or edit more than one specialty color depending on the capability of the printer or press.

A specialty color mixed with a spot color cannot be saved in any of the supported file formats (Adobe Swatch Exchange (.ase), .cxf, .icc, or .icm).

Advanced users can edit or create a spot color and add specialty colors, such as silver, gold, and neon pink, to generate unique effects for printing symbols or monograms.

Spot Pro supports editing with specialty color on Fiery servers that meet one of the following criteria:

- The specialty color must be installed on the printer or press to be available in Spot Pro.
- The specialty color must be licensed and does not need to be installed on the printer or press to be available in Spot Pro.

When you launch Spot Pro, the Specialty Colors feature is disabled by default. To enable the specialty colors feature, you must load and configure the specialty colorant on the Fiery server, and you must turn on the Specialty Colors feature for a specific color group in Spot Pro.

Note: The Fiery ColorRight Package or Fiery Graphic Arts Pro Package must be installed on a Fiery server with Fiery system software FS400/400 Pro or later.

Mix specialty color and spot colors

You can edit a spot color with a specialty color component. For example, you may choose to edit or define a spot color with CMYK + silver component by specifying the amount of specialty colorant.

- 1 In Spot Pro, select a spot color and click the **Edit** icon (**/**).
- 2 Select the Color Definition tab.
- **3** Edit the spot color separation (%) values.

The preview patch will display an exclamation mark within a circle () as a visual indication that the patch has some specialty color in it.

When you edit the specialty color value, the preview patch shows the new color.

Note: A green check mark (is shown next to the spot color group name if a specialty color was added to one or more spot colors and turned on for the group. A yellow exclamation mark (is shown next to the spot color group name if a specialty color was added to one or more spot colors and turned off for the group.

4 Click the **Reset** icon () to undo your changes.

Visual inspection for spot colors using a specialty color

You can visually inspect a spot color that includes a specialty color.

There are two ways to view spot colors with a specialty color:

- You can print the job using the specified output profile and manually inspect the printed appearance of the spot color using specialty color.
- You can print a swatch page using the specified output profile with the spot color using specialty color and visually inspect the printed appearance of the swatch. For more information about printing a swatch page, see Print a swatch book of one or more spot colors on page 264.

Note: To view spot colors with a specialty color, the specialty color option must be turned on in the **Job Properties** window of Command WorkStation.

Specialty color mixing and output profiles

Editing with specialty color is offered for all the spot color groups (custom and factory). Editing with specialty color is not supported for substitute color groups.

Keep in mind the following when using specialty color values per output profile:

- The specialty color values will stay with the specific output profile. For example, when you edit a spot color with silver and change the output profile, silver will not be retained for that profile. Specialty color information is specific to the output profile. If you change the output profile, the specialty color information changes.
- The Fiery server retains the specialty color information for each output profile and retrieves the specialty color information when the corresponding output profile is selected.
- You can print spot color swatches that include any specialty color components defined for those spot colors. You can also print spot color variations for spot colors with or without a specialty color component.
- For a Fiery server that supports one or more licensed specialty colors, you can use one or more specialty colors in a document when the specialty colors are licensed and installed. For example, a printer might support gold, silver, clear, or white as specialty colors. You can process a job with a licensed specialty color without installing the specialty color, but you cannot print the job without the specialty color installed. When you edit a specialty color with Spot Color Editor, all output profiles that have the specialty color enabled will also include the changes.

When a Fiery server supports multiple specialty colors in addition to CMYK, some specialty colors may be restricted to installing only in the first or last specialty color station, to print before or after CMYK, while other specialty colors may be installed in any color station. Specialty colors installed in color stations after CMYK can print over CMYK.

For example, the specialty color white may print first, under CMYK, while the specialty color clear may print over or after CMYK as a clear coating.

Limitations

- When printing spot color variations that include a specialty color, the specialty color will not be printed.
- When optimizing spot colors that include a specialty color, the specialty color will not be printed due to the limitations of measurement devices.

Spot color checkup

Spot Pro can perform a checkup on a selected spot color group for a given media or substrate and an output profile. The checkup produces a report that shows how well your printer reproduces the colors in the selected spot color group. If needed, calibration and spot color optimization may reduce the color difference (ΔE) and provide a better colorimetric match.

Spot Pro supports the following:

- All measurement instruments from FieryMeasure.
- Existing swatch book features, which are patch sizes and page sizes.

Before you begin, connect your measuring instrument to the computer.

- 1 In **Spot Pro**, select a spot color group.
- **2** To print the selected spot color group, do one of the following:
 - Click **Checkup** on the toolbar.
 - Right-click the selected spot color group and select Checkup.
- **3** Select a paper source to print the spot color checkup and click **OK**.
- **4** Select the measurement instrument from the list and click **Print**.

Note: Only supported inline measurement instruments are shown.

Spot Pro prints the selected spot color group and begins the measurement process using the selected measurement device.

- **5** Follow the on-screen instructions to measure the chart.
- 6 Click Next.

Spot Pro produces a report that shows how well your printer is reproducing the colors in the selected spot color groups with the current calibration and selected output profile. The report shows the measured ΔE value for each color and a health score to indicate how accurately the colors printed, with a score of 1 representing the lowest score and 10 representing the highest score.

- You can save the report for future use to compare the accuracy of colors over time.
- You can improve low health scores by recalibrating your printer, or by recalibrating your printer and creating a new output profile.

You can initiate a spot color verification schedule by clicking **Create a schedule** in the **Fiery Spot Color Report** window and create the schedule in the Fiery ColorGuardweb application. For more information on creating the schedule in the Fiery ColorGuard web application, see *Fiery IQ Help*.

Optimize spot colors

Spot Pro optimizes one or more selected spot colors for a given media or substrate and an output profile. Optimization may reduce the color difference (ΔE) and provide a better colorimetric match. You can optimize custom spot colors and spot colors from the internal spot color library.

Spot Pro supports the following:

- All measurement instruments from FieryMeasure.
- Existing swatch book features, which are patch sizes and page sizes.

Before you begin, connect your measuring instrument to the computer.

- 1 In **Spot Pro**, select one or more spot colors.
- 2 Click Optimize.
- 3 In the Optimization settings window, select whether to optimize Selected colors only or All spot colors.

If selecting **All spot colors**, choose to apply optimization to one of the following options:

- All spot colors in this group
- All spot colors in all groups
- **4** Select the measurement instrument from the list.

Note: Only supported inline measurement instruments are shown.

- 5 Click **Next** to open the **Job Properties** window.
- **6** Set the media or substrate source.

Note: Do not change the color settings.

- 7 Click **Print** to print a chart of the spot colors to be optimized.
- **8** Follow the on-screen instructions to measure the chart.
- Click Next.

Spot Pro displays the achieved average ΔE and the maximum ΔE .

- **10** Spot Pro can generate a report showing the L*a*b* spot color values, device values, and color differences for the optimization. To generate the report, click **View** in the report column after optimizing.
- 11 Click **Iterate** to repeat the optimization procedure until no further optimization is possible.

The iteration results are shown in the optimization table. Select the desired optimization and click **Apply** to use your optimization.

You can select a particular iteration and delete it from the optimization table.

- **12** To save the report as an HTML file, click **Save Report**.
- **13** Click **Finish** to create your spot color optimization file. The spot color optimization file is applied to all workflows that are using that spot color table.

Automatic spot color optimization

Spot Pro can automatically measure and optimize one or more selected spot colors using a qualified inline spectrophotometer color measurement device. Automatic optimization may reduce the color difference (ΔE) and provide a better colorimetric match. You can optimize custom spot colors and spot colors from the internal spot color library.

Spot Pro requires a qualified inline spectrophotometer color measurement device.

- 1 In **Spot Pro**, select one or more spot colors or a spot color group.
- 2 Click Optimize, then select Automatic.
- 3 In the Automatic settings window, select whether to optimize Selected colors only or All spot colors.

- a) If selecting All spot colors, choose to apply optimization to one of the following options:
 - All spot colors in this group
 - Only the selected spot colors
 - All spot colors in all groups
- **4** Specify the number of iterations to perform, between 1 and 5.
- **5** Select a paper or media source and click **OK**.

Spot Pro prints and measures each iteration and generates the **Fiery Spot Color Report**. The report indicates the ΔE measurements for each spot color and provides statistics including the average ΔE and maximum ΔE values.

- **6** You can save the Fiery Spot Color Report as either a PDF file or an HTML file. To save the report, do the following:
 - a) From the Fiery Spot Color Report window, select Save Report.
 - **b)** Select the location to save the report.
 - **c)** Rename the report file name or accept the default file name.
 - d) Select PDF File or HTML File for the file type and click Save.

Gamut warning

The color gamut describes the full range of colors that the printer can reproduce. During job processing, spot colors that are out of gamut are mapped to the nearest possible color within the available color gamut. The deviation in color is displayed as a ΔE value. If a spot color cannot be reproduced within the user-specified tolerance, Spot Pro displays a warning.

Spot Pro supports specifying the tolerance in different ΔE formulae (ΔE 2000, ΔE 76) by allowing spot colors that lie within this tolerance area to be accepted as in gamut.

Spot Pro will show the color graded ΔE for each spot color, which will be in the user specified ΔE format.

The ΔE column shows if the spot color can be accurately reproduced. Green indicates in gamut. Yellow indicates out of gamut. Be aware that it is possible for a spot color to yield a ΔE that exceeds the defined tolerance limit for that color, but still be within the gamut of the printer.

If a spot color is out of gamut, you may be able to reduce the ΔE value. Try the following:

- Switch to a different media or substrate. In this way, you can quickly find out which combination will produce
 the best results.
- Optimize a spot color.

Spot colors with gradation curve editing

The Spot color gradation editor feature allows you to edit the spot color gradations at varying percentages (%) to define a spot color reproduction curve so that accurate spot color gradients can be achieved.

Spot color gradation supports all spot colors.

By default, spot colors are defined with 100% and 0% color values. The full-tone color is represented by 100%. The color of the media is represented by 0%. By default, the unmeasured value for substrate white equals 0%.

If a print job includes a gradient of a spot color and the gradient prints too light or too dark, you can modify the intensity by adjusting the gradation curve.

Note: The Fiery ColorRight Package or Fiery Graphic Arts Pro Package must be installed on a Fiery server with Fiery system software FS400/400 Pro or later.

Use color gradation editor

The spot color gradation editor will modify the intensity of the gradients for a spot color.

Note: If a spot color has a specialty color component in it, both the process colors and specialty color component are affected by the gradation curve.

- 1 In Spot Pro, select a spot color and click the **Edit** icon ().
- **2** Select the **Gradation** tab.
- **3** In the **Input** and **Output** table, type a gradient between 1 and 99.

The values in the table represent a percentage of the color tint. The values 0 (zero) and 100 cannot be modified.

The values are applied to the primary process colors and specialty colors and are shown on the tonal curve.

Note: You can have a maximum of up to 15 values including 0 (zero) and 100. To add or remove rows, click the **Add new row** or **Delete row** buttons.

- **4** To modify a gradation point along the curve, drag a point upward (to increase intensity) or downward (to decrease intensity). You can also type coordinates directly in the table.
- **5** To delete a gradient, select a row in the table and press the **Delete** key.
- **6** To reset the gradation curve, click the **Reset** icon ().

Inspect spot color models against the output profile gamut

If Fiery Color Profiler Suite is installed on your computer, you can use Fiery Profile Inspector to inspect a model of spot colors against the gamut of the selected output profile.

Note: To access Fiery Profile Inspector from Spot Pro, you must have Fiery Color Profiler Suite version 5.9.1 or later installed on the client computer. If the **Inspect** option is disabled on the Spot Pro toolbar, you can download a demo version of Fiery Color Profiler Suite version 5.9.1 or later from Fiery Software Manager.

You can inspect all of the spot colors in a spot color group, individual spot colors, or spot colors used in a specific job.

Fiery Profile Inspector can help you visualize spot colors in relation to the output profile in the three-dimensional $L^*a^*b^*$ color space.

For more information, see Fiery Color Profiler Suite Help.

Inspect spot colors in Spot Pro against the output profile gamut

You can open Fiery Profile Inspector from Spot Pro to inspect a model of spot colors against the gamut of the selected output profile.

- In Spot Pro, do one of the following:
 - Select a spot color group and click **Inspect** on the toolbar.
 - Right-click a spot color group and select Inspect spot colors.
 - Select one or more spot colors, right-click, and select **Inspect spot colors**.

Inspect spot colors in a job against the output profile gamut

You can inspect a model of the spot colors in a job against the gamut of the selected output profile.

- 1 In Command WorkStation, right-click a job with assigned spot colors and select **Edit Spot Colors**.
- **2** Do one of the following:
 - Click **Inspect** on the toolbar.
 - Right-click a spot color in the Available Spot colors pane and select Inspect spot color.

Color swatch pages and swatch books

You can print a swatch page for an individual spot color containing all its neighboring spot colors. You can also print a swatch book for a color group containing all of the spot colors in the group or selected colors in the group.

Spot color matching

When printing spot color swatches or a swatch book, ensure the output profile and the media or substrate source combination are correct for the best color accuracy. You can select the output profile in the Spot Pro color pane, and you can select the media tray or media source in the **Print** window. Spot Pro uses the default job properties for the remaining settings because the remaining settings do not have a considerable impact on color accuracy.

Calibration

Calibrating the Fiery server ensures consistent and reliable color output. Calibration adjusts for variations in the color output, which changes over time and under different printing conditions.

Print a color swatch page or swatch book

You can print a color swatch page for a single spot color, or you can print a swatch book for a group of spot colors.

Print a swatch book of one or more spot colors

When you print a swatch book, you select one or more spot colors and a layout.

1 In Spot Pro, select one or more spot colors.

You can shift-click to select consecutive colors or ctrl-click or cmd-click to select or deselect specific colors.

To select spot colors from multiple spot color groups, drag the spot colors from the internal spot color groups to the custom spot color section.

2 Click **Print** or right-click to select **Print** from the menu, and select **Swatch book**.

Note: Depending on the Fiery server, you may have a **Print**, **Print to queue**, or **Send to printing** option.

3 Select a patch size.

The size is shown in mm or inches based on the Command WorkStation regional settings.

4 Select a chart size.

Width and height for custom charts can be defined between 5.0 inches and 39.37 inches.

The chart size will also be limited to the largest media that the printer or press can handle.

- **5** Select a media or substrate source.
- **6** To print the measured ΔE value on the color swatch book, select the **Show Measured ΔE2000 value** check box.
- **7** Specify the customer name and contact information.

In the **Customer name** and **Contact information** fields, you can specify up to five lines of text with each line having a maximum of 35 characters.

The Fiery logo and the manufacturer logo, where available, are printed.

- **8** Click **Job Properties** to specify additional print settings.
- **9** Click **OK** to print a spot color swatch book.

If the chart size is greater than the paper size available through the paper source, a warning message will appear and the **OK** button will be disabled.

The job appears as a multipage PDF file in Command WorkStation Job Center. In the printed job, the spot color name and the CMYK color values are printed under each color patch.

Print a swatch book of all spot colors in a group

When you print a swatch book, you select a spot color group and a layout.

1 In Spot Pro, select one color group.

Note: Only one color group can be printed at a time.

2 Click **Print** or right-click to select **Print** from the menu, and select **Swatch book**.

Note: Depending on the Fiery server, you may have a **Print**, **Print to queue**, or **Send to printing** option.

3 Select a patch size.

The size is shown in mm or inches based on the Command WorkStation regional settings.

4 Select a chart size.

Width and height for custom charts can be defined between 5.0 inches and 39.37 inches.

The chart size will also be limited to the largest media that the printer or press can handle.

- **5** Select a media or substrate source.
- **6** To print the measured ΔE value on the color swatch book, select the **Show Measured** ΔE **2000 value** check box.
- **7** Specify the customer name and contact information.

In the **Customer name** and **Contact information** fields, you can specify up to five lines of text with each line having a maximum of 35 characters.

The Fiery logo and the manufacturer logo, where available, are printed.

- **8** Click **Job Properties** to specify additional print settings.
- **9** Click **OK** to print a spot color swatch book.

If the chart size is greater than the paper size available through the paper source, a warning message will appear and the **OK** button will be disabled.

The job appears as a multipage PDF file in Command WorkStation Job Center. In the printed job, the spot color name and the CMYK color values are printed under each color patch.

Substitute colors

You can use the Substitute Colors feature to map a color in a job to a different color.

Color substitutions affect only text, vector graphics, and line art. Color substitutions have no effect on raster images.

When a color is defined as a substitute color, the settings for an RGB color (such as **RGB source**) or CMYK color (such as **CMYK source**) have no effect. The color is converted with a process similar to spot color conversion.

<u>ACAUTION</u> You cannot use the Substitute Colors and Postflight features at the same time. These print options are constrained.

Substitute colors are not supported for CMYK+ color mode and associated output profiles.

Using the Substitute Colors feature involves the following tasks:

- Configure the substitute color values in Command WorkStation.
- Print a document with the **Substitute colors** print option turned on.

Create and edit substitute colors

A substitute color resides in a special type of spot color group called a substitute group. For a substitute color, you specify the CMYK value of the original color and the CMYK value of the color that substitutes for the original color.

- 1 Start Spot Pro in one of the following ways:
 - In Job Center, click **Spot Pro** on the toolbar.
 - Click Server > Spot Pro.
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane and then click **Spot Pro**.
 - In Device Center, click **Resources** > **Spot Pro**, and then click **Launch Spot Pro**.
- 2 Click New and select Substitute Group.

For a substitute group, type a name for the group and click **OK**.

If a substitute group already exists, select a substitute group and proceed to 5.

- 3 Select the location in the color list where you want the new substitute color to be placed.
- 4 Click **New** and select **Substitute Color** to create a substitute color.
- **5** Select a color mode for specifying the original color value.
- **6** Select a tolerance degree for the original color.

Tolerance determines how close a particular color must be to the original color to match. Small and Large are defined as follows:

Color mode	Small tolerance range	Large tolerance range
CMYK (0-100%)	+/- 0.25%	+/- 0.5%
RGB (Device Code 0-255)	+/- 0.25	+/- 1
RGB (0-100%)	+/- 0.25%	+/- 0.5%

Note: Tolerance does not affect the substituted color.

- **7** Type the values for the original color. Use the **Tab** key to move from one field to the next.
- **8** Type the values for the converted color.
- **9** Do one of the following:
 - Click **Done** to finish editing and to exit the Spot Pro color editor pane.
 - Click **Save** to save your edits and switch to a different spot color, without leaving the Spot Pro color editor pane.

- **10** To edit a substitute color, in the Spot Pro color editor pane, click the **Edit** icon (). Make the necessary changes and do one of the following:
 - Click **Done** to finish editing and to exit the Spot Pro color editor pane.
 - Click **Save** to save your edits and switch to a different spot color, without leaving the Spot Pro color editor pane.

Use Fiery TrueBrand

Fiery TrueBrand allows you to match your print output to your brand colors. Some applications such as Microsoft Office allow colors only to be defined in the RGB space. Fiery TrueBrand helps the RGB color in Microsoft Office to print like a PANTONE color.

Any named color can be used from the PANTONE, DIC, HSK, and TOYO libraries, including user-created custom spot colors, supported by the Fiery server.

Note: Fiery TrueBrand applies only to RGB colors for elements defined within the application.

Make sure that the Fiery Administrator has given you the Calibration privilege. See *Configure Help* for more information.

Fiery TrueBrand is not available on all Fiery servers.

- 1 Open a job in a desktop application, for example Microsoft Word or Adobe Acrobat.
 - The source file types supported are PDF and Microsoft Office (.doc, .docx, .xls, .xlsx, .ppt, or .pptx).
 - You can also open a job that is either held, or processed and held in the Command WorkStation Job Center.
- 2 In the Fiery Driver or in the **Job Properties** window of Command WorkStation, select the **Color** tab, and then select **Substitute colors**.
 - Selecting **Substitute Colors** instructs the Fiery server to use these RGB-brand color substitutions. To prevent these RGB-brand color substitutions for any particular job, clear the **Substitute colors** check box.
- **3** Start Fiery TrueBrand by one of these methods:
 - In the Fiery Driver, select the **Fiery TrueBrand** link on the **Tools** tab. To use the **Tools** tab, you must enable Two-way Communication.
 - In WebTools, select the **Fiery TrueBrand** icon on the left side. You can access WebTools from the Command WorkStation **Server** menu.
 - In a web browser, type **https://IP address/truebrandapp** where the IP address is for the Fiery server and press **Enter**.
 - In Spot Pro, click **Fiery TrueBrand** on the toolbar. You can access Spot Pro from the toolbar in Command WorkStation.
- **4** Type your user name and password if prompted.
- 5 Click Let's get started.
- **6** Follow the onscreen instructions.

Fiery ColorGuard

Fiery ColorGuard allows operators to verify color, verify spot color, recalibrate, automatically report verification results to the cloud, and view recent verification history. Fiery ColorGuard requires a license to be available for each printer. Fiery ColorGuard provides a free 30-day trial license for your account.

To access Fiery ColorGuard, you must connect your Fiery server to the Fiery IQ cloud. For more information, see Connect the Fiery server to the Fiery IQ cloud on page 44.

After connecting your Fiery server with the Fiery IQ cloud, you can access Fiery ColorGuard features in Command WorkStation 7.0 and later using one of the following:

- Click Server > ColorGuard.
- Click the More icon () next to the server name in the Servers pane.
- Click pending schedules in the Notifications tab.

In the Fiery ColorGuard window:

- Click Go to ColorGuard web to access the Fiery ColorGuard Web application where you can schedule
 verifications and calibrations to be completed in Fiery ColorGuard and track the verification results. For more
 information, see Fiery ColorGuard Web application.
- Click **Refresh licensed printers** to view the details of any newly added Fiery server for which you have activated the license or the 30-day trial license. You can click the button once in five minutes to view the refreshed list of Fiery servers and schedules.

The Notifications tab includes the Fiery ColorGuard pending schedule notifications. You can do one of the following:

- Click **Recalibrate now** to open Calibrator and complete the recalibration.
- Click **Verify now** to open FieryMeasure and complete the verification or benchmark verification.

For more information about Fiery ColorGuard, see Fiery IQ Cutsheet Help.

Managing server resources

Fiery system software updates and patches

Command WorkStation includes the Fiery Updates feature for installing updates and patches for Fiery system software and Fiery API. The Fiery Updates feature allows installing system software updates from either the Fiery server or remote computers. The Fiery Updates feature also allows installing updates and patches without requiring the Fiery server to be connected to the Internet.

To access Fiery Updates, start Command WorkStation.

The computer running Command WorkStation must be:

- Connected to the Internet
- On the same network as the Fiery server

Updates and patches can be installed onto the Fiery server from only one computer at a time. System Updates must be disabled to allow installing patches.

Update Fiery server system software through Command WorkStation

You can update Fiery server system software from a client computer or locally at the Fiery server.

You will need the Fiery server name or IP address to connect to the Fiery server in Command WorkStation.

Note: The client computer must have an active internet connection to perform the Fiery server system updates.

Note: For best results, install updates and patches when no jobs or actions are in progress on the Fiery server or in Command WorkStation.

- 1 Start Command WorkStation.
- **2** Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 3 In Device Center, click Fiery Updates > Updates.
- **4** To view and install the available updates, click **Updates** under **Fiery Updates**, then click **Update** in the right pane for each update you want to install.
- **5** To view the available patches, click **Patches** under **Fiery Updates**.

6 Select the patches to install.

Any required patches will be automatically selected when you select a patch.

7 If a message about Fiery API displays, click **OK** to install Fiery API.

Fiery API is required to perform patch installations with Fiery Updates.

8 Click **Update** to install the selected patches.

The Fiery server must be rebooted after installing every Exclusive patch.

Note: You can install multiple non-exclusive patches along with each exclusive patch.

9 Click **OK** to reboot the Fiery server after installing updates and patches.

Note: After the restart, the administrator must reconnect to the Fiery server in Command WorkStation.

Note: Command WorkStation connected to a Fiery server displays a notification when the patch installation is in progress.

10 To view a list of the installed updates and patches, click History under Fiery Updates.

Examine server performance and security

Fiery Health Monitor helps keep your Fiery server secure and running in its most efficient condition to face the demands of a production print environment by constantly tracking the overall system health and presenting a list of preventative actions.

Keep the server running at its best

- 1 Start Fiery Health Monitor using one of these methods.
 - Under the logo at the upper-right corner of Job Center, click Fiery Health Monitor.
 - Select Server > Fiery Health Monitor.
 - Right-click the Fiery server name and select **Fiery Health Monitor**.
- **2** Click one of the tools.
 - **Fiery Updates** (if supported by your Fiery server) installs updates and patches for Fiery system software and Fiery API- Update Fiery server system software through Command WorkStation on page 269.
 - **Check C: disk space** monitors the C drive for disk usage and prompts the administrator to start Windows Disk Cleanup.
 - Check E: or J: disk space monitors the job storage drive (J for FS400/400 Pro and later and E for FS350/350 Pro and earlier) and accesses the Clear Server feature, allowing you to clear jobs, logs, and VDP resources- Clear Server on page 95.
 - **Restart Fiery** prompts the Administrator to restart the Fiery server periodically to optimize performance.

• Archive Manager archives jobs outside of the Fiery server- Archive jobs on page 90.

Note: If you turn off Archive Manager in **Command WorkStation** > **Preferences**, Archive Manager will not appear in Fiery Health Monitor.

- Fiery Backup Schedule (if supported by your Fiery server) sets a daily or weekly schedule for automatic backups. Fiery Backup Schedule opens WebTools in a default browser window. If browser security errors appear, you can dismiss them and continue.
- **Windows Updates** makes sure that your Fiery server is up to date with the latest Windows updates and prompts the administrator to start the Windows Updates application.

Note: You can select **Disk Cleanup** and **Windows Updates** from a remote Command WorkStation client using Window Remote Desktop, or from a keyboard, monitor, and mouse connected to the Fiery server.

For additional information or support, registered users may start a discussion through Fiery Communities.

Virtual printers

Virtual printers allow users to print to the Fiery server using predefined job settings. Virtual printers are published on the network so users can configure them as printers on their computer.

Administrators can manage virtual printers in Command WorkStation. They can duplicate the print and hold virtual printers and modify their settings. Administrators can also create new virtual printers.

From Device Center you can view the job properties of a selected virtual printer from **Workflows** > **Virtual Printers**. Use the toolbar to perform additional actions with a virtual printer.

Administrators can publish job presets as virtual printers. See Preset print settings on page 64.

Set Defaults

The Set Defaults feature allows you to customize the Fiery server by modifying the default properties of a job.

Create, edit, or duplicate virtual printers

Only Administrators can create, edit, and duplicate virtual printers. Administrators can also publish job presets as virtual printers.

- 1 In Device Center, click Virtual Printers under Workflows.
- **2** Do one of the following:
 - To create a virtual printer, click **New** on the toolbar.
 - If you want to create a basic virtual printer, select **Virtual Printer**.
 - If you want to create an IPDS virtual printer, select IPDS Virtual Printer.
 - To edit a virtual printer, click **Edit** on the toolbar.
 - To duplicate a virtual printer, click **Duplicate** on the toolbar.

- **3** Specify the following:
 - **Printer Name** This is the alphanumeric name of the virtual printer.

Note: When you have created or duplicated a virtual printer, you cannot change the name, but you can change print settings.

- Description Add or modify comments to describe the virtual printer to users, for example, company brochure.
- Job Actions Select one of the Fiery server job actions, such as Hold, or Process and Hold.
- **Job Properties** Select **Define** to access Job Properties to specify print settings, or select from a list of preset properties.

Note: You can lock any job setting by clicking its lock icon.

- **4** If required, select the **JobExpert** check box and then select a category from the menu.
- **5** If required, select **Preflight** and edit the settings:
 - Preset for PDF jobs Allows you to choose a preset.
 - **Preset for Non-PDF jobs** Allows you to use default preflight settings, customize a preflight setting, or select other presets.
 - **Default Preset** Indicates that print jobs will use the default print settings, unless you click **Edit** to change the settings.
 - Edit Allows you to select other presets or customize a preflight setting.

Note: You can also save the customized preflight setting as a preset.

- On critical error Specifies the action the Fiery server performs when encountering a critical error. Use job action refers to the job action specified for the virtual printer.
- **6** If required, select the **JobFlow** check box and click **Select**.
 - In the Fiery JobFlow Workflows window, select a workflow and then click Select.

Note: If you want to create a new Fiery JobFlow workflow, click **Manage workflows**.

- 7 For an IPDS virtual printer, click **Next** and then specify the appropriate settings in the **IPDS** window:
 - Job
 - Exceptions
 - Input Virtual Tray Settings
 - Image shift
 - Stacker Settings
- 8 Click OK.

Locked job settings

Locking a job setting prevents other users from changing the setting.

Note the following:

- Submitting a job to the virtual printer through the Mac OS printer driver You can modify the locked settings, but when the job reaches the Fiery server, the job prints according to the locked job settings. Any changes made by the user are overridden.
- Importing a job to Command WorkStation using a virtual printer The imported job uses the locked settings on the Fiery server and overrides any conflicting settings that came with the job.
- Unlocked job settings You can change job settings, and the job prints according to these settings. But if a job setting is not specified, the job uses the virtual printer setting.

Publish job presets as virtual printers

A server job preset can be published as a virtual printer.

- 1 In Device Center, click Job Presets under Workflows.
- 2 Select a preset and click **Publish as Virtual Printer**.
- **3** In the **New Virtual Printer** window, specify settings.

Note: You can specify all the settings except for job properties. The job properties used are those specified for the server preset.

Manage virtual printers

The Fiery server Administrator can publish, unpublish, or delete a virtual printer.

- 1 In Device Center, click Virtual Printers under Workflows.
- **2** Select a virtual printer in the list and click one of the following on the toolbar:
 - **Publish** to publish the selected virtual printer on the network.

The virtual printer is shared over the network when SMB printing is enabled in **Server** > **Configure**. In Configure, select **Job Submission** > **Windows Printing**.

• **Unpublish** to remove the selected virtual printer from the network.

The virtual printer no longer appears as a shared printer. It also no longer appears as a printer you can import jobs to in Command WorkStation.

• **Delete** to delete the selected virtual printer.

To select multiple virtual printers, use shift-click, ctrl-click (Windows), or cmd-click (macOS). To select all virtual printers, press ctrl+A (Windows) or cmd+A (macOS).

Print to virtual printers from Windows

Virtual printers allow you to print with predefined job settings.

Contact your administrater for the IP address or DNS name of the virtual printers on your network to ensure that you can print to the virtual printers.

For information about adding printers, see Printing, which is part of the user documentation set.

Update the installable options

To print to a virtual printer from a Windows computer, you must make sure two-way communication is enabled and update the installable options.

1 Locate the virtual printer in the location where your printers are listed..

Note: Common locations for printers on different operating systems include Devices and Printers, Printers and Faxes, Printers and Scanners, and Printers.

- **2** Right-click the virtual printer and choose **Printer properties**.
- 3 Click the Installable Options tab and make sure that Two-Way Communication is enabled.
- 4 Click Update.

Print a job

You must select job settings to print to a virtual printer from Windows.

- 1 Open the file and select File > Print.
- 2 Click Properties.
- **3** Make sure that the **Fiery Printing** tab is selected, and click the tabs to select job settings.
- **4** After you specify the settings, click **OK** and then **Print**.

Print to virtual printers from Mac computers

Virtual printers allow you to print with predefined job settings.

Contact your administrater for the IP address or DNS name of the virtual printers on your network to ensure that you can print to the virtual printers.

To print to a published virtual printer from a Mac computer, install the printer driver for the Fiery server, and add the virtual printer.

For information about installing printer drivers, see *Printing*, which is part of the user documentation set.

Update installable options and print a job

To print to a virtual printer from a Mac computer, you must make sure two-way communication is enabled so any installable options are updated.

- 1 Open a file and select File > Print.
- **2** Choose the virtual printer as your printer.
- 3 Choose Fiery Features from the list and select Two-Way Communication.
 When two-way communication is enabled, the virtual printer will be updated with the options installed on the printer.
- 4 Click Full Properties in the Quick Access pane to specify print options and settings for your job.
- 5 Click **OK** and then **Print**.

Paper Catalog

Paper Catalog is a system-based paper warehouse database that stores attributes of any media stock available in a production print shop.

The Paper Catalog database resides on the Fiery server and is not affected when you reboot or clear the Fiery server.

If Paper Catalog is supported on the Fiery server, any user can select media for a job from the Paper Catalog in the printer driver or Job Properties in Command WorkStation.

To set up and manage Paper Catalog, you must log in to Command WorkStation with Administrator access.

Note: Depending on what is supported on the Fiery server, either Paper Catalog or Media Catalog is displayed in the user interface.

Access levels

The level of Paper Catalog functionality available to you depends on how you log into Command WorkStation. The relevant access levels are:

- Administrator Has full access to all Command WorkStation and Fiery server functions. Administrator password is required.
- Operator Has access to all Job Center functions. In Device Center, does not have access to Configure, Backup
 and Restore, changing passwords, and deleting the Job Log. Can view Paper Catalog, virtual printers, and color
 management functions, but cannot edit them. Operator password is required.

Paper Catalog allows Administrators to:

- Define multiple media attribute combinations and assign unique names to each combination
- · Assign color profiles for each media
- Select predefined media when they submit their job
- Assign media to trays
- Specify which Paper Catalog columns are available for users

- Centrally maintain their Paper Catalog database
- Specify Paper Catalog favorites

Paper Catalog allows Operators to:

- Select predefined media when they submit their job
- Assign media to trays
- Specify Paper Catalog favorites

Choose media from Paper Catalog

After the Paper Catalog has been set up and entries defined, you can select media from the catalog and assign it to your job.

Note: Paper catalog entries must be set up in Command WorkStation before you assign it to your job. For more information, see Create a Paper Catalog entry on page 280.

Administrators can access Paper Catalog from:

- Media and Mixed Media in Job Properties
- Booklet and Gangup layout options in Job Properties
- Fiery Impose, Fiery Compose, or Fiery JobMaster, if supported
- The More icon (three vertical dots) next to the name of the Fiery server

Choose from Paper Catalog in Job Properties

Paper Catalog is available from the Job Properties window in Command WorkStation.

- 1 Select a job in the **Held** list in **Job Center**. Do one of the following:
 - Click Actions > Properties.
 - Right-click and select Properties.
 - Click the **Properties** icon on the **Job Center** toolbar.
 - Double-click the job.
- 2 Click Media.

3 After Paper Catalog has been set up and entries defined, select the desired item from the **Paper Catalog** list. To view the media attributes associated with each entry, click **Select**.

You can also select from Paper Catalog in Mixed media.

If you select **Booklet** or **Gangup** in the **Layout** tab, you can choose **Select from Paper Catalog** when assigning media.

Note: If you specify a paper catalog entry and then change the page size (or another attribute associated with the entry) in the **Job Properties** window, the Paper Catalog assignment is canceled. The **Job Properties** window subsequently displays **none defined** for Paper Catalog.

Choose from Paper Catalog in Fiery Compose or Fiery JobMaster

Administrators can access Paper Catalog from Fiery Compose or Fiery JobMaster, if supported.

- 1 Right-click a spooled job in the **Held** or **Printed** list in Job Center, and select **Compose** or **JobMaster**.
- **2** Do one of the following:
 - In the **Page View** pane in the **Fiery Compose** or **Fiery JobMaster** window, right-click the desired page and select **Assign Media**.
 - In the **Settings** pane in the **Fiery Compose** or **Fiery JobMaster** window, click the **Edit** button next to the **Sheet** field.
- **3** In the window that appears, click the arrow beside the **Media** field to display the media menu.
- 4 Scroll down and select Choose from Paper Catalog.
- 5 In the Paper Catalog window, select your desired media and click OK.
- 6 Click OK.

For more information, see Fiery JobMaster-Fiery Impose-Fiery Compose Help.

Choose from Paper Catalog in Fiery Impose

Administrators can access Paper Catalog from Fiery Impose, if supported.

- 1 Right-click a spooled job in the **Held** or **Printed** list in Job Center, and select **Impose**.
- **2** Do one of the following:
 - In the Sheet View pane in the Fiery Impose window, right-click the desired page and select Assign Media.
 - In the Settings pane in the Fiery Impose window, click the Edit button next to the Sheet field.
- **3** In the window that appears, click the arrow beside the **Media** field to display the media menu.
- 4 Scroll down and select Choose from Paper Catalog.
- **5** In the **Paper Catalog** window, select your desired media and click **OK**.

6 Click OK again.

For more information, see Fiery JobMaster-Fiery Impose-Fiery Compose Help.

Set up Paper Catalog

An Administrator creates Paper Catalog entries that describe all the media available for use with the printer.

If a job restored from an Archive contains a paper catalog entry that is not in the database, Paper Catalog automatically creates a new entry with the Archive attributes.

Only an Administrator can access setup options for Paper Catalog to customize it for specific print shop scenarios.

- 1 Log on to the desired Fiery server as Administrator. Enter the Administrator password if one has been set.
- **2** Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select Device Center.
- 3 Click Paper Catalog under Resources.

In the **Paper Catalog** window, you can create new entries, edit entries, delete entries, duplicate entries, and manage the Paper Catalog database.

Choose Paper Catalog settings

When creating a Paper Catalog entry, Administrators can choose from two sets of media attributes: Printer (PPD) based and JDF (Job Definition Format) based.

- The PPD set of media attributes is specific to the Fiery server. The name of each setting is standard across devices, but the list of possible options varies. The PPD set is recommended for new and intermediate users.
- The JDF set of media attributes comes from the printing industry standard specifications for Job Definition
 Format. This set of media attributes is not specific to the Fiery server, and allows for smooth mapping of media
 definitions from MIS-job submission workflows. The JDF set is recommended for advanced users familiar with
 the JDF workflow.

Note: The Fiery server must support JDF printing and the feature must be enabled in Configure. Open **Configure**, and click **Job Submission**. Select **JDF Settings** and select the **Enable JDF** check box.

Some of the media attributes are common to both sets, although the naming may be slightly different. The JDF set provides more granularity.

- **1** Open Paper Catalog.
- 2 In the Paper Catalog window, click Settings on the toolbar.
- 3 Select either PPD based or JDF based for Specification to use.

Attributes for new entries in Paper Catalog

Attributes for new Paper Catalog entries are grouped under different tabs.

Before creating a new entry, choose either PPD or JDF settings. For information, see Choose Paper Catalog settings on page 278.

PPD settings

The tabs are:

• **New** or **Edit**: Choose settings to specify the media to be used.

JDF settings

The tabs are:

- Basic and Other Attributes: Include a number of JDF attributes to describe the media in greater granularity.
- **Settings**: Choose the color profiles and the feed direction.

Change the column display in Paper Catalog

The column headings in the **Paper Catalog** window change dynamically, according to whether you are using PPD based media attributes or JDF based media attributes.

Administrators can change the order of these columns in the display, or add/delete the columns to present information useful to your particular print environment. To adjust the width of a column, drag the column border to the left or right.

Note: Tray is always the first column heading and cannot be moved or deleted.

- 1 In the **Paper Catalog** window, right-click in the column heading bar.
- **2** Do one of the following:
 - Click Add to choose an item from the menu to add to the columns.
 - Click **Delete** to remove a column.
 - Click **Move Left** or **Move Right** to move a column in the desired direction.

Specify JDF attributes in Paper Catalog

Administrators can specify JDF media attributes for a Paper Catalog media entry.

To use this procedure, you must select JDF based specifications in the Paper Catalog Settings window.

- 1 In the **Paper Catalog** window, do one of the following:
 - Click the **Add New** icon.
 - To edit an existing catalog entry, select the entry and click the **Edit** button.
- 2 In the **New** or **Edit** window that appears, enter information in the **Basic** or **Other Attributes** tabs. You can enter information in the text fields, or click the arrow to access the drop-down menu for an attribute.
- **3** Click the **Settings** tab and specify attributes as required.

For information about specifying color profile settings, see Specify color profile settings on page 281.

The new entry appears as an editable (white) entry line in the **Paper Catalog** window.

Create a Paper Catalog entry

Administrators can specify new media and media attributes in Paper Catalog.

Duplicate names for catalog entries are allowed when you create a new Paper Catalog entry, except on some printers. On those printers, duplicate names are ignored by Paper Catalog.

- 1 Open Paper Catalog.
- 2 In the Paper Catalog window, click Settings on the toolbar and choose either the PPD based or JDF based settings.
- 3 Click Add New on the toolbar.
- **4** In the **New** window, specify the attributes.

You must make a selection for each setting marked with an asterisk (*).

Note: If you enter an incorrect value for a media attribute, and move on to another media attribute, the incorrect media attribute will revert to its previous value.

Add new media from the tray

You can initiate the process of creating a new Paper Catalog entry from the tray if media settings have already been specified for that tray.

To use this procedure, you must select PPD based specifications in the Paper Catalog Settings window.

- 1 Open Paper Catalog in one of the following ways:
 - Click the **Paper Catalog** icon on the toolbar.
 - Select Paper Catalog from the Server menu.

- Right-click the Fiery server in the **Servers** list and select **Paper Catalog**.
- Right-click the Fiery server in the **Servers** list and select **Device Center**. In Device Center, select **Paper Catalog** under **Resources**.
- 2 Click Settings on the Paper Catalog toolbar to choose PPD based specifications.
 - **PPD based** is the default set of media attributes for the printer. For information about the specific attributes, see *Printing*.
- **3** In Command WorkStation, right-click the tray for the Fiery server in the **Servers** list, and select **Add New Media** from the menu.
 - The **New Media** window opens with the settings from the tray populating the matching fields. These settings cannot be edited.
- **4** Specify more attributes for the new media in the **New Media** window, if required.

Specify color profile settings

Administrators can associate a Paper Catalog entry with a color output profile.

Any default or custom Fiery server output profile appears listed by name as a possible Paper Catalog attribute.

- 1 In the Paper Catalog window, click Settings on the toolbar.
- **2** Specify the Paper Catalog setting as either **PPD based** or **JDF based**.
- **3** Do one of the following:
 - Click Add New.
 - To edit an existing catalog entry, select the entry and click the **Edit** button.
- **4** Assign the appropriate profile options to your catalog entry. For JDF attributes, options are on the **Settings** tab.

Front color profile - Default color profile applied only to the front side of the media. Select from the list of output profiles in the list. This attribute can be overridden by specifying a different color profile in **Job Properties**. Appears in both the PPD and JDF settings.

Back color profile - Default color profile applied only to the back of the media. Select from the list of output profiles in the list. **Back color profile** menu also includes **Same as Front**. This attribute can be overridden by specifying a different color profile in **Job Properties**. Appears in both the PPD and JDF settings.

Specify **Feed direction**, if available, by clicking either **Long edge feed** or **Short edge feed**.

5 Click OK.

The new or modified entry appears under **Name** in the **Paper Catalog** window.

For more information about output profiles, see Color Printing.

Marking or removing paper catalog entries as favorites

You can mark or remove frequently used paper catalog entries as favorites in the Paper Catalog window.

Mark paper catalog entries as favorites

To mark frequently used paper catalog entries as favorites, do one of the following:

- Select an entry and click **Favorite** on the toolbar.
- Right-click a paper catalog entry and select Favorite from the list.
 A star appears next to the paper catalog entry.

Remove paper catalog entries as favorites

You can remove an entry marked as a favorite.

- Select a favorite entry and do one of the following:
 - Click **Favorite** on the toolbar.
 - Right-click the entry and clear **Favorite** from the list.

You can view the paper catalog favorites in the media list available in the Job Properties window.

More information about paper catalog favorites

The paper catalog favorites are not applicable for the following:

- Export Paper Catalog
- Backup and restore options in Fiery Resources and Settings (Open Device Center, select Tools under General, and click Fiery Resources and Settings.)

Note: When you restore the paper catalog entries to the Fiery server with **Import** > **Merge with Existing**, the existing favorites will be retained.

Search for jobs using a paper catalog entry

You can perform an advanced search to list all jobs that use a particular paper catalog entry.

- 1 In Command WorkStation, click **All Jobs** in the Servers pane. All jobs across all queues are listed in the All Jobs view.
- 2 Right-click the Job List column header and select **Add New** > **Media** > **Paper Catalog Name**. Paper Catalog Name appears in the Job List column header.
- **3** In the toolbar, click the arrow next to the **More** filter.
- 4 In the Customize Search Filters list, select Paper Catalog Name and click Save.
- **5** Click the arrow next to the **Paper Catalog Name** filter, select the required paper catalog entry and click **Apply**. All jobs using the selected paper catalog entry are listed.
- **6** Optionally, click **Save** to save the search results as a view. In **Save Search as View**, type a name and click **Save**.

The view appears below the list of queues in the Servers pane.

Duplicate a Paper Catalog entry

You can duplicate an existing catalog entry and then customize it to create a new entry.

Duplicate names for catalog entries are allowed when you create a new Paper Catalog entry, except on some printers. On those printers, duplicate names are ignored by Paper Catalog.

Note: Only an Administrator can access Paper Catalog setup.

- 1 In the main **Paper Catalog** window, select the Paper Catalog entry that you want to duplicate.
- 2 Click the **Duplicate** button, enter a new name if desired, and click **OK**.

The duplicated entry appears at the bottom of the list.

3 To customize your catalog entry, click the **Edit** button.

See Editing or deleting paper catalog entries on page 283.

Note: You can also right-click a Paper Catalog entry, and choose Edit or Duplicate.

Editing or deleting paper catalog entries

With Fiery Command WorkStation 6.8 and later, you can edit or delete a paper catalog entry even if it is a default server setting or assigned to any of the following:

- Job
- Tray
- Smart media
- Preset
- Virtual printer

To edit or delete a paper catalog entry that is associated with a tray, you must first remove the association. For more information, see Remove tray association on page 283.

To view all jobs using a particular paper catalog entry, perform an advanced search. For more information, see Search for jobs using a paper catalog entry on page 282.

Remove tray association

To remove the tray association, you must do the following:

- 1 In the consumables area in Fiery Command WorkStation, click the arrow to the right of a tray.
- 2 Click Remove Association.

Edit a Paper Catalog entry

You can edit attributes and values of paper catalog entries.

- 1 In the **Paper Catalog** window, do one of the following:
 - Select the entry and click **Edit** on the toolbar.
 - Double-click the selected entry.
 - Right-click the selected entry and select **Edit**.

A message notifies you that one or more jobs use the paper catalog entry.

- **2** If the paper catalog entry is associated with any of the following:
 - **a)** Tray: A message notifies you to remove the tray association. For more information, see Remove tray association on page 283.
 - **b)** Job, smart media, preset, virtual printer, or a default server setting: A message notifies you that one or more jobs use the paper catalog entry.

Click **OK** in response to the message.

3 Enter information in the text fields or click the arrow to display the list for that attribute. Choose the new attribute setting or enter the new attribute value.

Note: If you enter an incorrect value for a media attribute and move on to another media attribute, the incorrect media attribute will revert to its previous value.

4 Click **OK** to save the changes.

Note: For jobs that are already in queues, the media attribute columns will be updated when the job is processed or printed, or when you open the **Job Properties** window.

Delete a Paper Catalog entry

You can delete a paper catalog entry in the Paper Catalog window.

1 In the Paper Catalog window, select the paper catalog entry that you want to delete from the list.

Note: Use Shift-click to select multiple sequential entries, and ctrl-click to select multiple entries that are not sequential.

- **2** Delete the selected entry in one of the following ways:
 - Click **Delete** on the toolbar.
 - Right-click the selected entry and select **Delete**.

If the paper catalog entry is associated with a tray, job, smart media, preset, virtual printer, or a default server settinga, do one of the following::

- Tray A message notifies you that the selected entry is associated with one or more trays. Click **Yes** to remove the tray association and delete the paper catalog entry.
- Job, smart media, preset, virtual printer, or a default server setting A message notifies you that one or more jobs use the paper catalog entry. To delete the entry, click **OK** in response to the message that appears.

Note: After you delete the paper catalog entry, it will no longer be associated with the job. In the **Job Properties** window, the Paper Catalog list will display **Not defined**.

Define a custom page size

Administrators can define a custom page size when creating or editing a Paper Catalog entry.

- **1** Do one of the following:
 - Click the Add New icon.
 - To edit an existing catalog entry, select the entry and click **Edit**.
- 2 In the **New** or **Edit** dialog, click **Custom** beside the **Paper size** field and enter the custom page values for that catalog entry. Click **OK**.
- **3** Add a **Product ID** as required and click **OK**.

Send a job with Paper Catalog settings

On Fiery servers with Fiery system software FS350/350 Pro or later, you can send a job with Paper Catalog settings from one Fiery server to another and retain the settings.

When a job with Paper Catalog settings is sent from one Fiery server to another and a matching paper catalog entry is found in the destination Fiery server database, the matching entry will be used for the job.

If a matching paper catalog entry is not found, the Paper Catalog settings are applied to the job, and you do not need to create a new entry.

In Job Properties, the **Paper Catalog** print option will be set to **None defined**, but the other media settings will reflect the Paper Catalog settings of the job from the original Fiery server.

- **1** Do one of the following:
 - Right-click a job in the **Held** list with Paper Catalog settings and select **Send To**.
 - Select a job in the **Held** list, and click **Actions** > **Send To**.
- **2** Choose the destination Fiery server from the list. The selected job is listed in the **Held** list of the destination Fiery server.
- **3** Select the desired job action for the job.

Manage the Paper Catalog database

Administrators set up and manage the Paper Catalog database.

When the Paper Catalog database is set up, you can export it, merge it with another Paper Catalog database, reset it to factory defaults, and publish or unpublish Paper Catalog media entries.

Export the Paper Catalog database

Exported databases are saved as .xml files and can be imported back into Paper Catalog at any time.

Before you replace your Paper Catalog database or reinstall system software, we recommend that you first back up your existing database by exporting it to a remote location. You can choose to export all entries in the database or a subset.

- 1 In the Paper Catalog window, click Export on the toolbar and choose Export All.
 - If you only want to export some of the media entries, you can select multiple entries in the Paper Catalog and choose **Export Selected**. You can Shift-click to select sequential entries, or ctrl-click to select nonsequential entries
- 2 Navigate to the location on your computer or network where you want to save the exported database file.
- **3** Enter a name for the database file and click **Save**.

The exported database is saved as an .xml file.

Replace the Paper Catalog database

Administrators can import a new database and replace the existing Paper Catalog database.

Before you replace your Paper Catalog database, we recommend that you first archive your existing database by exporting it.

- 1 In the Paper Catalog window, click Import on the toolbar and choose Replace Existing.
- 2 Navigate to the replacement database .xml file on your computer or network, and click Open.
- **3** Click **Yes** in response to the alert message.

Merge Paper Catalog databases

Administrators can import entries from another database to create a merged Paper Catalog database.

If the imported database contains an entry that has identical attributes as an entry in the original database, the new entry is not imported and the original entry remains intact in the merged database.

- 1 In the Paper Catalog window, click Import on the toolbar and select Merge with Existing.
- 2 Navigate to the database .xml file on your computer or network that you want to import, and click **Open**.

Your current Paper Catalog database is now merged with the one you just selected.

Note: When you merge databases, all color profile associations in the imported database are discarded.

Repeat the process for additional Paper Catalog databases that you want to merge into the existing one.

Reset the Paper Catalog to factory defaults

Administrators can revert the Paper Catalog database to its factory default.

Any added or edited catalog entries are lost when you reset the Paper Catalog to factory defaults, unless they have been assigned to a job, assigned to a tray, or are locked. To save your customized entries, first export your existing catalog database before you reset it to factory defaults.

- 1 Click Settings.
- 2 In the Paper Catalog Settings window, click Reset to Factory Defaults.
- **3** Click **Yes** in response to the alert message.

Unpublish or publish paper catalog media entries

By default, all paper catalog entries are published. They are visible to users and can be selected for a job.

When an Administrator unpublishes an entry, it is dimmed in the **Paper Catalog** window, and does not appear in the Paper Catalog list in Job Properties or the printer driver. An Administrator can also choose to hide unpublished entries in the **Paper Catalog** window.

When an entry, or entries, have been unpublished, an Administrator can always publish them again.

Note: You cannot unpublish a paper catalog entry if it is being used by a job, virtual printer, or preset.

- 1 In the Paper Catalog window, select the entry or entries you want to publish or unpublish.
 Use Shift-click to select multiple sequential entries, and ctrl-click to select multiple entries that are not sequential.
- **2** Do one of the following:
 - To unpublish an entry, click the **Unpublish** icon on the Paper Catalog toolbar.
 - To publish an entry, click the **Publish** icon on the Paper Catalog toolbar.

Note: You can also right-click a paper catalog entry, or entries, and choose Unpublish or Publish.

Media attributes

When you create or edit a paper catalog entry, you can select from a number of media attributes. Set media attributes for a catalog entry in the **New** or **Edit** window in Paper Catalog.

Mandatory attributes appear with an asterisk (*) next to the name. You cannot leave the field for a mandatory attribute empty.

Paper Catalog offers you two sets of media attributes:

• Printer (PPD) based (the default)

The choices listed for each PPD setting are determined by the PPD for the connected Fiery server.

JDF (Job Definition Format) based

JDF attributes are standard and are not dependent on the connected Fiery server.

Common media attributes

Attribute names appear in the column headers of the main **Paper Catalog** window, according to whether you have selected PPD based or JDF based settings.

Note: Attribute names may vary depending on what is supported on your Fiery server.

JDF attributes are described below. Equivalent PPD settings are also included. The PPD attributes provided to create a paper catalog entry vary from project to project, so the terminology for the attributes will vary. For a description of the PPD settings available for your product, see *Printing*.

Note: In the descriptions of the attributes, the terms "media" or "paper" refer to "substrate".

% recycled content The percentage of recycled material in the media.

Back Settings that can be applied to the back of the media. See Back on page 291.

Users have the option to clear the **Same as Front** check box and select from

the Coating, Gloss value, and the Imageable sides options.

Back color profile Default color profile applied only to the back side of the media. This

attribute can be overridden by specifying a different color profile in Job

Properties. Appears in both the PPD and JDF settings.

Brightness Light reflectance of the media used. Enter a value from 0% (low reflectance)

to 100% (high reflectance).

CIE Lab Color The device-independent color of the media. Specify the color using CIE

L*a*b* values.

CIE Tint Describes how neutral, unsaturated, or non-chromatic the media is. Specify

the media tint using values in the CIE xyz coordinate system. A coordinate

of 0 indicates a perfectly neutral tint in the red-green axis.

CIE Whiteness Describes the amount of overall light reflected by the media, as measured

across the entire visible spectrum. Specify the reflection amount using values in the CIE xyz coordinate system. A coordinate of (100, 100, 100)

indicates perfect whiteness.

Color name Color of the media used. To indicate translucent media, choose a "Clear"

color option.

Custom color name Custom color of the media used. If your desired color does not appear in the

Color menu, type the name of your custom color into this field.

Description

Descriptive information that would enable a user to order more of this media from a paper merchant. For example, the description might read Hammermill Color Copy 10246-7 8 1/2" x 11" 105 gsm Photo White Ultra Smooth.

Feed direction

The Feed direction attribute specifies the orientation of the media as it feeds into the printhead. See Feed direction on page 292.

Flute/Grain direction

Specifies the direction of the fluted substrate as it feeds into the printhead. Choose from the following options:

- None This is the default.
- **Short** The short edge of the fluted substrate as it feeds into the printhead.
- **Long** The long edge of the fluted substrate as it feeds into the printhead.

Front:

Settings that can be applied to the front of the media. See Front on page 291.

Front color profile

Default color profile applied only to the front side of the media. This attribute can be overridden by specifying a different color profile in **Job Properties**. Appears in both the PPD based and JDF based settings.

Grade

The Grade attribute indicates the surface quality of the media, expressed as a grade level from 1 to 5. See Grade on page 292.

Hole type

Pattern of punched holes (if any) on the media used.

Media color

The PPD setting for the color of the media to be used. JDF settings for color of media include **Color name** and **Custom color name**.

Media unit

The Media unit attribute indicates the physical format of the media that is fed into the printer. See Media unit on page 293.

Media weight

The PPD setting for weight of the media used, measured in grams per square meter (gsm) or pounds (lbs). The similar JDF setting is Weight on page 297.

Name

Descriptive name for the catalog entry, to describe the media to load in the trays, such as 11" x 17" Hammermill 105 gsm. Type the desired name into this field.

Opacity

The Opacity attribute indicates the level of transparency of the media. See Opacity on page 293.

Output paper size

Pre-defined sizes that can be selected for the media output. You can select a size or enter a custom paper size.

Opacity Level %

The media's percentage of opacity. 0% represents full transparency, and 100% represents full opacity.

Paper size

Width and height dimensions of the media used. You can select a size or enter a custom paper size.

For information about specific Paper size options, see *Printing*, which is part of the user documentation set.

Paper type

The PPD setting that includes categories that are similar to those in the JDF Type, Type details on page 295, and Texture on page 294 settings.

Pre-Printed

When the check box is selected, the media contains pre-printed content (for example, stationery paper with a pre-printed letterhead). When the check box is cleared, the media is not pre-printed.

Printing technology

Choose from the available printing technologies.

- **Offset**: Uses metal plates to transfer (offset) images to a rubber medium or rollers which is then printed on the substrate.
- Laser: Uses light or a "laser" to transfer text and images on to the substrate. This type of printing uses toner or dry ink powder to print on the substrate.

Product ID

Part number, item code, article number, or other identifier for the media used, as defined manually by the print operator, or by a Management Information System (MIS).

Pre-punched media

The PPD setting for possible hole-punch combinations. The similar JDF setting is **Hole type**.

Set count

Defines the number of pieces in a grouped media set. For example, tab stock with five pre-cut tabs has a Set count of "5".

Tab Properties

When you specify JDF Settings for a new paper catalog entry, and select **Tab Stock** from the **Type details** menu, the **Tab Properties** button is enabled. See <u>Tab Properties</u> on page 293.

Texture

The Texture attribute indicates the surface texture of the media used. See Texture on page 294.

Thickness

Thickness of the media used, measured in microns (µm).

Type

This JDF attribute describes the stock type of the media used. Choose from the following options:

- **Paper** Standard fiber-based paper stock.
- **Transparency** Transparent media stock designed to be viewed through projection.

Type details

The Type details attribute describes additional details of the media stock type used. See Type details on page 295.

Weight

The Weight attribute indicates the weight of the media used, measured in grams per square meter (gsm) or pounds (lbs). See Weight on page 297.

Front

The Front pane has the following attributes that can be applied to the front of the media.

Choose from the following options:

Coating The type of pre-process coating applied to the front side of the media.

See Coating on page 291.

Gloss value The percentage of light reflected by the front side of the media when it is

viewed under illumination with a 75-degree angle of incidence. A higher

percentage of reflection indicates a higher gloss value.

Imageable sides Specifies which side of the media supports print imaging.

Back

The **Back** pane has the following attributes that can be applied to the back of the media.

Same as Front Replicates the settings selected in the **Front** pane. See **Front** on page 291.

Note: For the Fiery server, **Same as Front** is the default. You can clear the **Same as Front** check box and select options from the **Coating, Gloss**

value, and Imageable sides attributes.

Coating Indicates the type of pre-process coating applied to the back side of the

media. See Coating on page 291.

Gloss value The percentage of light reflected by the back side of the media when it is

viewed under illumination with a 75-degree angle of incidence. A higher

percentage of reflection indicates a higher gloss value.

Imageable sides Specifies which side of the media supports print imaging.

Coating

The Coating attribute indicates the type of surface coating to be used for the media.

Choose from the following options:

None No coating applied.

Coated Uses a surface sealant to render qualities to the media such as surface

gloss, smoothness, and weight.

Glossy Coating that has a high level of sheen and is very reflective.

High gloss Glossiest of all coatings rendering a mirror-like finish. This coating is very

reflective and renders a sharp resolution.

Matte Non-glossy with very little sheen; also known as "flat". This coating may

slightly increase the thickness of the media.

Satin Possesses a lower gloss level than a gloss coating but a higher gloss level

than a matte coating. Colors appear sharp and vivid on the media.

Semi-gloss The gloss level can be placed roughly in the middle between a gloss and

matte coating. This coating renders a sharp resolution.

Feed direction

The Feed direction attribute specifies the orientation of the media as it feeds into the printhead.

Choose from the following options:

Long Edge Feed Media feeds into the printhead along the long edge of the sheet, as

defined by paper size.

Short Edge Feed Media feeds into the printhead along the short edge of the sheet, as

defined by paper size.

Grade

The Grade attribute indicates the surface quality of the media, expressed as a grade level from 1 to 5.

Note: This attribute is not usually used for media used in digital printing.

If required, use the following guidelines:

Grade	Surface quality of media
1	Gloss-coated paper
2	Matte-coated paper
3	Gloss-coated, web paper
4	Uncoated, white paper
5	Uncoated, yellowish paper

Media unit

The Media unit attribute indicates the physical format of the media that is fed into the press or the printer.

Choose from the following options:

Sheet Individually cut sheets.

Roll Media that is continuously connected and wrapped around a spindle.

Continuous Media that is continuously connected and folded, as in a fan-folded

format.

Opacity

The Opacity attribute indicates the level of transparency of the media.

Choose from the following options:

Opaque The media is opaque. If the media is printed on both sides, the image on

the other side does not show through under normal lighting conditions.

Translucent The media is partially transparent, under certain lighting conditions such

as back-lit viewing.

Transparent The media is fully transparent, under all lighting conditions.

Tab Properties

When you specify JDF Settings for a new paper catalog entry, and select **Tab Stock** from the **Type details** menu, the **Tab Properties** button is enabled.

Click the button to choose the following JDF tab settings:

Tab collation order Applicable to sets of pre-cut tabs.

Tab width The width along the tab edge as measured along the mid-line of the tab.

Each tab is centered within a space called the "tab pitch."

Tab edge Indicates the edge (left, top, right, or bottom) of the media that has tabs.

Tab extension distance The distance that the tab extends beyond the body of the other media.

Tab offset The distance from the corner of the media to the edge of the first tab

pitch point of the first tab in the bank along the tab edge. This distance is

the same on both ends of the bank of tabs.

Tabs per bank The number of equal-sized tabs in a single set if all positions are filled.

Texture

The Texture attribute indicates the surface texture of the media used.

Choose from the following options:

Antique Surface that is rougher than **Vellum**.

Calendared Extra-smooth or polished uncoated paper.

Cockle Surface that has a rough, wrinkled, irregular finish.

Dull Machine-worn finish without gloss or luster.

Eggshell Surface that has a texture similar to that of an eggshell.

Embossed linen Surface resembling coarse woven cloth, with a pronounced embossed

texture.

English Surface that is smoother than Machine Finished, but rougher than Super

calendared.

Felt Finish applied by a special marking felt.

Laid Surface with a pattern of vertical and horizontal lines.

Light cockle Surface that has a rough, wrinkled, irregular finish, with less pronounced

wrinkles than in Cockle.

Linen Surface that has the texture of coarse woven cloth.

Luster Shiny surface.

Machine finished Extra-smooth or polished uncoated paper, rougher than **English**.

Matte Dull finish without gloss or luster.

Mottled Finish that shows diverse spots or blotches.

Parchment Finish that resembles the appearance of parchment paper.

Satin Smooth, dull finish that resembles satin fabric.

Semi-vellum Slightly rough finish, smoother than Vellum.

Silk Smooth, dull finish that resembles silk fabric.

Smooth Surface that has a smooth finish.

Stipple Fine, pebbled finish.

Suede Smooth, dull finish that resembles suede fabric.

Super calendared Smoothest, most polished, uncoated paper.

Super smooth Very flat and even finish. Smoother than **Ultra smooth**.

Traditional laid Surface with a heavier pattern of vertical and horizontal lines than Laid.

Ultra smooth Very flat and even finish, but not as **Super smooth**.

Uncalendared Rough, unpolished, and uncoated finish.

Vellum Slightly rough and dull finish.

Velvet Smooth, dull finish that resembles velvet fabric.

Wove Soft, smooth finish.

Type details

The Type details attribute describes additional details of the media stock type used.

Choose from the following options:

Plain Choose this option if your media stock does not require a special

description. Some systems require a value of plain, but leaving this blank if the detail is not needed would be better, if the print engine allows it.

Cardboard Media made from cardboard stock.

Continuous long Opaque media composed of sheets continuously connected along the

long edge, as defined by paper size.

Continuous short Opaque media composed of sheets continuously connected along the

short edge, as defined by paper size.

Envelope Media that can be used for conventional mailing purposes. Can either be

plain envelopes or envelopes with transparent address windows.

Envelope plain Envelopes that are not pre-printed and do not have address windows.

Envelope window Envelopes that have transparent windows for addressing purposes.

Full cut tabsMedia with a single long tab that extends along the full length of the

sheet.

Labels Adhesive label stock, such as a sheet of peel-off labels.

Letterhead Cut sheets of opaque media that contain a pre-printed letterhead.

Multi-part form Media designed for use as a multi-layer form. Individual layers of the

form are detached from one another and may be drawn from separate paper trays. It is more likely that the layers are pre-collated. These media

tend to be referred to as NCR - No Carbon Required.

Photographic Cut sheets of opaque media designed to support photographic-quality

images.

Pre cut tabsMedia with two or more tabs that extend along an edge of the sheet.

Stationery Cut sheets of opaque media. Generic paper falls under this category.

Tab Stock

Media with one or more tabs. Can be either Full cut tabs or Pre cut tabs, or refer to media with enough thickness and stiffness to be used as a tab. The media may or may not have tabs.

US Basic Size

The US Basic Size attribute indicates the type of media stock (measured in inches), as defined by US industry standards.

The US basic size is the established size (in inches) of paper stocks upon which the basis weight for the stock is calculated in the United States. The basic size of most paper stocks is also recognized by buyers and sellers as one size that has common use requirements. Choose from the following options:

Paper stock	US basic size
Bond	17" x 22"
Ledger	17" x 22"
Thin (manifold, onion skin)	17" x 22"
Duplicator	17" x 22"
Safety	17" x 22"
Uncoated book	25" x 38"
Coated book	25" x 38"
Text book	25" x 38"
Cover Papers	20" x 26"
Index bristol	25.5" x 30.5"
Tagboard	24" x 36"
Blanks	22" x 28"
Printing bristol	22.5" x 28.5"
Wedding bristol	22.5" x 28.5"
Blotter	19" x 24"

Paper stock	US basic size
Label	25" x 38"
Newsprint	24" x 36"

Weight

The Weight attribute indicates the weight of the media used, measured in grams per square meter (gsm) or pounds (lbs).

The basis weights of most North American stock types are measured in pounds (lbs). To convert to gsm, multiply the basis weight by the appropriate conversion factor.

For example, the metric weight of a 50lb bond stock is calculated as follows:

Basis Weight x Conversion Factor = $50 \times 3.76 = 188 \text{gsm}$.

The appropriate conversion factor for stock types is listed in the following table:

Stock type	Conversion factor
Bond	3.76
Ledger	3.76
Thin (manifold, onion skin)	3.76
Duplicator	3.76
Safety	3.76
Uncoated book	1.48
Coated book	1.48
Text book	1.48
Cover Papers	2.70
Index bristol	1.81
Tagboard	1.63
Blanks	2.28

Stock type	Conversion factor
Printing bristol	2.19
Wedding bristol	2.19
Blotter	3.08
Label	1.48
Newsprint	1.63

Tray association

Tray association allows you to assign a paper catalog media entry to a printer tray. Use this feature to allow the printer to automatically pull specific Paper Catalog assigned media for a job that uses a particular paper catalog entry.

Note: Tray association is only supported if Paper Catalog is supported.

You can use the tray association feature to assign media from the Paper Catalog to the trays installed on the printer.

You can also use smart media to perform automatic tray association—for example, in a print shop, where the printer is configured with the same paper in the tray more than 90 percent of the time.

Tray association display

Tray association is displayed in:

- Consumables area
- Paper Catalog window
- Paper Catalog list in Job Properties Media area

In the consumables area in Command WorkStation, all trays installed on the printer are listed with the size of the media loaded displayed.

If a media entry from Paper Catalog has been associated with a specific tray, that tray displays the name of the media. If no media from the Paper Catalog has been associated, the tray displays as **Unassigned**.

Note: When a paper catalog entry is assigned to a tray, any selection made for **Input tray** for that media in Job Properties will be ignored.

You can assign media to a tray in a number of ways, but the media entry must match the paper attributes that are loaded in that tray. Paper Catalog filters the entries shown for each tray by the paper attributes reported from the Fiery server.

You can also view the media supply in a tray. See Monitor media status in a tray on page 302.

Assign media to a tray

Use the tray association feature to assign media from the Paper Catalog to the trays installed on the printer. If the smart media feature is turned on in Paper Catalog Settings, you can perform automatic tray association.

Assign media to a tray from the Paper Catalog window

In Paper Catalog, you can associate media with a tray by right-clicking or by dragging and dropping.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 Select Paper Catalog under Resources.
- **3** Do one of the following:
 - Right-click the media, select **Associate to**, and select the tray.

Note: Associate to is displayed only when a paper catalog entry matches the printer tray properties.

• Drag and drop the media to the desired tray displayed in the consumables area.

Associate to will be displayed only if the media you select matches the specifications for the specific tray. Similarly, you can only drag and drop a media entry that matches the specifications. For instance, you cannot associate Letter size media to a tray intended for Tabloid, or for Letter size media with a different weight or feed direction.

Assign media to a tray from the consumables area

From the Command WorkStation consumables area, you can create or remove an association between media and a tray.

- 1 In the main **Fiery Command WorkStation** window, click the plus sign next to the name of the Fiery server to display the consumables area.
- **2** Click the arrow to the right of a tray.

Note: If media has been assigned to a tray previously, you can also choose **Remove Association**. If you click **Remove Association**, the association is removed without any further action on your part.

3 Select one paper catalog entry.

All possible entries are listed for that tray. If the tray does not recognize any Paper Catalog information, you must either create/modify a paper catalog entry that matches the printer tray properties, or set the tray properties on the printer so that the desired paper catalog entries show up. Some printers have many attributes, some have only size.

The tray association is also displayed in the Paper Catalog window.

Smart media

Smart media performs automatic tray association when your favorite media is loaded.

This feature is intended for a specific environment, such as a print shop, where the printer is configured with the same paper in the tray more than 90 percent of the time. In this environment, users may be accustomed to attach the paper labels onto the trays to remind the Operators which paper to load. With the smart media feature, the Fiery server remembers these favorite media and performs an automatic tray association when any media with the same attributes is loaded in the tray.

Smart media can be defined in one of the following workflows:

- · Adding new media from the tray
- · Adding new media from Paper Catalog

Note: To use smart media, you must turn it on in the **Paper Catalog Settings** dialog. See <u>Turn on smart media</u> on page 300.

Turn on smart media

You turn on smart media in the Paper Catalog Settings dialog box.

- 1 Do one of the following:
 - In Device Center, choose Paper Catalog under Resources.
 - Choose Server > Paper Catalog.
 - Click the **Paper Catalog** icon in the Job Center toolbar.
 - Right-click the Fiery Server in the **Servers** list and select **Paper Catalog**.
- **2** Click the **Settings** button.
- 3 Select PPD based.

Note: JDF based media attributes cannot be used when defining smart media.

- 4 If Enable Smart Media is not selected, select it.
- 5 Click Close or Manage.

For information about the Manage Smart Media dialog, see Managing smart media on page 302.

Add new smart media

You can add smart media from Paper Catalog, from the tray, or from the Manage Smart Media dialog box.

Add smart media from Paper Catalog

You can select media in Paper Catalog to add it as smart media.

- 1 Select Enable Smart Media in the Paper Catalog Settings dialog.
- 2 Click Manage.
- 3 Click Add in the Manage Smart Media dialog, then choose Add from Paper Catalog.
- 4 In Paper Catalog, select a media and click Add.

The selected media is designated as smart media in the Manage Smart Media dialog.

Add smart media from the tray

To add smart media, you can specify settings for loaded media on the printer control panel and in the **New Media** dialog box.

- 1 Select Enable Smart Media in the Paper Catalog Settings dialog.
- 2 Load media in the tray and specify media settings on the printer control panel.
- **3** In Command WorkStation, click the tray in the consumables pane, and select **Add New Media** from the menu.

Note: The **Add New Media** option only appears if **PPD based** specifications have been selected in the **Paper Catalog Settings** dialog.

The **New Media** dialog opens with the settings from the tray populating the matching fields. These settings cannot be edited.

- **4** Specify more attributes for the new media in the **New Media** dialog, if required.
 - For more information about adding a new media in Paper Catalog, see Create a Paper Catalog entry on page 280.
- 5 Select the Add as smart media check box.

The new media is designated as a smart media, and every time a media with matching attributes is loaded in the tray, the tray is automatically associated with the smart media.

Add smart media from the Manage Smart Media dialog box

You can select a tray and use the Manage Smart Media dialog box to add smart media.

- 1 Select a tray in the Consumables area.
- **2** Choose **Manage Smart Media** from the contextual menu.

3 In the Manage Smart Media dialog, select a tray, click Add, and select Add from tray.

Managing smart media

When smart media has been created, it is listed in the **Manage Smart Media** dialog. In this dialog, all available trays are listed, and for each tray, all smart media are listed.

The **Manage Smart Media** dialog can be accessed from the **Paper Catalog Settings** dialog or from the contextual actions menu for a selected tray in the Consumables area.

You can perform the following actions:

- Add from either Paper Catalog or from a tray.
- Remove a selected smart media.
- Remove all smart media.
- Modify the column headings.

The column headings are the available media attributes.

Monitor media status in a tray

If your printer supports reporting media levels in each tray, you can check the status from the Servers list.

- 1 In the Servers list in Command WorkStation, click the plus sign beside the name of the Fiery server.
 The trays for that Fiery server are displayed, and each tray displays a visual graphic of the media loaded.
- **2** Place your cursor on a tray listing to display the level as a percentage.

Media Catalog

Media Catalog is a system-based paper (media) warehouse database that can store attributes of any media available in a production print shop.

Media Catalog is installed by default with Command WorkStation. The Media Catalog resides on the Fiery server and is not affected when you reboot or clear the Fiery server.

To set up and manage Media Catalog, you must log in to Command WorkStation with Administrator access. After the Media Catalog is set up, you can modify the media catalog entries.

To select a media for a job, in Command WorkStation, select a job and click **Properties** > **Media**, and then select an entry from the media catalog. Media catalog entries are listed alphabetically in the **Media Catalog** list.

Each media catalog entry is associated with a specific output profile. When you create a new media catalog entry, you can associate the media catalog entry with either an existing profile or create a new profile.

Access levels

Media Catalog allows Administrators to:

- Define multiple media attribute combinations and assign unique names to each combination
- Assign color profiles for each media entry
- Select predefined media when they submit their job
- Specify which media catalog columns are available for users
- Centrally maintain the Media Catalog
- Assign media to virtual printers and presets

Media Catalog allows Operators to:

Select predefined media when they submit their job

Access Media Catalog

An Administrator creates media catalog entries that describe different types of media available for use with the printer. Administrators can access setup options for Media Catalog to customize it for specific print shop scenarios.

- **1** Log in to the desired Fiery server.
- **2** Do one of the following:
 - Click the **Media Catalog** icon on the **Job Center** toolbar. If the **Media Catalog** icon is not displayed, do the following:
 - Right-click the Job Center toolbar, and either click Standard Set or click Customize and add Media Catalog
 to the Selected Tools list.

Note: In the **Customize Toolbar** window, you can also click **Standard Set** to add **Media Catalog** to the **Selected Tools** list.

- If the **Media Catalog** icon is hidden from view on the **Job Center** toolbar, either enlarge the window or alternatively, click the More icon (three vertical dots), then click **Media Catalog**.
- Click Server > Media Catalog.
- Right-click the Fiery server in the Servers list and select Media Catalog.
- Right-click the Fiery server in the **Servers** list and select **Device Center**. In **Device Center**, click the **Resources** tab and select **Media Catalog**.

In the Media Catalog window, you can create entries, edit entries, and manage the Media Catalog.

View media entries

Media entries can be viewed in different ways in the Media Catalog window.

The default view of the **Media Catalog** window displays the names of all media in the catalog. As you click through the names, attributes are displayed for the selected name.

Note: Attribute names will vary according to what is supported on your Fiery server, and on whether you are using PPD based media attributes or JDF based media attributes. For more information about media attributes, see Common media attributes on page 313.

The following list includes the standard attributes displayed in the **Media Catalog** window in Fiery Command WorkStation:

- Name of the media catalog entry
- Description
- · Front coating
- Back coating
- · Media color or Color name
- Prepunched or Pre-punched media
- Media type or Type
- Type details
- Paper type
- Media weight or Weight
- · Paper weight
- Pre-Printed media
- Thickness
- Size ID
- Dimensions or Media size
- Feed direction (when JDF based setting is selected)
- Grain direction
- Product ID
- Set count
- Front color profile
- Back color profile

The **List View** (select the check box to display) lets you choose to display all media or all media of a selected size. The information for each media displayed is dictated by the column headings you have selected.

Change the column display in Media Catalog

The column headings in the **Media Catalog** window change dynamically, according to whether you are using PPD based media attributes or JDF based media attributes.

Administrators can change the order of these columns in the display, or add or delete the columns to present information useful to your particular print environment. To adjust the width of a column, drag the column border to the left or right.

Note: Tray is always the first column heading and cannot be moved or deleted.

- 1 In the **Media Catalog** window, select the **List View** check box and right-click in the column heading bar.
- **2** Do one of the following:
 - Click **Add** to choose an item from the menu to add to the columns.
 - Click **Delete** to remove a column.
 - Click **Move Left** or **Move Right** to move a column in the desired direction.

Choose Media Catalog settings

When creating a media catalog entry, Administrators can choose from two sets of media attributes: PPD (Printer) based and JDF (Job Definition Format) based.

- The PPD set of media attributes is specific to the Fiery server. The name of each setting is standard across devices, but the list of possible options varies. The PPD set is recommended for new and intermediate users.
- The JDF set of media attributes comes from the printing industry standard specifications for Job Definition
 Format. This set of media attributes is not specific to the Fiery server, and allows for smooth mapping of media
 definitions from MIS-job submission workflows. The JDF set is recommended for advanced users familiar with
 the JDF workflow.

Note: The Fiery server must support JDF printing and the feature must be enabled in Configure. Select **Job Submission** > **JDF Settings** > **Enable JDF**.

Some of the media attributes are common to both sets, although the naming may be slightly different. The JDF set provides more granularity.

- 1 Open Media Catalog. For more information, see Access Media Catalog on page 303.
- **2** In the **Media Catalog** window, click **Settings** on the toolbar.
- 3 Select either PPD based or JDF based for Specification to use.

Depending on whether you have selected PPD based or JDF based settings, you can select **List View** in the **Media Catalog** window and the column headers will display the attributes according to your selection.

Attributes for new entries in Media Catalog

Attributes for new media catalog entries are grouped under different tabs.

Before creating a new media catalog entry, choose either PPD or JDF settings. For more information, see Choose Media Catalog settings on page 305.

To create a new media catalog entry, see Create a media catalog entry on page 306.

PPD settings

The tabs are:

- **General** Choose settings to specify the media to be used.
- Sizes Edit an existing entry or create new entries. Choose a pre-defined media size from the size catalog.
- Color Settings Choose the color profiles.

JDF settings

The tabs are:

- **General** Choose general JDF attributes.
- Other Attributes Choose additional JDF attributes to describe the media in greater granularity.

Note: The Sizes and Color Settings tabs are common to both PPD and JDF settings.

Create a media catalog entry

Administrators can specify new media and media attributes in Media Catalog.

Depending on whether PPD based settings or JDF based settings are selected, the Administrator must specify media attributes in the following tabs:

- For PPD based General, Sizes, and Color Settings
- For JDF based General, Other Attributes, Sizes, and Color Settings
- 1 Open Media Catalog. For more information, see Access Media Catalog on page 303.
- 2 In the Media Catalog window, click Settings on the toolbar and choose either the PPD based or JDF based setting.

Note: The media attributes that available for use differ depending on whether you select PPD based or JDF based settings.

- **3** Click **Add New** on the toolbar.
- **4** In the **New** window, specify the attributes.

For each setting marked with an asterisk (*), you must enter a value or select an option from the list. For more information, see Common media attributes on page 313.

Note the following:

- Duplicate names for catalog entries are not allowed when you create a new media catalog entry.
- For attributes that have an applicable range, you must specify a value that is within the valid range.
- If a job restored from an archive contains a media catalog entry that is not in the database, create a new media catalog entry with the attributes of the archived job and assign it to the restored job.
- The unique name may be composed of media entry name and size.
- It is generally not recommended to restore jobs with paper catalog entries to the Media Catalog. If restored, they may not produce the desired result.

Define size attributes for media catalog entries

Administrators can set or modify size-related attributes when creating or editing a media catalog entry.

- 1 Open Media Catalog and do one of the following:
 - Click Add New on the toolbar.
 - To edit an existing catalog entry, select the entry and click **Edit**.
- **2** Click the **Sizes** tab.
- **3** Double-click the entry or click **Edit**.
- 4 In the Size ID field, make sure there is an entry for the size you want to add or edit.

Note: The Size ID is automatically generated by the Fiery server. You can modify the Size ID but must ensure that the Size ID is unique. An error message notifies you if you have entered a duplicate Size ID.

5 In the **Size Catalog** list, select a size for the media catalog entry.

Note: If you choose a media size from the **Size Catalog** list, the **Size ID** field will reflect the Size ID assigned to the selected media size. You can modify the **Size ID**, as required.

6 Add a Product ID as required and click **OK**. In the main **Media Catalog** window, select the media catalog entry in the **Name** column and you can view the media size that has been added or modified. It is also displayed in the **Sizes** tab of the media catalog entry.

Specify color profile settings

Administrators can associate a media catalog entry with a color output profile.

Any default or custom Fiery server output profile appears listed by name as a possible media catalog attribute.

- 1 In the Media Catalog window, click Settings on the toolbar.
- **2** Specify the media catalog setting as either **PPD based** or **JDF based**.
- **3** Do one of the following:
 - · Click Add New.
 - To edit an existing catalog entry, select the entry and click the **Edit** button.
- 4 Click the **Color Settings** tab and assign the appropriate profile options to your catalog entry.

Front color profile - Default color profile applied only to the front side of the media. Select from the list of output profiles in the list. This attribute can be overridden by specifying a different color profile in **Job Properties**. Appears in both the PPD and JDF settings.

Back color profile - Default color profile applied only to the back of the media. Select from the list of output profiles in the list. **Back color profile** menu also includes **Same as Front**. This attribute can be overridden by specifying a different color profile in **Job Properties**. Appears in both the PPD and JDF settings.

5 Click OK.

The new or modified entry appears under **Name** in the **Media Catalog** window.

For more information about output profiles, see Color Printing, which is part of the user documentation set.

Marking or removing media catalog entries as favorites

You can mark or remove frequently used media catalog entries as favorites in the Media Catalog window.

Mark media catalog entries as favorites

To mark frequently used media catalog entries as favorites, do one of the following:

- Select an entry and click **Favorite** on the toolbar.
- Right-click a media catalog entry and select **Favorite** from the list. A star appears next to the media catalog entry.

Remove media catalog entries as favorites

You can remove an entry marked as a favorite.

- Do one of the following:
 - Click Favorite on the toolbar.
 - Right-click the entry and clear **Favorite** from the list.

You can view the media catalog favorites in the media list available in the Job Properties window.

More information about media catalog favorites

The media catalog favorites are not applicable for the following:

- Export media catalog
- Backup and Restore option in Fiery Resources and Settings

Note: When you restore the media catalog entries to the Fiery server with **Import** > **Merge with Existing**, the existing favorites will be retained.

Search for jobs using a media catalog entry

You can perform an advanced search to list all jobs that use a particular media catalog entry.

- 1 In Command WorkStation, click **All Jobs** in the **Servers** pane. All jobs across all queues are listed in the **All Jobs** view.
- 2 Right-click the Job List column header and select Add New > Media > Media Catalog Name. Media Catalog Name appears in the Job List column header.
- **3** On the toolbar, click the arrow next to the **More** filter.
- 4 In the Customize Search Filters list, select Media Catalog Name and click Save.
- **5** Click the arrow next to the **Media Catalog Name** filter, select the required media catalog entry, and click **Apply**. All jobs using the selected media catalog entry are listed.
- **6** (Optional) Click **Save** to save the search results as a view. In **Save Search as View**, type a name, and click **Save**.

The view appears below the list of queues in the **Servers** pane.

Modify a media catalog entry

Administrators can duplicate, edit, or delete media catalog entries.

The following table describes the actions that you can perform to modify a media catalog entry with Command WorkStation 6.7 and later, even if it is a default server setting or assigned to any of the following:

Assigned to	Duplicate	Edit	Delete
Job	Yes	No	No
Tray	Yes	No	Yes
Smart media	Yes	No	No
Preset	Yes	No	No
Virtual printer	Yes	No	No

To edit or delete a media catalog entry that is associated with a tray, you must first remove the association. For more information, see Remove tray association on page 283.

To view all jobs using a particular media catalog entry, perform an advanced search.

Duplicate a media catalog entry

You can duplicate an existing catalog entry and then rename it to create a new entry.

1 In the **Media Catalog** window, select the entry that you want to duplicate and click **Duplicate** on the toolbar. (Optional) You can right-click the entry and select **Duplicate**.

Note: You can duplicate only one entry at a time.

- **2** In the **Duplicate** window, enter a new name for the entry.
- **3** Click **OK** to save the changes.

The duplicated media catalog entry appears in the **Name** column. You can select this entry and edit other attributes as required.

Edit a media catalog entry

You can edit attributes and values of media catalog entries.

- 1 In the **Media Catalog** window, do one of the following:
 - Select the entry and click **Edit** on the toolbar.
 - Double-click the selected entry.
 - Right-click the selected entry and select Edit.

A message notifies you that one or more jobs use the media catalog entry.

- 2 If the media catalog entry is associated with any of the following:
 - Tray A message notifies you to remove the tray association. For more information, see Remove tray association on page 283.
 - Job, smart media, preset, virtual printer, or a default server setting A message notifies you that one or more jobs use the media catalog entry. Click **OK** in response to the message.
- **3** Enter information in the text fields or click the arrow to display the list for that attribute. Choose the new attribute setting or enter the new attribute value.

Note: If you enter an incorrect value for a media attribute and move on to another media attribute, the incorrect media attribute will revert to its previous value.

4 Click **OK** to save the changes.

Note: For jobs that are already in queues, the media attribute columns will be updated when the job is processed or printed, or when you open the Job Properties window.

Delete a media catalog entry

You can delete a media catalog entry in the **Media Catalog** window.

- 1 In the Media Catalog window, select the media catalog entry that you want to delete from the list.
 Use shift-click to select multiple sequential entries, and ctrl-click to select multiple entries that are not sequential.
- **2** Delete the selected entry in one of the following ways:
 - Click **Delete** on the toolbar.
 - Right-click the selected entry and select **Delete**.

- **3** If the media catalog entry is associated with any of the following:
 - Job, smart media, preset, virtual printer, or a default server setting A message notifies you that one or more jobs use the media catalog entry. Click **OK** in response to the message.

After you delete the media catalog entry, it will no longer be associated with the job. In the Job Properties window, the Media Catalog list will display **Not defined**.

Assign a temporary custom media size

A temporary custom size can be assigned to a media. You do not have to select any of the pre-defined sizes that are applied when a media catalog entry is assigned to the job. When you assign a custom size to a media, you do not have to create a new entry for the custom size in the Size Catalog. A temporary custom size is useful when you have a single or limited use of a particular media size.

- 1 Select a job and do one of the following:
 - Click **Properties** in the **Actions** menu.
 - · Right-click the job and select Properties.
 - Click the **Properties** icon on the **Job Center** toolbar.
 - Double-click the job.
- 2 In the Job Properties window, click the Media tab on the left.
- **3** Select **Not defined** from the **Media Catalog** list.
- **4** In the **Media size** field, click **Custom** and specify the custom size dimensions for the media. The custom size is displayed in the **Media size** list.

Note: Custom size dimensions are temporary and will not be reflected in the list of sizes defined in the Size Catalog.

Assign a temporary custom media size to a Media Catalog entry

A temporary custom size can be assigned to a media without having to add the new size to the Size Catalog. You can override the Size ID defined by the media catalog entry and assign a temporary custom size to the media without reprocessing the job. Other media-related attributes defined in the media catalog entry are retained as is.

Note:

To specify a temporary custom size, a media catalog entry must be assigned to the job and the Custom option must be available in the Size ID menu.

Not all Fiery servers support this feature.

- 1 Select a job and do one of the following:
 - Click **Properties** in the **Actions** menu.
 - Right-click the job and select **Properties**.

- Click the **Properties** icon in the **Job Center** toolbar.
- Double-click the job.
- 2 In the **Job Properties** window, click the **Media** tab on the left.
- **3** From the **Media Catalog** list, assign a media catalog entry to the job.

Note: The **Size ID** field is enabled when a media catalog entry is assigned to the job.

4 From the **Size ID** list, select **Custom**.

The Media size field is enabled.

5 In the **Media size** field, click **Custom** and specify the custom size dimensions for the media. The custom size dimensions are displayed in the **Media size** list.

Note: Custom size dimensions are temporary and will not reflect in the list of sizes defined in the Size Catalog.

Assign a media catalog entry to a job

Media Catalog is available from the **Job Properties** window in Command WorkStation.

- 1 Select a job and do one of the following:
 - Click **Properties** in the **Actions** menu.
 - Right-click the job and select Properties.
 - Click the **Properties** icon on the **Job Center** toolbar.
 - Double-click the job.
- 2 In the Job Properties window, click the Media tab on the left.
- **3** Select a media catalog entry from the **Media Catalog** list. To view the media attributes associated with each entry, click the **Select** button.
 - The size id assigned to the media catalog entry is displayed in the Size ID list.
- **4** You can select a different size id or specify a custom size from the **Size ID** list.

Note: Entries in the **Media Catalog** and **Size ID** lists are listed alphabetically.

Media entries

When you create or edit a media catalog entry, you can select from a number of media attributes. To set media attributes for a catalog entry, use the main **Media Catalog** window or the **Edit** window.

Mandatory attributes appear with an asterisk (*) next to the name. You cannot leave the field for a mandatory attribute empty.

Media Catalog offers you two sets of media attributes:

• Printer (PPD) based

The choices listed for each PPD setting are determined by the PPD for the connected Fiery server.

JDF (Job Definition Format) based

JDF attributes are standard and are not dependent on the connected Fiery server.

Common media attributes

Administrators can create media catalog entries with either PPD or JDF attributes. The PPD attributes provided to create a media catalog entry vary from project to project, so the terminology for the attributes will vary. For a description of the PPD settings available for your product, see *Printing*, which is part of the user documentation set.

When you create a new media catalog entry, you must first choose either PPD based settings or JDF based settings. For more information, see Choose Media Catalog settings on page 305.

When you select PPD based settings, the attributes are displayed on the following tabs:

- General tab (PPD based) on page 313
- Sizes tab (common to both PPD and JDF settings) on page 314
- Color Settings tab (common to both PPD and JDF settings) on page 315

When you select JDF based settings, the attributes are displayed on the following tabs:

- General tab (JDF based) on page 315
- Other Attributes tab (JDF based) on page 316
- Sizes tab (common to both PPD and JDF settings) on page 314
- Color Settings tab (common to both PPD and JDF settings) on page 315

Note the following:

- The Sizes and Color Settings tabs are common to both PPD and JDF settings.
- Attribute names may vary depending on what is supported on your Fiery server.
- In the descriptions of the attributes, the terms "paper" or "substrate" refer to "media".

Name Descriptive name for the catalog entry to describe the media. Type the

desired name for the media catalog entry. This field is common to both PPD

and JDF attributes.

General tab (PPD based)

Front coating The type of pre-process coating applied to the front side of the media sheet.

Back coating The type of pre-process coating applied to the back side of the media sheet.

Media color Color of the media to be used. JDF settings for color of media include **Color**

name and Custom color name.

Pre-printed media When the check box is selected, the media contains pre-printed content (for

example, stationery paper with a pre-printed letterhead). When the check

box is cleared, the media is not pre-printed.

Pre-punched media Indicates possible hole-punch combinations. The similar JDF setting is **Hole**

type.

Prepunched The Prepunched print option allows you to specify if you are using pre-

punched media.

Media type Describes the stock type of the media used. The list of options include

different types of media that can be used depending on the type of job.

Colored Paper Lists the different default paper colors available.

Punched Paper Indicates whether the printer punches the paper.

Paper type Describes the stock type of the paper used. The list of options include

different types of paper that can be used depending on the type of job.

Set count Defines the number of pieces in a grouped media set. For example, tab stock

with five pre-cut tabs has a Set count of "5".

CIE Lab Color The device-independent color of the media. Specify the color using CIE

L*a*b* values.

Media weight Indicates weight of the media used, measured in grams per square meter

(gsm) or pounds (lbs). The similar JDF setting is Weight on page 322.

Paper weight Indicates weight of the paper used, measured in grams per square meter

(gsm) or pounds (lbs).

Description Descriptive information and additional details of the media used. For

example, the description might read Hammermill Color Copy 10246-7 8

1/2" x 11" 105 gsm Photo White Ultra Smooth.

Sizes tab (common to both PPD and JDF settings)

Size ID Indicates the size of the media selected from the Size Catalog. The Size ID is

automatically generated by the Fiery server.

Size Catalog List of available pre-defined sizes of the media.

Dimensions/Paper size Displays the width and height dimensions of the media selected from the

Size Catalog.

Feed direction The Feed direction attribute specifies the orientation of the media as it feeds

into the printhead. See Feed direction on page 318.

Grain direction

Specifies the direction of the fluted substrate as it feeds into the printhead. Choose from the following options:

- None This is the default.
- **Short** The short edge of the fluted substrate as it feeds into the printhead.
- **Long** The long edge of the fluted substrate as it feeds into the printhead.

Product ID

Part number, item code, article number, or other identifier for the media used, as defined manually by the print operator, or by a Management Information System (MIS).

Color Settings tab (common to both PPD and JDF settings)

Front color profile Default color profile applied only to the front side of the media. This

attribute can be overridden by specifying a different color profile in Job

Properties.

Back color profile Default color profile applied only to the back side of the media. This

attribute can be overridden by specifying a different color profile in Job

Properties.

General tab (JDF based)

Description Descriptive information and additional details of the media used. For

example, the description might read Hammermill Color Copy 10246-7 8

1/2" x 11" 105 gsm Photo White Ultra Smooth.

Pre-Printed When the check box is selected, the media contains pre-printed content (for

example, stationery paper with a pre-printed letterhead). When the check

box is cleared, the media is not pre-printed.

Type Describes the stock type of the media used. Choose from the following

options:

- Paper Standard fiber-based paper stock.
- **Transparency** Transparent media stock designed to be viewed through projection.

projection.

Type details Describes additional details of the media stock type used. See Type details

on page 321.

Set count Defines the number of pieces in a grouped media set. For example, tab stock

with five pre-cut tabs has a Set count of "5".

Tab PropertiesWhen you specify JDF Settings for a new media catalog entry, and select

Full cut tabs, Pre cut tabs, or Tab Stock from the Type details list, the Tab

Properties button is enabled. See Tab Properties on page 319.

Weight Indicates the weight of the media used, measured in grams per square meter

(gsm) or pounds (lbs). See Weight on page 322.

.

Hole type Pattern of punched holes (if any) on the media used.

Texture Indicates the surface texture of the media used. See Texture on page 320.

% recycled content The percentage of recycled material in the media.

Color name Color of the media used. To indicate translucent media, choose a "Clear"

color option.

Printing technology Choose from the available printing technologies:

Offset - Uses metal plates to transfer (offset) images to a rubber medium

or rollers which is then printed on the media.

• Laser - Uses light or a "laser" to transfer text and images on to the media. This type of printing uses toner or dry ink powder to print on the

media.

Front Settings that can be applied to the front of the media. See Front on page 317.

Settings that can be applied to the back of the media. See Back on page 317.

You can clear the Same as Front check box and select from the Coating,

Gloss value, and the Imageable sides options.

Other Attributes tab (JDF based)

Back

Brightness Light reflectance of the media used. Enter a value from 0% (low reflectance)

to 100% (high reflectance).

Thickness Thickness of the media used, measured in microns (μ m).

Grade Indicates the surface quality of the media, expressed as a grade level from 1

to 5. See Grade on page 318.

Media unit Indicates the physical format of the media that is fed into the printer. See

Media unit on page 319.

CIE Lab Color The device-independent color of the media. Specify the color using CIE

L*a*b* values.

CIE Whiteness Describes the amount of overall light reflected by the media, as measured

across the entire visible spectrum. Specify the reflection amount using values in the CIE xyz coordinate system. A coordinate of (100, 100, 100)

indicates perfect whiteness.

CIE Tint Describes how neutral, unsaturated, or non-chromatic the media is. Specify

the media tint using values in the CIE xyz coordinate system. A coordinate

of 0 indicates a perfectly neutral tint in the red-green axis.

Opacity The Opacity attribute indicates the level of transparency of the media. See

Opacity on page 319.

Opacity Level % The media's percentage of opacity. 0% represents full transparency, and

100% represents full opacity.

Front

The Front pane has the following attributes that can be applied to the front of the media.

Choose from the following options:

CoatingThe type of pre-process coating applied to the front side of the media

sheet. See Coating on page 317.

Gloss value The percentage of light reflected by the front side of the media when it is

viewed under illumination with a 75-degree angle of incidence. A higher

percentage of reflection indicates a higher gloss value.

Imageable sides Specifies which side of the media supports print imaging.

Back

The **Back** pane has the following attributes that can be applied to the back of the media.

Same as Front Replicates the settings selected in the **Front** pane. See <u>Front</u> on page 317.

Note: For the Fiery server, **Same as Front** is the default. You can clear the **Same as Front** check box and select options from the **Coating**, **Gloss**

value, and Imageable sides attributes.

Coating Indicates the type of pre-process coating applied to the back side of the

media sheet. See Coating on page 317.

Gloss value The percentage of light reflected by the back side of the media when it is

viewed under illumination with a 75-degree angle of incidence. A higher

percentage of reflection indicates a higher gloss value.

Imageable sides Specifies which side of the media supports print imaging.

Coating

The Coating attribute indicates the type of surface coating to be used for the media.

Choose from the following options:

None No coating applied.

Glossy Coating that has a high level of sheen and is very reflective.

CoatedUses a surface sealant to render qualities to the media such as surface

gloss, smoothness, and weight.

High gloss Glossiest of all coatings rendering a mirror-like finish. This coating is very

reflective and renders a sharp resolution.

Matte Non-glossy with very little sheen; also known as "flat". This coating may

slightly increase the thickness of the media.

Satin Possesses a lower gloss level than a gloss coating but a higher gloss level

than a matte coating. Colors appear sharp and vivid on the media.

Semi-gloss The gloss level can be placed roughly in the middle between a gloss and

matte coating. This coating renders a sharp resolution.

Inkjet A special type of paper that gives high-quality and long-lasting prints.

Pearlescent Coating that has shimmering pearl-like effect.

Feed direction

The Feed direction attribute specifies the orientation of the media as it feeds into the printhead.

Choose from the following options:

Long Edge Feed Media feeds into the printhead along the long edge of the media, as

defined by media size.

Short Edge Feed Media feeds into the printhead along the short edge of the media, as

defined by media size.

Grade

The Grade attribute indicates the surface quality of the media, expressed as a grade level from 1 to 5.

Note: This attribute is not usually used for media used in digital printing.

If required, use the following guidelines:

Grade	Surface quality of media
1	Gloss-coated paper
2	Matte-coated paper
3	Gloss-coated, web paper
4	Uncoated, white paper
5	Uncoated, yellowish paper

Media unit

The Media unit attribute indicates the physical format of the media that is fed into the printer.

Choose from the following options:

Sheet Individually cut sheets.

Roll Media that is continuously connected and wrapped around a spindle.

Continuous Media that is continuously connected and folded, as in a fan-folded

format.

Opacity

The Opacity attribute indicates the level of transparency of the media.

Choose from the following options:

Opaque The media is opaque. If the media is printed on both sides, the image on

the other side does not show through under normal lighting conditions.

Translucent The media is partially transparent, under certain lighting conditions such

as back-lit viewing.

Transparent The media is fully transparent, under all lighting conditions.

Tab Properties

When you specify JDF Settings for a new media catalog entry, and select **Tab Stock** from the **Type details** menu, the **Tab Properties** button is enabled.

Click the button to choose the following JDF tab settings:

Tab collation order Applicable to sets of pre-cut tabs.

Tab width The width along the tab edge as measured along the mid-line of the tab.

Each tab is centered within a space called the "tab pitch."

Tab edge Indicates the edge (left, top, right, or bottom) of the media that has tabs.

Tab extension distance The distance that the tab extends beyond the body of the other media.

Tab offset The distance from the corner of the media to the edge of the first tab

pitch point of the first tab in the bank along the tab edge. This distance is

the same on both ends of the bank of tabs.

Tabs per bank The number of equal-sized tabs in a single set if all positions are filled.

Texture

The Texture attribute indicates the surface texture of the media used.

Note: The list of options available in the **Texture** drop-down menu may vary depending on the type of texture that is supported on your Fiery server.

Choose from the following options:

Antique Surface that is rougher than **Vellum**.

Calendared Extra-smooth or polished uncoated paper.

Cockle Surface that has a rough, wrinkled, irregular finish.

Cotton Bond media type that has a finish of cotton texture.

Dull Machine-worn finish without gloss or luster.

Eggshell Surface that has a texture similar to that of an eggshell.

Embossed linen Surface resembling coarse woven cloth, with a pronounced embossed

texture.

English Surface that is smoother than **Machine Finished**, but rougher than **Super**

calendared.

Felt Finish applied by a special marking felt.

Laid Surface with a pattern of vertical and horizontal lines.

Light cockle Surface that has a rough, wrinkled, irregular finish, with less pronounced

wrinkles than in Cockle.

Linen Surface that has the texture of coarse woven cloth.

Luster Shiny surface.

Machine finished Extra-smooth or polished uncoated paper, rougher than **English**.

Matte Dull finish without gloss or luster.

Mottled Finish that shows diverse spots or blotches.

Parchment Finish that resembles the appearance of parchment paper.

Satin Smooth, dull finish that resembles satin fabric.

Semi-vellum Slightly rough finish, smoother than **Vellum**.

Silk Smooth, dull finish that resembles silk fabric.

Smooth Surface that has a smooth finish.

Stipple Fine, pebbled finish.

Suede Smooth, dull finish that resembles suede fabric.

Super calendared Smoothest, most polished, uncoated paper.

Super smooth Very flat and even finish. Smoother than **Ultra smooth**.

Traditional laid Surface with a heavier pattern of vertical and horizontal lines than Laid.

Ultra smooth Very flat and even finish, but not as smooth as **Super smooth**.

Uncalendared Rough, unpolished, and uncoated finish.

Vellum Slightly rough and dull finish.

Velvet Smooth, dull finish that resembles velvet fabric.

Waterproof Surface that resists water.

Wove Soft, smooth finish.

Type details

The Type details attribute describes additional details of the media stock type used.

Choose from the following options:

Plain Choose this option if your media stock does not require a special

description. Some systems require a value of plain, but leaving this blank if the detail is not needed would be better, if the print engine allows it.

Full cut tabsMedia with a single long tab that extends along the full length of the

sheet.

Pre cut tabsMedia with two or more tabs that extend along an edge of the sheet.

Envelope Media that can be used for conventional mailing purposes. Can either be

plain envelopes or envelopes with transparent address windows.

Labels Adhesive label stock, such as a sheet of peel-off labels.

Letterhead Cut sheets of opaque media that contain a pre-printed letterhead.

Multi-part form Media designed for use as a multi-layer form. Individual layers of the

form are detached from one another and may be drawn from separate paper trays. It is more likely that the layers are pre-collated. These media

tend to be referred to as NCR - No Carbon Required.

Tab Stock Media with one or more tabs. Can be either Full cut tabs or Pre cut tabs,

or refer to media with enough thickness and stiffness to be used as a tab.

The media may or may not have tabs.

Postcard Media that can be used for conventional mailing purposes.

Weight

The Weight attribute indicates the weight of the media used, measured in grams per square meter (gsm) or pounds (lbs).

The basis weights of most North American stock types are measured in pounds (lbs). To convert to gsm, multiply the basis weight by the appropriate conversion factor.

For example, the metric weight of a 50lb bond stock is calculated as follows:

Basis Weight x Conversion Factor = $50 \times 3.76 = 188 \text{gsm}$.

The appropriate conversion factor for stock types is listed in the following table:

Stock type	Conversion factor
Bond	3.76
Ledger	3.76
Thin (manifold, onion skin)	3.76
Duplicator	3.76
Safety	3.76
Uncoated book	1.48
Coated book	1.48
Text book	1.48
Cover Papers	2.70
Index bristol	1.81
Tagboard	1.63
Blanks	2.28
Printing bristol	2.19
Wedding bristol	2.19
Blotter	3.08
Label	1.48

Stock type	Conversion factor
Newsprint	1.63

Manage the media catalog

Administrators set up and manage the Media Catalog.

When the Media Catalog is set up, you can export it, merge it with another Media Catalog, or reset it to factory defaults.

Export the Media Catalog

When a media catalog is exported, it is saved as an .xml file.

Before you replace your Media Catalog or reinstall system software, we recommend that you first back up your existing catalog by exporting it to a remote location. You can choose to export all entries or a subset.

After a catalog is exported, it can be imported back into Media Catalog at any time.

Note: It is generally not recommended to import Paper Catalog entries to the Media Catalog. If imported, they may not produce the desired result.

- 1 In the Media Catalog window, click Export on the toolbar and choose Export All.
 - If you only want to export some of the media entries, you can select multiple entries in the Media Catalog and choose **Export Selected**. You can shift-click to select sequential entries, or ctrl-click to select nonsequential entries.
- 2 Navigate to the location on your computer or network where you want to save the exported file.
- **3** Enter a name for the exported file; then click **Save**.

The exported Media Catalog is saved as an .xml file.

Replace the Media Catalog

Administrators can import and replace the existing Media Catalog.

Before you replace your Media Catalog, we recommend that you first archive your existing catalog by exporting it.

- 1 In the Media Catalog window, click Import on the toolbar and choose Replace Existing.
- 2 Navigate to the replacement .xml file on your computer or network, and click **Open**.
- **3** Click **Yes** in response to the alert message.

Merge two Media Catalogs

Administrators can import entries from another Media Catalog to create a merged Media Catalog.

Note the following:

- If the imported catalog contains an entry that has identical attributes as an entry in the original Media Catalog, the new entry is not imported and the original entry remains intact in the merged Media Catalog.
- It is generally not recommended to import Paper Catalog entries to the Media Catalog. If imported, they may not produce the desired result.
- 1 In the Media Catalog window, click Import on the toolbar and choose Merge with Existing.
- 2 Navigate to the .xml file on your computer or network that you want to import, and click **Open**.

Your current Media Catalog is now merged with the one you just selected.

Note: When you merge two catalogs, all color profile associations in the imported Media Catalog are discarded. Repeat the process for additional Media Catalogs that you want to merge into the existing one.

Reset the Media Catalog to factory defaults

Administrators can revert the Media Catalog to its factory default.

Any added or edited catalog entries are lost when you reset the Media Catalog to factory defaults, unless they have been assigned to a job, assigned to a tray, or are locked. To save your customized entries, first export your existing catalog before you reset it to factory defaults.

- 1 In the Media Catalog window, click Settings on the toolbar.
- 2 In the Media Catalog Settings window, click Reset to Factory Defaults.
- **3** Click **Yes** in response to the alert message.

Tray association

Tray association allows you to assign a media catalog media entry to a printer tray. Use this feature to allow the printer to automatically pull specific Media Catalog assigned media for a job that uses a particular media catalog entry.

Note: Tray association is only supported if Media Catalog is supported.

You can use the tray association feature to assign media from the Media Catalog to the trays installed on the printer.

You can also use smart media to perform automatic tray association - for example, in a print shop, where the printer is configured with the same paper in the tray more than 90 percent of the time.

Tray association display

Tray association is displayed in:

- Consumables area
- Media Catalog window
- Media Catalog list in Job Properties Media area

In the consumables area in Command WorkStation, all trays installed on the printer are listed with the size of the media loaded displayed.

If a media entry from Media Catalog has been associated with a specific tray, that tray displays the name of the media. If no media from the Media Catalog has been associated, the tray displays as **Unassigned**.

Note: When a media catalog entry is assigned to a tray, any selection made for **Input tray** for that media in Job Properties will be ignored.

You can assign media to a tray in a number of ways, but the media entry must match the paper attributes that are loaded in that tray. Media Catalog filters the entries shown for each tray by the paper attributes reported from the Fiery server.

You can also view the media supply in a tray. For more information, see Monitor media status in a tray on page 328.

Remove tray association

To remove the tray association, you must do the following:

- 1 In the consumables area in Fiery Command WorkStation, click the arrow to the right of a tray.
- 2 Click Remove Association.

Assign media to a tray

Use the tray association feature to assign media from the Media Catalog to the trays installed on the printer. If the smart media feature is turned on in Media Catalog Settings, you can perform automatic tray association.

Assign media to a tray from the Media Catalog window

In Media Catalog, you can associate media with a tray by right-clicking.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.

- Click Server > Device Center.
- Right-click the server name and select **Device Center**.
- 2 Select Media Catalog under Resources.
- **3** Right-click the media, select **Associate to**, and select the tray.

Note: Associate to is displayed only when a media catalog entry matches the printer tray properties.

Assign media to a tray from the consumables area

From the Command WorkStation consumables area, you can create or remove an association between media and a tray.

- 1 In the main **Fiery Command WorkStation** window, click the plus sign next to the name of the Fiery server to display the consumables area.
- **2** Click the arrow to the right of a tray. Choose from the following options:
 - **Assign** Select a media catalog entry that matches the printer tray properties.

Note: All possible entries are listed for that tray. If the tray does not recognize any Media Catalog information, you must either create or modify a media catalog entry that matches the printer tray properties, or set the tray properties on the printer so that the desired media catalog entries show up. Some printers have many attributes, some have only size.

• Add New Media - Create a media catalog entry. If the media catalog entry matches the printer tray properties, you can assign this new entry to the tray.

Optionally, if media has been assigned to a tray previously, you can choose to:

• Remove Association - Removes the media entry that was previously assigned to the tray.

The tray association is also displayed in the **Media Catalog** window.

Smart media

Smart media performs automatic tray association when your favorite media is loaded.

This feature is intended for a specific environment, such as a print shop, where the printer is configured with the same paper in the tray more than 90 percent of the time. In this environment, users may be accustomed to attach the paper labels onto the trays to remind the Operators which paper to load. With the smart media feature, the Fiery server remembers these favorite media and performs an automatic tray association when any media with the same attributes is loaded in the tray.

Smart media can be defined in one of the following workflows:

- Adding new media from the tray
- Adding new media from Media Catalog

Note: To use smart media, you must turn it on in the **Media Catalog Settings** window. See <u>Turn on smart media</u> on page 327.

Turn on smart media

You turn on smart media in the Media Catalog Settings window.

- **1** Do one of the following:
 - In Device Center, choose Media Catalog under Resources.
 - Choose Server > Media Catalog.
 - Click the **Media Catalog** icon on the Job Center toolbar.
 - Right-click the Fiery server in the **Servers** list and select **Media Catalog**.
- **2** Click the **Settings** button.
- 3 Select PPD based.

Note: JDF based media attributes cannot be used when defining smart media.

- 4 If Enable Smart Media is not selected, select it.
- 5 Click Close or Manage.

For more information about the Manage Smart Media window, see Managing smart media on page 328.

Add new smart media

You can add smart media from Media Catalog, from the tray, or from the Manage Smart Media window.

Add smart media from Media Catalog

You can select media in Media Catalog to add it as smart media.

- 1 Select Enable Smart Media in the Media Catalog Settings window.
- 2 Click Manage.
- 3 Click Add in the Manage Smart Media window, then choose Add from Media Catalog.
- 4 In Media Catalog, select a media and click Add.

The selected media is designated as smart media in the Manage Smart Media window.

Add smart media from the tray

You can add smart media from the tray and specify settings.

- 1 Select Enable Smart Media in the Media Catalog Settings window.
- **2** Load media in the tray and specify media settings on the printer control panel.

3 In Command WorkStation, click the tray in the consumables pane, and select **Add New Media** from the menu.

Note: The **Add New Media** option only appears if **PPD based** specifications have been selected in the **Media Catalog Settings** window.

The **New Media** window opens with the settings from the tray populating the matching fields. These settings cannot be edited.

- **4** Specify more attributes for the new media in the **New Media** window, if required. For more information about adding attributes, see Attributes for new entries in Media Catalog on page 305.
- 5 Select the Add as smart media for <name of tray> check box.

The new media is designated as a smart media, and every time a media with matching attributes is loaded in the tray, the tray is automatically associated with the smart media.

Add smart media from the Manage Smart Media window

You can select a tray and use the Manage Smart Media window to add smart media.

- 1 Select a tray in the Consumables area.
- 2 Choose Manage Smart Media from the contextual menu.
- 3 In the Manage Smart Media window, select a tray, click Add, and then select Add from Tray.

Managing smart media

When smart media has been created, it is listed in the **Manage Smart Media** window. This window also lists the available trays and the smart media associated with each tray.

The **Manage Smart Media** window can be accessed from the **Media Catalog Settings** window or from the contextual actions menu for a selected tray in the Consumables area.

You can perform the following actions:

- Add from either Media Catalog or from a tray.
- Remove a selected smart media.
- Remove all smart media.
- Modify column headings to add available media attributes.

Note: The column headings are the available media attributes.

Monitor media status in a tray

If your printer supports reporting media levels in each tray, you can check the status from the Servers list.

1 In the **Servers** list in Command WorkStation, click the plus sign beside the name of the Fiery server.

The trays for that Fiery server are displayed, and each tray displays a visual graphic of the media loaded.

2 Place your cursor on a tray listing to display the media level as a percentage.

Size Catalog

The Size Catalog enables users to create a list of frequently used custom sizes. The Size Catalog is stored on the Fiery server. Creating a Size Catalog reduces the chance of error from having to specify the size dimensions for the media for every job.

Note: To manage the Size Catalog, you must log in to Command WorkStation with Administrator access.

Access Size Catalog from Command WorkStation

You can access Size Catalog from Device Center in Command WorkStation.

- 1 Open Device Center from Command WorkStation in one of the following ways:
 - Click the More icon (three vertical dots) next to the Fiery server in the **Servers** list and select **Device Center**.
 - Right-click the Fiery server in the **Servers** list and select **Device Center**.
 - Double-click the Fiery server in the **Servers** list.
 - Click Server > Device Center.
- 2 In Device Center, select Size Catalog under Resources.

Manage the Size Catalog

When you open Size Catalog for the first time, the default size catalog entries are listed, displaying the name and dimensions of the media. After setting up the size catalog, you can add, modify or delete, publish or unpublish, import or export, and reset the entries to factory defaults.

Create or edit a size catalog entry

You can create or edit size catalog entries for frequently-used custom sizes of media.

Note: Default size catalog entries cannot be edited.

- 1 In Device Center, select **Size Catalog** under **Resources**, and do one of the following:
 - Click the **Add New** icon to create a size catalog entry.
 - To edit an existing entry, select the entry and click the **Edit** icon.

Note: To edit an entry, you can also double-click the entry or right-click the entry and select **Edit**.

2 In the Add or Edit window, specify or modify the name and dimensions for the entry.

Note the following:

- Each size catalog entry must have a unique name. Two size catalog entries cannot share the same name.
- Multiple size catalog entries can have the same dimensions as long as the name of each size catalog entry is unique.
- The default unit of measurement for the dimensions of the size catalog entry can be set from Command WorkStation. Click **Edit** > **Preferences**, select **Region**, and then select **Measurement units** in the **Regional Settings** pane.
- The width of the size catalog entry denotes the leading or feed or gripper edge of the media.

3 Click OK.

The new or modified entry is listed in the Size Catalog.

Note: Default size catalog entries may vary depending on the capabilities of the press or the printer.

Delete a size catalog entry

You can delete one or more size catalog entries from the Size Catalog.

Note: Default size catalog entries cannot be deleted.

1 In Device Center, select **Size Catalog** under **Resources**, and select one or more entries that you want to delete

Use Shift-click to select multiple sequential entries, and ctrl-click to select multiple entries that are not sequential.

- **2** Do one of the following:
 - Right-click the entries and select **Delete**.
 - Click the **Delete** icon on the toolbar.

An alert message asks if you want to delete the entry.

3 Click Yes.

The selected entry or entries are deleted from the Size Catalog.

Unpublish or publish size catalog entries

By default, all size catalog entries are published; that is, they are visible and can be selected for a job by users.

You can choose to unpublish an entry listed in the Size Catalog. When a size catalog entry is unpublished, the entry is made unavailable in the list of size catalog entries. To view the list of size catalog entries in Device Center, select **Size Catalog** under **Resources**. Additionally, the unpublished size catalog entry cannot be selected by the user when specifying a media size. In **Size Catalog**, you can select the **Hide Unpublished entries** check box to hide unpublished entries.

When an entry, or entries, have been unpublished, you can always publish them again.

Note: If the Size Catalog consists of only one entry, the **Publish** and **Unpublish** icons are grayed out (unavailable).

1 In Device Center, select **Size Catalog** under **Resources**, and select the entry or entries you want to publish or unpublish.

Use Shift-click to select multiple sequential entries, and ctrl-click to select multiple entries that are not sequential.

- **2** Do one of the following:
 - To unpublish an entry, click the **Unpublish** icon on the toolbar.
 - To publish an entry, click the **Publish** icon on the toolbar.

Note: You can also right-click a size catalog entry, or entries, and choose Unpublish or Publish.

Import size catalog entries

You can import previously created size catalog entries to add to the existing Size Catalog.

Note: It is generally not recommended to import size catalog entries created on a Fiery server that is connected to an inkjet press. If imported, they may not produce the desired result.

During import, if a duplicate size name with different dimensions is encountered, a suffix such as "_1, _2, ..." is added to the size name while retaining the dimensions.

- 1 In Device Center, select **Size Catalog** under **Resources**, and click the **Import** icon on the toolbar.
- 2 Navigate to the .json file on your computer or network that you want to import, and click **Open**. The .json file is imported and listed in the Size Catalog. If the .json file contained multiple size catalog entries, each size catalog entry is listed separately.

Repeat the process for additional size catalog entries that you want to add to the existing Size Catalog.

Export size catalog entries

Exported size catalog entries are saved as .json files and can be imported back into the Size Catalog at any time.

You can choose to export all or selected entries in the Size Catalog. Both published and unpublished size catalog entries can be exported.

1 In Device Center, select **Size Catalog** under **Resources**, click the **Export** icon on the toolbar, and select **Export All**.

If you only want to export some of the size catalog entries, you can select multiple entries and choose **Export Selected**. Use Shift-click to select sequential entries, or ctrl-click to select non-sequential entries.

- 2 Navigate to the location on your computer or network where you want to save the exported size catalog entries.
- **3** Enter a name for the exported entry or entries; then click **Save**. The exported size catalog entries are saved as a .json file.

Note: If you have selected multiple size catalog entries or used the **Export All** option, a single .json file is created to save the exported size catalog entries.

Reset the Size Catalog to factory defaults

Reset to Factory defaults allows you to revert the Size Catalog to the factory default entries and attributes.

Any added or edited size catalog entries are lost when you reset the Size Catalog to factory defaults, unless they have been assigned to a job. To save your customized entries, first export your existing size catalog before you reset it to factory defaults.

1 In Device Center, select Size Catalog under Resources, and click Reset to Factory on the toolbar.

Note: If the **Reset to Factory** icon is hidden from view on the Size Catalog toolbar, either enlarge the **Device Center** window or alternatively, click the More icon (three vertical dots) to view the option.

2 Click **Yes** in response to the alert message.

VDP resources

VDP (Variable Data Printing) jobs use master elements, and global and reusable resources for variable elements inside jobs.

You can use FreeForm 1 and 2 masters for any fixed-element data you might combine with different data from day to day. For example, you can store a letterhead template as a FreeForm master and use it repeatedly as the background for different letter content (the variable-element data).

Global resources are required images that must be downloaded to the Fiery server for VDP jobs with variable elements. These global resources are stored on the Fiery server as a group inside each individual project.

Note: VDP Resource Manager is supported on Command WorkStation v7.0 and earlier with Fiery system software FS600/600 Pro and earlier.

VDP Resources allows an Administrator to manage disk space on the Fiery server by:

- Managing FreeForm 1 and 2 masters
- Viewing and deleting global resources
- Allowing global resources to reside for future VDP jobs
- Archiving and restoring global resources to the Fiery server

If VDP Resource Manager is supported for your Fiery server, you can access VDP Resources: connect to the Fiery server, click the More icon, and choose **Device Center** > **Resources** > **VDP Resources**.

Manage FreeForm 1 and 2 masters

FreeForm 1 and 2 variable data printing sends the master-element data for the job to the Fiery server and rasterizes it separately from the variable-element data.

The master-element data is stored on the Fiery server in rasterized form as a FreeForm 1 and 2 master, and can be used as often as required with multiple sets of variable-element data.

After the master is created, use VDP Resources to view FreeForm master thumbnails and manage the master files on the Fiery server.

- 1 Connect to the desired Fiery server and click **Device Center** > **Resources** > **VDP Resources**.
- **2** To view FreeForm 1 and 2 masters, click **FreeForm**, select a FreeForm master, and then click **List View** or **Thumbnail View** from the View menu (if your Fiery server supports it).
- **3** To delete FreeForm 1 and 2 masters, click **FreeForm**, select a FreeForm language or master file, and then click **Delete**.
- **4** To update current information, click **Refresh** (if your Fiery server supports it).

Back up VDP resources

You can back up FreeForm 1 and FreeForm 2 masters and global resources.

Back up FreeForm 1 and 2 masters for a project

Using Device Center's VDP Resources feature, you can back up a FreeForm master in a separate file.

- 1 Connect to the desired Fiery server and click **Device Center** > **Resources** > **VDP Resources**.
- 2 Click FreeForm, select a FreeForm language, and then select a FreeForm master.
- 3 Click Backup.
- **4** Specify the location to save the file, and then click **OK**.

Back up global resources for a project

Using Device Center's VDP Resources feature, you can back up projects in a separate file.

Backup and restore are not available for PDF/VT jobs.

- 1 Connect to the desired Fiery server and click **Device Center** > **Resources** > **VDP Resources**.
- **2** Click a VDP folder to display the list of available projects.
- **3** Select the project that you want to archive and click **Backup**.
- **4** Specify the location to save the file, and then click **OK**.

Restore VDP resources

You can restore FreeForm 1 and 2 masters and archived global resources.

Restore FreeForm 1 and 2 masters for a project

If you have backed up a FreeForm 1 and 2 master in a separate file, you can restore it.

- 1 Click Restore.
- 2 Navigate to the location of the archived master file, select the file, and then click **Restore**.

Restore archived global resources for a project

Archived jobs can only be restored to the Fiery server where the files were originally archived.

Note: Except for FreeForm 1 and 2, VDP languages without global resources do not appear in VDP Resources. VDP languages for which global resources have been restored appear in VDP Resources.

- 1 Click Restore.
- 2 Navigate to the location of the archived file, select the file, and then click **Restore**.

View and delete global resources

You can view global resources as well as job name information for a project.

- 1 Connect to the desired Fiery server and click Device Center > Resources > VDP Resources.
- **2** To view global resources, click a project and click **List View** or **Thumbnail View** from the View menu (if your Fiery server supports it).
- **3** To view submitted job name information and resources for a project, click a project and click **Resources** or **Jobs** (if your Fiery server supports it).
- **4** To delete global resources, click a VDP language or a project, and then click **Delete**.
- **5** To update current information, click **Refresh** (if your Fiery server supports it).

Fonts

The Fonts management window lists the fonts resident on the Fiery server. You can also print the font list to a local printer.

Manage fonts on the Fiery server

You can add, update, and delete fonts, as well as print a font list.

In Configure, make these settings:

Enable **Job Submission** > **Queues** > **Publish Font Queue**. For security reasons, enable the **Font Queue** only while installing fonts.

For PostScript fonts, disable **Security** > **PostScript Security**.

The PCL option is available on a Fiery server that supports it.

Note: You can also upload and save PCL soft fonts on a Fiery server.

Note: All Japanese fonts resident on the server or downloaded by a supported application are locked. Japanese fonts downloaded to the Fiery server can only be deleted by the installing application.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 Click Resources > Fonts.
- 3 Select PS Fonts or PCL Fonts.

A list of the fonts that currently reside on the Fiery server appears.

4 To add or update fonts, click Add New. Click Add to locate the font that you wish to download, and then click OK and Refresh.

You can add Adobe PostScript Type 1 fonts.

If your Fiery server supports PCL, you can add PCL soft fonts. The supported formats for PCL soft fonts are sfp, sfl, sfg, sfs, sft, hpf, r8p, r8l, usp, usl, and hpp. PCL soft fonts are not removed after the Fiery server is rebooted or restarted. You cannot delete PCL soft fonts.

- 5 To delete a font, select an unlocked font in the Font List and click **Delete**. Locked fonts cannot be deleted.
- **6** To print the Font List, click **Print**.
- 7 If you added PostScript fonts, re-enable Security > PostScript Security.

Back up and restore fonts

You can back up and restore all fonts on the Fiery server. You cannot select individual fonts.

You must be logged in as Administrator to back up and restore fonts on the Fiery server.

- 1 Open **Device Center** in one of the following ways:
 - Click the More icon (three vertical dots) next to the server name in the **Servers** pane.
 - Double-click the server name in the **Servers** pane.
 - Click Server > Device Center.
 - Right-click the server name and select **Device Center**.
- 2 Click Resources > Fonts.

- 3 Click Backup or Restore.
- **4** In the web browser window that appears, follow the security prompts.
- 5 Under Backup Resources and Settings, click Backup Now.
- **6** Log in as administrator if you are prompted.
- 7 In the list of items to back up, select **Fonts**.
- **8** Observe these guidelines:

Do not back up fonts to an internal drive that also contains the Fiery server. You must restore fonts only to the same Fiery server from which the fonts were originally backed up.

Users and groups

You can define privileges for the users who access the Fiery server by assigning them to groups. Several groups are provided by default, and you can create new groups. All users in a group have the same privileges.

Note: Command WorkStation allows only users from the existing Administrators or Operators groups to log in and not from any custom groups created by the user.

You can view detailed information about users and groups by selecting **User Accounts**.

In addition to assigning the users that you have created to a group, you can add users from your organization's global address list. To do so, you must first enable LDAP services on the Fiery server.

View or add Groups

With Groups, Administrators can set up print groups with selected privileges, as well as add users to the group.

Note: Groups may not be supported for all Fiery servers.

To modify users and group privileges, click **Configure**. For more information, see Change group privileges on page 41.

Use the Job Log

The Job Log preserves a record of all processed and printed jobs, the date and time they were printed, and their characteristics.

Note: If an Administrator clears the Fiery server or installs new software, the Job Log may also be cleared.

An Administrator can set automated Job Log maintenance in Configure, such as scheduling a day and time to export and clear the Job Log.

For more information about how to manage the Job Log in Configure, see Configure Help.

View the Job Log

- 1 Connect to the desired Fiery server and do one of the following:
 - Click the More icon (three dots) next to the server name, choose Device Center, and then click Logs > Job Log.
 - Click **Server** > **Logs**.
- **2** Choose either the **Timestamp Done Printing** column or the **Date/Time** column and specify the date range of jobs you want to view.

The **Timestamp Done Printing** is displayed in the first column, with the most recently printed jobs appearing at the top.

The second column displays the **Date/Time** when the job was received by the Fiery server.

3 To view all jobs, click **Clear Filter**.

If you select Proof Print for a job, the printed proof appears in the Job Log with a copy count set to one.

Customize Job Log columns

- 1 Right-click a column header.
- 2 Select Add.
- **3** In the list of available columns, select the column to add.
- **4** To delete a column, right-click the column header and select **Delete**.
- **5** To change the order of columns, select the column header and drag it to another location.

View Job Log entry details

You can view more details about an entry in the Job Log. You can copy the text using standard Windows or macOS controls to select, select all, copy, and so on. Also, you can print the details to the Fiery server or a local printer.

Select the row and click **Details** in the toolbar, or double-click the row.
 The Job Log columns are displayed in a vertical format, allowing more information to be seen at a glance and printed.

Print the Job Log

- 1 Connect to the desired Fiery server and do one of the following:
 - Click the More icon (three dots) next to the server name, choose Device Center, and then click Logs > Job Log.
 - Click Server > Logs.
- 2 Click Print.
- **3** Choose the printer.
 - If you select **Fiery**, your job is printed.
 - If you select **Local Printer**, select a printer, and then click **Print**.

Export the contents of the Job Log

- 1 Connect to the desired Fiery server and do one of the following:
 - Click the More icon (three dots) next to the server name, choose Device Center, and then click Logs > Job Log.
 - Click Server > Logs.
- 2 Click Export.
- **3** Select **Current View** to export the current date range view of the Job Log or select **Complete Log** to export the entire Job Log, regardless of the date range specified in your view.

Export or clear the contents of the Job Log

- 1 Connect to the desired Fiery server and do one of the following:
 - Click the More icon (three dots) next to the server name, choose Device Center, and then click Logs > Job Log.
 - Double-click the server name in the **Servers** pane to open **Device Center**, and then select **Logs** > **Job Log**.
 - Click Server > Logs.
- **2** Do one of the following:
 - Click Export and Clear.
 - Click Clear.

Graphic arts tools

Fiery graphic arts features

Some graphic arts features of the Fiery server are available through feature packages. To determine which packages are supported by your Fiery server, see the documentation that accompanies your Fiery server.

For FS350/350 Pro and earlier, the following packages are available:

- Fiery Graphic Arts Package, Premium Edition on page 339
- Fiery Productivity Package on page 340

For FS400/400 Pro and later, the following packages are available:

- Fiery Graphic Arts Pro Package on page 340
- Fiery Automation Package on page 341
- Fiery ColorRight Package on page 341

Fiery Graphic Arts Package, Premium Edition

Fiery Graphic Arts Package, Premium Edition is a feature package for the Fiery server. If this package is installed on the Fiery server, the following features are available in Command WorkStation:

- 2-color print mapping on page 240
- Control Bar on page 342
- Trapping on page 344 (configurable)
- Paper simulation white point editing on page 348
- Preflight on page 349
- Fiery ImageViewer on page 352

Note: The Progressives option is no longer available through Device Center or Job Properties. But you can set up and print progressives through Fiery ImageViewer. See <u>Progressives</u> on page 346.

The following features of Fiery Graphic Arts Package, Premium Edition are not part of Command WorkStation:

- Hot Folders filters
- Ugra/Fogra Media Wedge
- Integrated Altona Visual Test

Fiery Productivity Package

Fiery Productivity Package is a feature package for the Fiery server that contains some graphic arts features.

If Fiery Productivity Package is installed on the Fiery server, the following features are available in Command WorkStation:

- Spot colors on page 229 (part of the Spot-On feature)
- Control Bar on page 342
- Trapping on page 344 (configurable)
- Fiery ImageViewer on page 352
- Image Enhance Visual Editor on page 223
- Advanced job management (if available on the printer):
 - Rush Print
 - Print and Process Next
 - Schedule Print
- Virtual printers on page 271
- Fiery JDF Jobs on page 103

The following features of Fiery Productivity Package are not part of Command WorkStation:

- Hot Folders
- Hot Folders filters
- Fiery JobFlow Base
- Fiery JobFlow

Fiery Graphic Arts Pro Package

Fiery Graphic Arts Pro Package contains features that are especially suited to the requirements of graphic arts applications. If this package is installed on the Fiery server, the following features are available in Command WorkStation:

- Control Bar on page 342
- Fiery ImageViewer on page 352
- Preflight on page 349 (FS400 Pro)
- Preflight Pro on page 351 (FS500 Pro and later)
- Spot colors in Spot Pro on page 241

The following features of Fiery Graphic Arts Pro Package are not part of Command WorkStation:

- Ugra/Fogra Media Wedge
- Integrated Altona Visual Test

The 2-color print mapping on page 240 feature was previously available only with the Fiery Graphic Arts Package, Premium Edition. The feature is now included with any Fiery server (FS400 Pro or later) that supports the Fiery Graphic Arts Pro Package.

Fiery Automation Package

The Fiery Automation Package contains advanced job management features. If the Fiery Automation Package is installed and activated on the embedded Fiery server, the following additional job management features are available in Command WorkStation:

- Advanced job management features (if available on the printer):
 - Rush Print
 - Print and Process Next
 - Schedule Print

For more information, see Commands for managing jobs in a queue on page 20.

- About Fiery JDF and JMF on page 103
- Preflight on page 349
- Virtual printers on page 271

The following features of Fiery Automation Package are not part of Command WorkStation:

- Hot Folders
- Hot Folders filters
- Fiery JobFlow Base
- Fiery JobFlow

Fiery ColorRight Package

The Fiery ColorRight Package contains features that are especially suited to the requirements of graphic arts applications. If Fiery ColorRight Package is installed and activated on the embedded Fiery server, the following additional color features are available in Command WorkStation:

- Control Bar on page 342
- Fiery ImageViewer on page 352
- Image Enhance Visual Editor on page 223
- Spot colors in Spot Pro on page 241

The 2-color print mapping on page 240 feature is now included with any Fiery server (FS400 or later) that supports the Fiery ColorRight Package.

Control Bar

If the Control Bar feature is supported by your Fiery server, you can add a control bar (containing a static color bar and dynamic job information) to each printed page at a user-defined location.

This is useful for proofing and checking the color accuracy of a job. You can use a control bar, in conjunction with analytical tools such as Fiery Color Profiler Suite, to evaluate color quality.

You can turn on a control bar for an individual job or you can set a server default to print a control bar for all jobs.

You can edit a control bar or create a new one. Since a control bar does not become a part of a job, a job printed with a control bar can print differently later if the control bar definition has changed.

Control Bar is supported for PostScript and PDF jobs.

The factory-supplied control bar (called Fiery) and any custom control bars that you create can be applied to any page size. The Control Bar print option lets you select which control bar, if any, to use for a job. In addition, when you edit a control bar definition, a preview shows how the control bar will appear on a specified page size.

Print a control bar by default (FS200/200 Pro)

The **Print Control Bar by default** option is a server setting that prints a control bar on all pages sent to the Fiery server.

- 1 In Device Center, click Control Bar under Color Setup.
- **2** Select a setting for **Print Control Bar by default**.
 - · Select the control bar.
 - · Select Off.

All pages are printed with the selected control bar.

Print a control bar by default

You can set a server default to print a control bar for all jobs in Fiery system software later than FS200/200 Pro.

- 1 Click the More icon (three dots) and select **Set Defaults**.
- **2** In the **Default settings** window, select **Job Info**.
- **3** Scroll down to **Reporting** and select a menu option for **Control Bar**.

The Fiery server comes supplied with a factory default control bar called 'Fiery'. You can create custom control bars.

- **4** Choose from the following:
 - Off: No control bar is printed.
 - **Fiery**: The factory default control bar is printed.
 - Custom control bars: All custom control bars are listed. The selected one is printed.

You can choose to lock the **Control Bar** setting so users cannot override it.

Note: The factory default is **Off**. To reset job properties to the factory defaults, click **Reset** in the **Default settings** window.

View and edit a control bar

You can view the definition of a control bar and edit the settings.

A control bar can be configured to include information or settings that do not apply to specific job properties. When a control bar includes information or settings that do not apply to a job, the control bar may include fields that are blank or shows as not defined. This can be avoided by creating custom control bars for user-specific workflows.

- 1 In Device Center, click Control Bar under Color Setup.
- **2** Select the control bar in the list and view the definition on the right side of the window.
- **3** To change settings, click **Edit** and define the values for each option.
 - **Control bar name** The name used to select the control bar.

Note: In the printer driver, this name appears only if Two-Way Communication is enabled.

• **Color Bar** - Lets you turn the display of the color bar on or off, select one of several factory-supplied images or import your custom image (EPS or PDF format), and specify the placement of the image.

Note: For an image in PDF format, only the first page is used.

• **Job Information** - Lets you turn the display of the job information on or off, select the job settings to display, and specify the appearance and placement of the text.

Note: The available job settings depend on the model of Fiery server.

- **Page Settings** Lets you select the preview page size, specify margins (the color bar and job information are placed inside these margins), and select mirror image (for transparent media).
- 4 Click **OK** to save your edits.

Create a custom or duplicate control bar

You can duplicate a control bar to create a custom control bar that fits your needs, or you can create a completely new control bar. For example, create a control bar that uses a different EPS file as the color bar image.

- 1 In Device Center, click Control Bar under Color Setup.
- **2** Do one of the following
 - To duplicate a control bar, select the control bar and click **Duplicate**.
 - To create a custom control bar, click **Create New**.
- **3** Define the values for each option.
- 4 Click **OK** to save the control bar.

Export, import, or delete a custom control bar

You can export a custom control bar from the Fiery server to your computer as a file and share the local copy or import it to another Fiery server. Imported control bars are immediately enabled for use on the Fiery server.

Note: You can delete a custom control bar but you cannot delete the factory-supplied control bar.

A control bar created on a Fiery server with FS200/200 Pro software cannot be imported to a Fiery server with an earlier version of software, and vice versa.

If an exported control bar contains any features that are not supported on the Fiery server to which it is imported (for example, job settings specific to the Fiery server), those features are hidden.

- 1 In Device Center, click Control Bar under Color Setup.
- **2** Do one of the following:
 - To export a control bar, select the control bar, click **Export**, browse to the location where you want to save the file, and click **Select Folder**.
 - To import a control bar, click **Import**, locate and select the control bar file, and click **Open**.
- 3 To delete a custom control bar, select the control bar, click **Delete**, and then click **Yes** to confirm.

Restore the factory default control bar settings

You can restore the factory-supplied control bar to its original (factory default) state. The following procedure is for Fiery system software FS200/200 Pro.

- 1 In Device Center, click **Control Bar** under **Color Setup**.
- 2 Select a control bar and click Edit.
- 3 Click Reset to factory and click Reset.

Trapping

Trapping is a technique to prevent white edges around objects, or "halos," caused by the misalignment of color plates. With trapping, objects are printed with slightly enlarged edges, or traps, to fill any gaps between objects.

Trapping is applied to a job when the **Auto trapping** print option is enabled.

If configurable Auto Trapping is supported by your Fiery server, you have full control over the trapping settings used by the **Auto trapping** print option. The factory default settings of the Fiery server are optimized for the printer using regular paper. Many jobs print satisfactorily with the default trapping settings, but if they do not provide the results necessary for the media that you use, configure the trapping settings to meet your requirements. You can always restore the trapping settings to the factory default by clicking the **Factory Defaults** button in the **Trapping** pane in Device Center.

Note: You must be logged in as Administrator to configure trapping settings. Operators can view trapping settings but cannot make changes.

For more information about trapping, see Color Printing, which is part of the user documentation set.

Set default auto trapping for all jobs

Selecting the **Auto trapping** check box in the **Default settings** window applies trapping to all jobs sent to the Fiery server.

- 1 Click the More icon (three dots) and select **Set Defaults**.
- 2 In the **Default settings** window, select **Color**.
- 3 Scroll down to Color settings and select Auto trapping.
 You can choose to lock the setting to prevent users overriding it in Job Properties.

Specify the trap width

Trap width values determine how thick the trapped area between objects is. You specify the width values relative to the paper feed direction: horizontal is perpendicular to the feed direction and vertical is parallel to the feed direction.

- 1 In Device Center, click **Trapping** under **Color Setup**.
- **2** For **Trap width**, specify the horizontal and vertical widths. Or, if you want to force the values to be equal, select the link icon displayed between the horizontal and vertical values. If the values are different when you select the link icon, the higher of the two values is used for both.
 - **Horizontal** Defines the horizontal thickness of the trapped areas (0-10 pixels).
 - **Vertical** Defines the vertical thickness of the trapped areas (0-10 pixels).

The bitmap image provides a dynamic visual example of the selected values.

Specify trap color reduction

Trap color reduction values determine how much of each color is applied in the trap. The trap between two objects of different colors can create a line of a third color that is a combination of the two colors. You can reduce the appearance of this line using Trap color reduction.

The values you specify are the percent reduction of the toner. A 100% reduction results in no toner intensity applied to the trap. A 0% reduction results in the same toner intensity as the object edge.

- 1 In Device Center, click **Trapping** under **Color Setup**.
- **2** Under **Trap color reduction**, specify the values for the color channels:
 - **Cyan** Defines the trap reduction in cyan (0-100%).
 - Magenta Defines the trap reduction in magenta (0-100%).
 - **Yellow** Defines the trap reduction in yellow (0-100%).
 - **Black** Defines the trap reduction in black (0-100%).

3 (Optional) If you want to force all the reduction values to be the same, select the link icon displayed between the trap reduction values. If the values are different when you select the link icon, the highest value is used for all values.

The icon to the left of each color provides a visual example of the selected value.

Specify trap shape

Trap shape represents how a single pixel appears when trapped against a contrasting background. With elements bigger than one pixel, the shape, or part of the shape, is only visible at the corners of objects.

- 1 In Device Center, click **Trapping** under **Color Setup**.
- 2 Under Trap shape, select either Ellipse, Diamond, or Rectangle.

Specify trap object types

When you do not select an option for Trap object types, only the trapping of objects (text and graphics) against objects is applied. To apply trapping to images, use the settings under Trap object types.

- 1 In Device Center, click Trapping under Color Setup.
- 2 Under Trap object types, select any of the following:
 - Trap Objects to Images Trapping is applied to boundary areas between objects and images.
 - **Trap Images Internally** Trapping is applied to every individual pixel of an image. This option is available only when you select **Trap Objects to Images**.

Progressives

The term "progressives" refers to printing any combination of the C, M, Y, and K separations in a multi-color document. Printing or proofing the separations can be used to diagnose problems in a job.

You cannot set up or print progressives in either Device Center or in Job Properties. However, you can perform a similar operation by using ImageViewer to view and print separations. By flattening the curve for a specific colorant, you can save it as a preset. For information, see Fiery ImageViewer on page 352.

The sequence for printing progressives does not have to represent the actual sequence applied by the printer. A different sequence may be useful for analyzing the image composition.

With progressives, you can see the influence of trapping, check the halftone interaction between two colorants, verify registration of two plates relative to each other, and see the color separation parameters (making it easy, for example, to visualize the GCR level when only the black plate, or all but the black plate are printed).

Progressives show the color separations used by the job when printed to the printer. They are not intended to be used to proof for another printer.

Halftone simulation for proofing

For advanced proofing purposes, the Halftone Simulation feature offers user-controlled halftone generation. For halftone resolutions that are lower than the printer resolution, halftoned proofs can simulate the dots on films or plates for offset printing that result from screening an image.

You can select preset halftone screens to print jobs with good results. If Halftone Simulation is supported by your Fiery server, you can define custom screening functions applied to your print job. The Fiery server may also support different frequency values for each color channel.

When color accuracy is more important than dot simulation, make sure that the Fiery server is calibrated using the particular halftone screen you use and that the output profile you print with is also matched to the halftone screen. Changing a halftone screen usually modifies the color response of the printer.

When dot simulation is more important than color accuracy, print with no CMYK simulation (with the **CMYK source** set to **Bypass conversion** or **ColorWise OFF**).

View or edit custom halftone screens

You can customize the values for a halftone screen by configuring a custom halftone screen and then selecting the screen in the **Halftone simulation** print option when you print a job.

You can specify up to three custom halftone screens that correspond to the **User defined screen 1**, **User defined Screen 2**, and **User defined Screen 3** settings for the **Halftone simulation** print option. For each of these screens, you can define the angle, frequency, and dot shape.

Specify a custom halftone screen

You specify a custom halftone screen in the **Halftone Simulation** window.

- 1 In Device Center, click **Halftone Simulation** under **Color Setup**.
- 2 Specify the Angle and Frequency for each color channel (Cyan, Magenta, Yellow, and Black), and Dot Shape for a custom halftone screen.
 - **Angle** Angle in degrees (0-360) for each color.
 - **Frequency** Frequency refers to the number of rows of spots that combine to form a halftone dot, expressed in Lines per Inch (LPI).

To constrain all four color channels to the same **Frequency** value, select the link icon.

If your Fiery server does not support different Frequency values for each color, the **Frequency** value is applied to all color channels.

• **Dot Shape** - Select a shape from the list or select **Custom** to specify a custom shape.

Specify a custom dot shape

You can customize a dot shape if the standard dot shapes do not meet your needs.

- 1 In the **Edit Dot Shape** window, select a predefined shape from the **Template** list. The PostScript function for the shape appears in the text field.
- 2 Modify the shape by editing the PostScript function, and then click **Preview** to view it.
- **3** Change the size of the preview by moving the **Area coverage** slider.
- **4** Save the custom shape and close the window by clicking **OK**.

Paper simulation white point editing

The Paper Simulation feature renders paper white as a printed color in the output, rather than leaving white areas of the page unprinted. White point editing allows you to adjust the hue, brightness, and saturation of the simulated paper white, which is defined in a CMYK source profile as the white point.

If Paper Simulation with white point editing is supported by your Fiery server, you can customize the white point if necessary to achieve the result that you want.

Note: If you have defined a substitute color as C=0, M=0, Y=0, K=0, the values defined in Substitute Colors override those for Paper Simulation.

Edit Paper Simulation white point values

The Paper Simulation white point editing feature lets you customize an existing CMYK source profile and adjust its white point. You must also link the custom profile with a specific output profile. When you print a job, you must select the customized CMYK source profile and its linked output profile to see the effect of the Paper Simulation White Point editing.

If you want to preserve the existing CMYK source profile, make a copy of it before editing the white point. You can copy a profile by exporting it and then importing it with a different name.

Note: You can edit the white point of a CMYK source profile but not an output profile.

If you have a spectrophotometer (such as an ES-2000), you can import measured color values directly. This feature allows you to target a match based on the actual color of the paper. To use a spectrophotometer, install and set up the spectrophotometer before you begin editing the white point.

Note: To use an X-Rite i1Pro 2, you must use an instrument obtained from Fiery.

- 1 In Device Center, click Resources > Profiles.
- **2** Select a CMYK source profile to customize and click **Paper Simulation**.
- **3** Select the output profile to link with this CMYK source profile and click **OK**.

Note: When you print a job with the custom profile, you must select the same output profile.

- 4 Make sure that the correct monitor profile for your monitor is displayed under Monitor Profile.
 - To display the colors correctly on your monitor, you must set up the monitor according to the manufacturer's recommendations and specify the correct monitor profile for your monitor.
- 5 To measure a new white point using a spectrophotometer, click the spectrophotometer icon.
- **6** Place the spectrophotometer in its calibration cradle and click **Calibrate**. Calibration improves the accuracy of measurements.
- 7 Place the spectrophotometer over the target color, making sure to center the sample aperture over the color.
- **8** Press the button on the spectrophotometer to take the measurement. The measured CMYK values are imported into the CMYK fields, and the corresponding Lab values are displayed.
- 9 Alternatively, or additionally, you can edit the hue, brightness, and saturation values manually.
 - **Hue** 0.0 to 359.9
 - Brightness 0.0 to 100.0 (inclusive)
 - Saturation 0.0 to 100.0 (inclusive)

Edit the values by dragging the sliders or typing values in the text fields. The sliders do not show absolute values. The slider position and associated values are relative to the paper white definition in effect when you open the window. View the changes in the preview patch in the upper-left corner of the window and in the Lab values displayed on the right.

- **10** To print a test page, click **Print**.
- 11 If the test page looks correct, click **Save** and close the **Paper Simulation White Point** window.

Preflight

You can use the Preflight feature to check a job before printing, to reduce costly printing errors. Preflight checks the most common areas of error to ensure that a job will print successfully and to the expected quality on the selected printer.

To perform a preflight check, you will require one of the following:

Table 1: External Fiery server

Fiery System Software	Package
FS350 Pro and earlier	Fiery Graphic Arts Package, Premium Edition
FS400 Pro	Fiery Graphic Arts Pro Package

Fiery System Software	Package
FS500 Pro and later	Standard – no optional package required

Table 2: Embedded Fiery server

Fiery System Software	Package
FS350 and earlier	Not supported
FS400	Fiery Automation Package
FS500	Fiery Automation Package

Note: Preflight does not require any optional package for Fiery system software FS500 Pro and later with Windows for color and black-and-white servers.

Preflight generates a report of errors as well as information about the job, including security settings, page size, and color spaces.

Preflight checking can be enabled in Hot Folders and Virtual Printers as well as in Command WorkStation.

Note: Processed jobs cannot be checked with Preflight.

The following file formats are supported for Preflight:

Fiery server	Supported file formats
Windows-based	PostScript, PDF, EPS, PPML, Creo VPS, and PDF/VT
Embedded	PostScript, PDF, EPS, and Creo VPS

TIFF and PCL file formats are not supported for Preflight.

Preflight can check for the following categories of errors:

- Fonts Checks for missing fonts and Courier font substitution.
- Spot Colors Checks for missing spot colors. You can add missing spot colors in Command WorkStation Spot Colors.
- Image Resolution Checks for image resolution less than a specified value.
- **VDP Resources** Checks for missing VDP resources. You can specify the number of records to check, to prevent a potentially long processing time.
- **Hairlines** Checks for line thickness less than a specified value.
- **Overprint** Checks for overprint.
- **PostScript** Checks for PostScript errors.

You can configure Preflight to specify which categories of errors to check and how errors are reported. Preflight configuration settings can be saved as a preset, which allows you to quickly select a Preflight configuration for a particular job.

Note: If Fiery Preflight Pro is available, you can check a spooled or processed PDF or PDF/VT job in Command WorkStation. For other file types, use Preflight.

Configure and run Preflight check

You can configure Preflight to specify which categories of errors to check and how errors are reported. Preflight configuration settings can be saved as a preset, which allows you to quickly select a Preflight configuration for a particular job.

- 1 In Job Center, select a held job and select **Actions** > **Preflight**.
- **2** Optionally, select a Preset (collection of settings) from the **Preset** list.
- **3** Select each category of error to check and specify any settings. Clear the check box to skip a particular category. A skipped category is displayed as **Not checked**.
- **4** Select a notification level (**Critical** or **Warning**) for each category of error.
- **5** Select **Stop Preflight on first critical error** if you want to stop running Preflight as soon as a critical error is detected.
- **6** To save the settings as a new preset, select **Save As** from the **Preset** list.
- 7 To perform the Preflight check with these settings, click **Preflight**.

 Preflight runs and displays the results in a report. You can print and save this report, and you can also redisplay the report by right-clicking the job in Job Center and selecting **View Preflight Report**.

Fiery Preflight Pro

You can use the Fiery Preflight Pro feature to check jobs for conformity to a set of standards defined in a selected preset.

Preflight Pro is available only on Windows-based Fiery servers with Fiery system software FS500 Pro or later. Preflight Pro is enabled only if the Fiery Graphic Arts Pro Package is activated on the Fiery server.

You can use Fiery Preflight Pro to check these types of jobs:

- PDF
- PDF/VT
- FreeForm Plus (FS600 and later)

The checks performed by Preflight Pro are based on the settings defined in a selected preset. Presets can be applied to spooled, and processed jobs. Preflight Pro generates a report to capture the errors and warnings in the jobs, if the jobs deviate from the standards defined in the preset.

Note: Preflight Pro is applicable only to PDF, PDF/VT, and FreeForm Plus jobs. Preflighting of all non-PDF file types is done using Preflight on page 349.

To access Preflight Pro, you must log in to Command WorkStation with Administrator or Operator access. Right-click a spooled or processed job in Command WorkStation Job Center and select **Preflight Pro**. You can also preflight jobs that are submitted from Fiery Hot Folders or virtual printers.

Fiery ImageViewer

Fiery ImageViewer allows you to soft proof and edit colors or gray levels (if supported) in a job before printing. You can preview orientation, content, general color or grayscale accuracy, and a preview of a processed job (raster image).

Color output

Unlike the Preview application, Fiery ImageViewer displays the job with the actual CMYK values sent to the printer, providing an accurate soft proof. However, the soft proof does not display the effects of calibration, which can affect color.

You can edit the individual C, M, Y, and K response curves. You can save your edits and apply them to other color jobs. You can also apply G7 calibration curves created using CHROMiX Curve2 or Curve3.

You can display the separation data for each process color independently or in combination with any other process colors. If the job has **Halftone simulation** settings, the preview shows a composite view of all separations at the dot level. If you print pages from Fiery ImageViewer, the output includes composite color information for the separations selected in Fiery ImageViewer.

Black-and-white output

Fiery ImageViewer allows you to adjust the gray levels in a job before printing. You make these adjustments visually, by changing the response curve (a graphical representation of input vs. output density), and viewing the effect in a preview of the job.

Fiery ImageViewer also allows you to install the response curve adjustments of the current job on the Fiery server. The same gray level adjustments are then applied to all jobs that are processed subsequently.

ImageViewer requirements

Command WorkStation includes Fiery ImageViewer version 4.0. Your computer must meet the following requirements and the following types of connections:

- GPU running OpenGL version 3.2 and later
- Minimum 750MB of memory available to the graphics card
- Client computer connected using Remote Desktop Connection

The OpenGL version can be verified with third-party software, such as OpenGL extension viewer.

Start ImageViewer

You can start ImageViewer from a job in Command WorkStation.

Note: You can also start ImageViewer from Command WorkStation Preview.

1 In Command WorkStation Job Center, select a job that has been processed and held.

If needed, select **Actions** > **Process and Hold** to move a job to processed and held status.

- **2** Do one of the following:
 - Select Actions > ImageViewer.
 - Right-click (Windows) or ctrl-click (macOS) the selected job, and select **ImageViewer** from the menu that appears.

Fiery ImageViewer toolbar for quick access to common actions

The Fiery ImageViewer toolbar provides quick access to common actions that can be applied to the job. To show or hide the toolbar, press the $\boldsymbol{\mathsf{T}}$ key to toggle.

Some toolbar icons are available only if the Fiery server supports them.

Button	Description
Save	The Save button saves the current settings for the job.
Duplicate	The Duplicate button duplicates selected pages in the Thumbnails pane.
Delete	The Delete key deletes selected pages in the Thumbnails pane.
Revert	The Revert button reverts to the previous settings for the job.
Proof Print	The Proof Print button prints a single copy or iterative proof of a job directly from Fiery ImageViewer to verify output. Proof print does not save changes if any are made or change the original job.
Magnifier Q	(Fiery ImageViewer v3) Displays a magnified area of the image around the cursor location that moves with the cursor. (Fiery ImageViewer v4) Zooms in on the image by a fraction.
Wiper []	(Fiery ImageViewer v4) The Wiper button provides split screen on a diagonal, so the user can see the image before and after adjustments are made. The user can pan the image to move the split to before or after correction. To move or swipe the diagonal on the image, click ctrl+alt for Windows and click cmd+opt for macOS and use the wheel on the mouse to spin the diagonal.

Button	Description
Ruler	The Ruler button displays measuring rulers along the X and Y axes on the sides of the canvas.
Measure	The Measure button activates a measuring tool that allows you to click on two locations in your document. The tool measures the distance and angle between the two points, and the height and width on the X and Y axes.
Preserve Spot Colors	When enabled, spot colors remain unaffected by adjustments to color channel curves. When disabled, spot colors are affected by adjustments to color channel curves.
Rotate	The Rotation button allows you to rotate the Image Preview display in 90-degree increments. Note: This action does not alter the orientation of the final printing output. Rotation is a global setting that affects all pages within the job.
Mirror	The Mirror button allows you to mirror the image preview horizontally, and to reverse the mirror effect on the image preview. Note: This action does not alter the final printing output. Mirror is a global setting that affects all the pages within the job.
Local area correction	The Local area correction tool allows you to draw a selection box anywhere on the image to locally make color edits. The button is available only for the Fiery server that supports the Local area correction feature.
Fiery Learning	The Fiery Learning button links to the most recent Fiery ImageViewer course at the Fiery Learning website.

View rulers in the Image Preview pane

You can display rulers along the top and left side of the Image Preview pane in Fiery ImageViewer.

- 1 To display rulers in the **Image Preview** pane, do one of the following:
 - Click the **Rulers** icon () in the toolbar.
 - Press ctrl+shift+R.
 - Click View > Rulers.
- **2** Place the cursor at any point along either of the rulers to display a horizontal or vertical guideline across the document canvas to assist with identifying where content is placed on the page.
- **3** To view both the horizontal and vertical rulers together, click and drag from the top left corner of the ruler. This is useful to measure the vertical and horizontal distance to any point on the image.

Measure distances in the Image Preview pane

You can measure distances in the **Image Preview** pane in Fiery ImageViewer. The tool measures the distance and angle between the two points, and their height and width on the X and Y axes.

- 1 To use the measurement tool, do one of the following:
 - Click the **Measure** icon () in the toolbar.
 - Press ctrl+M.
 - Click View > Measure.
- 2 Click the measurement starting point on your document in the Image Preview pane.
- **3** Click the measurement end point on your document in the **Image Preview** pane.

Adjust the image preview

The **Navigator** pane controls what appears in the image preview. You can enlarge the area of the image preview to fit the screen.

The bounding box in the **Navigator** pane contains the part of the image visible in the image preview. If the bounding box is hard to see, change its color in **Edit** > **Preferences**.

- 1 To reposition the part of the image that shows in the preview, do one of the following:
 - Drag the bounding box in the **Navigator** pane.
 - Drag the image.
 - To center the preview on a specific location in the image, hold down the Shift key and click that location.

- **2** To rotate the image clockwise, do one of the following:
 - Choose 90°, 180° or 270° from the list, or click the **Rotate** () icon.
 - Click **View** > **Rotate** and click the appropriate selection.

The rotation applies only to the preview, not the printed job.

To reset the preview to the original orientation, click **View** > **Rotate** > **Reset**.

- **3** To mirror the image preview horizontally, click the **Mirror** icon.
 - The mirror applies only to the preview, not the printed job.
 - To reverse the mirror effect on the image preview, click the **Mirror** icon again.
- **4** (For Fiery ImageViewer 4.0) To split the screen on a diagonal to see the image before and after making adjustments, click the **Wiper** icon.

The raster area above the diagonal line displays the after effects of an edit and the raster area below the diagonal line displays the before effects without an edit. You can pan the image to move the split to before or after correction. The image moves in the direction that you drag it.

You can move the wiper around the screen with either ctrl+alt (Windows) or cmd+option (macOS) and the scroll wheel on the mouse.

- **5** To enlarge the area of the image preview, click **View** > **Full Screen**.
 - To return to the normal display, press the **F** key.
- **6** To display the non-imageable area, click **View** > **Non-Imageable Area**. You can change the color of the non-imageable area in **Preferences**.

Adjust the image position

The **Image Position** pane provides precise control over the vertical and horizontal positioning on both sides of the printed material. Additionally, it offers a visual preview of the final printed result in the **Image Preview** window.

If the printer is not 100% registered, adjusting the image position can help correct any misalignment between the front and back when printing on both sides, adapt for finisher behavior such as hole punching or binding, or fix jobs with fundamental offset issues. While tray alignment makes adjustments for all print jobs, **Image Position** allows for making individual changes to each job.

- 1 To enable image position in Fiery ImageViewer, select the **Offset** check box from the **Image Position** tab in the **Viewer Controls** pane.
- **2** Select the units used for offset from the **Offset Unit** menu.
- **3** Enter positive or negative values for X and Y to adjust the position of the front and back sides of the sheet. To shift the front and back sides together, select the **Align front and back images** check box.
- 4 To display the visual preview of the adjustments to both sides, select **On** from the **Overlay** menu in the **Front and Back Overlay** pane. This reduces the opacity of the front and back so you can see the effect of the adjustments to the front and back of the page. You can independently adjust the opacity of the front and back with the **Front opacity** and **Back opacity** sliders.

- 5 To make the front and back content easier to see, select one of the following options in **Display mode**:
 - **Continuous tone** to view the front and back in their printed colors.
 - **Custom** to view the front and back in custom solid colors. Click on the color box for **Front color** or **Back color** to change the colors used to display the front and back content.

Resize the image

In addition to the zoom control at the bottom of the screen, there are several ways to resize the image.

1 To zoom in so that Fiery ImageViewer displays each data pixel in the image as a single pixel on the screen, select View > Actual Pixels.

The monitor resolution setting determines the actual size of the pixel display.

Note: (For Fiery ImageViewer 3.0) If the job has **Halftone simulation** settings and the zoom is set at 100% or higher, Fiery ImageViewer displays the halftone dot pattern and halftone shape. Depending on the frequency of the dot pattern, a dot will consist of several pixels.

- 2 To zoom out so the entire page fits in the image preview, click the **Fit in Window** icon next to the zoom control or select **View** > **Fit in Window**
- **3** (ImageViewer 3.0) To display a magnified view of the area around the cursor location that moves with the cursor, click the **Magnifier** icon or select **View** > **Magnifier**.

View color values in the image

ImageViewer displays the job with the actual color values that are sent to the printer. You can inspect the color values of any point in the image.

• Hover over a pixel in the image.

The **Separations** pane displays the values for each colorant.

Total Area Coverage reports the sum of the separation % values for the sampled raster pixel.

Using Object Inspector, you can also see the object type that the pixel in the raster was rendered from. See Object Inspector on page 358.

Object Inspector

Object Inspector shows the object type from which the selected pixel in the raster was rendered.

Object Inspector displays separation % color values for the sampled pixel. Object types include image, graphics, text, and edge pixels (tagged for edge enhancement). If the sampled pixel was rendered from blending multiple page objects, the Object Inspector displays the object as an unknown object type.

To use Object Inspector, move the cursor over the pixel in the Image Preview pane.

Color Replacement

Color replacement allows you to replace colors in the output raster. It works best with solid colors and uniform tints.

Note: The Color Replacement feature is available only in Fiery ImageViewer 4.0 and later when connected to Fiery server with Fiery system software FS350/350 Pro or later.

You can enter color tint values for replacement or select the original color to replace with the eye dropper. You can then enter a color replacement tint value, sample replacement color with the eye dropper, or replace using an existing Fiery spot color. The order of color replacements may be changed, and individual replacements can be shown or hidden with the eye icon.

You can zoom in to an area on the image down to a pixel for color replacement.

To use the Color Replacement feature, in the **Image Preview** pane, click and move the eye dropper (color picker icon over the pixel of the original color in the image, and then move the eye dropper (replacement picker icon over the pixel of the replacement color. The large square defines the currently viewed area, while the smaller square

is the pixel. Optionally, you can click the spot color replacement icon (to open the spot color library on the Fiery server and choose a spot color to use for the replacement color. Click **Apply** to save the changes.

Page () and Local () icons show the type of color correction made. Page edits are indicated with solid lines, and local edits are indicated with dash lines. When you modify an entry, Fiery ImageViewer removes the check box if applied because the entry is valid only for the current page. You can apply the local color replacement and page color replacement to all pages by selecting the corresponding **All Pages** check box.

You can save page color curves or page color replacements as a preset, or you can save both page color curves and page color replacements as a preset. Then, you can apply color replacement through Command WorkStation, Fiery Hot Folders, or Fiery Driver with **Job Properties**.

Up to thirty-two color replacements can be applied per page. You can change the order of color replacements and hide or delete individual replacements. By selecting the color replacements in the **Edits** pane, you can modify a substituted color later.

In Fiery ImageViewer 4.2 and later, when you apply any color replacement edit, it will apply only to the current page, unless you explicitly select the **All Pages** check box in the **Edits** pane. The changes are applied during printing of the job.

Keep in mind the following:

- Clearing the **All Pages** check box from any page for any color replacement edit, should delete that specific edit from all pages except the current page.
- For best results, view the raster at 100% in Fiery ImageViewer when applying color replacements. If you view the raster at less than 100%, anti-aliasing of the raster preview may cause color replacement at edges to look distorted. This does not affect the print.
- Color replacement is only available for jobs processed with the **Composite overprint** print option selected.
- Deleting the color replacement entry from any page will delete the color replacement from all pages in the document only if you selected the color replacement edit (**All Pages** check box). If you cleared the color replacement edit, then deleting the edit will only affect the current page.

Local area correction

Local area correction allows you to make color corrections locally to a selected area of the page.

Note: The Local area correction feature is available only in Fiery ImageViewer 4.2 and later.

To use Local area correction, do the following:

- Click the **Local area correction** button () and use the marquee to select an area within the image to apply local color correction. The dashed line indicates the selected area for color replacement.
- Use the large square to zoom in to an area on the image down to a pixel (smaller square) for color replacement.
- Click the picker icon () for the original color. You can change or replace the color by clicking the replacement color picker icon and moving to the image to select a color or change the values for the color mode, such as CMYK, CMYK+, Grayscale, and CMYK+ Specialty under the **Replacement** column. The large square used for color enhancement defines the currently viewed area, while the smaller square is the pixel for the selected color.
- Optionally, replace a color with an existing spot color from the spot color library for the Fiery server. Click the spot color replacement icon (and search for a specific spot color by name, a fuzzy search by number, or scroll through the list to select a spot color, and then click **OK**.
- Optionally, perform color adjustment by adjusting the individual color curves in the **Color Adjust** pane. After you make a marquee selection and curve adjustment, the **Apply** and **Cancel** buttons will appear in the toolbar next to the **Local area correction** button (). After you are satisfied with your change, click **Apply** to save the local color edits.

After making a color replacement, click **Apply** to save your changes in the **Color Replacement** pane. Fiery ImageViewer will list the color replacement as a row in the **Edits** pane.

The **Edits** pane shows all the color edits, whether you made the edits with color replacement or color adjustment of the color curves, made at the local level or page level. Toggle between local color replacement and original color by clicking the eye icon for any of the rows listed in the **Edits** pane. In the **Edits** column, the paint brush icon () shows the color edit was made with color replacement based on changes made in the **Color Replacement** pane or the wavy line box icon () shows the color edit was made using the **Color Adjust** pane, which shows the overall color curve change.

If you wish to apply the local color replacement to all pages in the document, click the **All Pages** check box for that specific color replacement. The specified area on all pages in the document will show the same color replacement.

You can adjust the local color replacement area by clicking the replacement color in one of the rows listed in the **Edits** pane, and then adjust the marquee for the specific area.

Display and print color separations

The **Separations** pane controls which color separations the image preview displays and includes in the printed output when you print the job from ImageViewer. Each page in the job may have different separations enabled.

- To display color separations, do any of the following:
 - To control which separations appear and print, select or clear the check box next to the separation name in the **Separations** pane.

Note: Fiery ImageViewer 4.0 and later will print all separations regardless of whether they are selected in the **Separations** pane.

- To invert the current selection of separations, select View > Separations > Invert Selections.
 Inverting a selection makes unselected separations the new selection. For example, if CMYK separations are available and you select Cyan and Magenta, inverting the selection displays Yellow and Black.
- To quickly display all separations, choose View > Separations > Select All.
- The Fiery server reads the colorant order. The **Separations** pane displays the process colors and specialty colors. Fiery ImageViewer displays the specialty colors in the order that they are installed on the printer.

Specialty colors that print under process colors are listed at the bottom of the separation list and specialty colors that print on top of process colors are listed at the top of the list.

Note: Specialty colors are shown for a Fiery server that supports them.

ImageViewer Edits

The ImageViewer Edits print option allows you to apply color curve edits saved as a preset on the server.

ImageViewer in Command WorkStation can be used to edit the CMYK curves of a processed job on the Fiery server. You can save the curve edits as presets in the **Preset** area of the **Color Adjust** pane in ImageViewer. You can apply the presets to spooled jobs with the **ImageViewer Edits** print option on the **Color** tab in the **Job Properties** window.

Use the **ImageViewer Edits** option to select a preset for your job.

Factory-supplied curve edits apply some typical color corrections:

- No correction
- Lighter highlights
- Midtone boost
- Shadow detail
- Reduce C (cyan) cast
- Reduce M (magenta) cast
- Reduce Y (yellow) cast

The preset list shows the factory-supplied curve edits followed by the custom curve edits.

After the job is processed, the edits become part of the job and are no longer visible as edits when you view the job in ImageViewer.

Edit response using curves

You can edit the response curves in the **Color Adjust** pane (for color output) or **Curve Edit** pane (for black-and-white output) to make precise edits to a job. This feature lets you customize the response curve for all the color curves together, for an individual color separation in a color job, or for the gray of a black-and-white job.

For a black-and-white job, edits to the gray response curve apply to all pages of the job.

Note: After you make curve edits for a color job, save the job before you switch to the **Color Wheel** tab. Otherwise, all of your curve edits are lost.

Edit a curve graphically

- 1 For a color job, click the **Curves** tab in the **Color Adjust** pane.
- 2 If necessary, adjust how the color curves are displayed:
 - To select a specific color curve, select the color from the **Channels** menu.
 - To select all the color curves together, select **All Channels** from the **Channels** menu.

Note: When **All Channels** is selected, use the **Page Up** and **Page Down** keys to switch between the color curves.

- **3** For a color job or black-and-white job, do any of the following:
 - To add a point on the curve, click anywhere on the curve.
 - To edit a curve, drag a point on the curve to the desired response value.

Note: In Windows, you can select a point and use the arrow keys to move the point 1% in any direction, or to move a large amount, hold down the shift key and press an arrow key.

- To delete a point on a curve, select the point and press Delete.
 You can also select a point and drag it over the point you want to delete.
- In Windows, move from point to point by selecting one point on the curve and using **shift+page up** and **shift +page down**.

Edit color curve data

- 1 For a color job, click the **Curves** tab in the **Color Adjust** pane and then click **Edit Curve**.
- **2** In the table that appears, edit the numeric values.

Each row of the table corresponds to an edit point in the graph.

- **3** Do any of the following:
 - To display a predefined set of rows, select the set from the **Control Points** list.
 - To add a row, type in the empty row.
 - To delete a row, click anywhere in the row and click **Delete Row**.

Edit colors using the color wheel

For a color job, you can edit colors using the color wheel in the Color Adjust pane.

Note: The edits that you make using the color wheel are kept if you switch to the **Curves** tab. But edits that you make using curves are lost if you switch to the **Color Wheel** tab without first saving the job.

- 1 Click the Color Wheel tab in the Color Adjust pane.
- 2 Click a tonal range (Highlights, Overall, or Shadows) to set the tonal range for the edit.

Note: The tonal range selection does not apply to **Brightness**. **Brightness** always applies to the entire tonal range.

- **3** To edit hue and saturation, click a new location inside the color wheel.
 - The image preview changes to show the result of the edit.
- **4** Fine-tune the edit by dragging the sliders for **Hue**, **Saturation**, **Black**, or **Brightness**, or type a new numeric value to the right of the slider.

Edit gray response curve through image

For a black-and-white Fiery server, you can use the gray response curve in the **Curve Edit** pane to make precise edits to the gray response of a job.

Edits to the gray response curve apply to all pages of the job.

Note: The response curve under **Curve Edit** is not the response curve of the Fiery server. In a processed job, the gray levels have already been converted by the Fiery server.

- 1 Move the cursor in the image to an area of gray that you want to adjust.
 - An image may contain many levels of gray in a small area. Make sure that you enlarge the image enough to locate the desired gray precisely.
- **2** Ctrl-click at the cursor location.
 - The point on the response curve that corresponds to the gray level at the location is highlighted.
- **3** Move the selected point to the desired location using the arrow keys. To adjust the response curve, use the Up Arrow key for darker and use the Down Arrow key for lighter.

Apply color edits to one or all pages

For a color job, you can copy color edits from the current page and paste them to another page or to all pages in a job.

- 1 Click the Curves tab in the Color Adjust pane, and then click Apply To.
- **2** Specify the page numbers and click **OK**.

Apply color edits through a local file

For a color job, you can save color edits to a local file on your computer and then import the edits from the file to the current page in Fiery ImageViewer. The current page may be in the same job or in a different job.

Note: For some types of Fiery server, you can also save color edits as a server preset and apply the preset to a different job.

Save color edits to file

- 1 Select File > Export > Color Adjust.
- **2** Type a name for the file and select a file type.
- **3** Browse to the location where you want to save the file and save it.

Import color edits from file

- 1 Select File > Import > Color Adjust.
- **2** Locate and select the desired color edits file.
- 3 Click Open.

The color edits are applied to the current page.

Apply color edits through a server preset

If your Fiery server supports this feature, you can save color edits as a server preset. With a preset, you can apply the same color edits to a different job in Fiery ImageViewer, and you can also apply the preset to a held job through the window in Command WorkStation, without using Fiery ImageViewer.

Note: You can also save color edits to a local file on your computer and apply them to a different job in ImageViewer.

Save color edits as a preset

- 1 In the Color Adjust pane, make the edits that you want to save.
- **2** Do one of the following:
 - For Fiery ImageViewer 4.7 and later: Click **Save As** in the toolbar.
 - For Fiery ImageViewer 4.6 and earlier: Click the Curves tab and click Preset > Save As.
- **3** Type a name for the preset and click **OK**.

The preset is added to the list.

Note: Color replacements are available with Fiery ImageViewer 4.0 and later and are saved in the preset as a global correction. Color replacements cannot be used on a per-page-basis.

Apply color edits through a preset in ImageViewer

- 1 In the Color Adjust pane, click the Curves tab and select the preset in the Preset list.
- 2 Click File > Save.

The preset is applied to the current job.

Note: Image position is not included in the preset.

Apply color edits through a preset in Job Properties

- 1 In Command WorkStation Job Center, select a held job and click Actions > Properties.
- 2 Click the Color tab, select the preset in the ImageViewer Curves option, and click OK.
- **3** With the same job selected, click **Actions** > **Process and Hold**.

The color edits of the preset are applied to the processed job.

Note: After the job is processed, the color edits are incorporated in the job and no longer appear as edits in ImageViewer.

Delete a preset

- Do one of the following:
 - For Fiery ImageViewer 4.7 and later: Click the gear icon in the toolbar to launch the Manage Custom Presets window.
 - Click to select one custom preset, or ctrl-click (Windows) or cmd-click (macOS) to select more than one custom preset.
 - Click Delete.
 - For Fiery ImageViewer 4.6 and earlier: In the Color Adjust pane, select the preset in the Preset list.
 - Select the custom preset that was applied to the image, and click **Delete**.
 - Click Yes to confirm.

The preset is removed from the list and from the image.

Note: If you notice any inconsistent or bad curves in Fiery ImageViewer that you are unable to delete, or if the Job Properties menu does not display the full list of curve presets, you can resolve this issue by pressing ctrl+shift+D (Windows) or cmd+shift+D (macOS) within Fiery ImageViewer. This will remove all problematic curves and allow the Fiery server to display the full list of curve presets in Job Properties.

Rename a preset

- For Fiery ImageViewer 4.7 and later: Click the gear icon in the toolbar to launch the **Manage Custom Presets** window.
 - Click to select one custom preset, or ctrl-click (Windows) or cmd-click (macOS) to select more than one
 custom preset.
 - Click Rename.
 - Type a name for the preset and click **OK**.

Apply color curve from Curve2/Curve3/Curve4 file

For a color job, you can import a CMYK response curve that was created in CHROMiX Curve2, Curve3 or Curve4 (G7 calibration software) and exported as a text file.

The file can be in standard format or Delta format.

- 1 Click the Curves tab in the Color Adjust pane, and then click Edit Curve.
- 2 Click Import Curve, locate and select the file that contains the curve, and click Open.

Apply gray response curve edits

For a black-and-white job, you can save the edited gray response curve to a file on your computer and then apply the same edits to a different black-and-white job.

The gray response curve is applied to all pages of a job.

Save gray response curve

- 1 Select File > Save Curve to File.
- **2** Type a name for the file.
- **3** Browse to the location where you want to save the file and save it.

Import gray response curve

Note: You will lose any changes you have made to the current job when you import a curve from a file.

- 1 Select File > Load Curve from File.
- **2** Locate and select the desired gray response curve.
- 3 Click Open.

Manage pages in Fiery ImageViewer

You can manage pages within documents and among different documents in Fiery ImageViewer.

The **Thumbnails** pane in Fiery ImageViewer displays a thumbnail view of each sheet surface in a job. You can use the **Thumbnails** pane to manage pages in a job.

Reorder document pages

You can drag-and-drop page thumbnails in the **Thumbnails** pane to reorder the pages of a document in Fiery ImageViewer.

- 1 To select the pages to move in a document, do one of the following:
 - Click on a page thumbnail to select a single page.
 - Shift-click to select multiple pages.
 - Ctrl-click (Windows) or cmd-click (macOS) to select individual pages.
 - Press ctrl+A (Windows) or cmd+A (macOS) to select all pages.

2 Drag the page thumbnails to their new location in the **Thumbnails** pane.

Note: Reorder document pages is not supported in Fiery ImageViewer for variable data jobs.

Delete pages

You can use the **Thumbnails** pane to delete pages of a document in Fiery ImageViewer.

- 1 To select the pages to delete in a document, do one of the following:
 - Click on a page thumbnail to select a single page.
 - Shift-click to select multiple pages.
 - Ctrl-click (Windows) or cmd-click (macOS) to select individual pages.
 - Press ctrl+A (Windows) or cmd+A (macOS) to select all pages.
- **2** To delete the selected pages, do one of the following:
 - Right-click the selected page thumbnails and select **Delete**.
 - Press the **Delete** key.
 - Click Edit > Delete.
 - Click the **Delete** icon (in the toolbar.

Note: Delete pages is not supported in Fiery ImageViewer for variable data jobs.

Duplicate pages

You can use the Thumbnails pane to duplicate pages of a document in Fiery ImageViewer.

- 1 To select the pages to duplicate in a document, do one of the following:
 - Click on a page thumbnail to select a single page.
 - Shift-click to select multiple pages.
 - Ctrl-click (Windows) or cmd-click (macOS) to select individual pages.
 - Press ctrl+A (Windows) or cmd+A (macOS) to select all pages.
- **2** To duplicate the selected pages, do one of the following:
 - Right-click the selected page thumbnails and select **Duplicate**.
 - Click Edit > Duplicate.
 - Click the **Duplicate pages** icon () in the toolbar.

Note: Duplicate pages is not supported in Fiery ImageViewer for variable data jobs.

Move pages between documents

You can use the **Thumbnails** pane to move pages between documents in Fiery ImageViewer.

1 Open two documents in Fiery ImageViewer.

Note: Both documents must use the same color space to move pages between documents using Fiery ImageViewer.

- **2** To select the pages to move from one document, do one of the following:
 - Click on a page thumbnail to select a single page.
 - Shift-click to select multiple pages.
 - Ctrl-click (Windows) or cmd-click (macOS) to select individual pages.
 - Press ctrl+A (Windows) or cmd+A (macOS) to select all pages.
- 3 Drag the selected pages from one **Thumbnails** pane to the other Fiery ImageViewer **Thumbnails** pane.

Note: Move pages between documents is not supported in Fiery ImageViewer for variable data jobs.

Print the job with edits

After you edit the job, you can print it.

For a color job, the printed page(s) include composite color information for the separations that are selected in the **Separations** pane. Each page in the job may have different separations enabled.

- 1 For each page in a color job, set the separations in the **Separations** pane that you want to print.
- 2 Click File > Save.
- 3 Click File > Print.
- **4** Select the page range and click **Print**.

Print a proof

You can print a single copy or iterative proof of a job directly from Fiery ImageViewer to verify output. A proof print will create a copy of the selected page with the current edits and send it as a new job directly to the Printed queue. The proof print job will be deleted after printing has finished.

• To print a proof, select the **Proof Print** icon () in the toolbar.

Export soft proof to PDF

For a color job, you can save a soft proof in PDF format for viewing at a different time or location. When you export to PDF, you can select a page range and resolution.

Note: The soft proof does not display the effects of calibration, which can affect color, and it does not show the color replacement changes applied in the job.

The resolution of the soft proof can be different from the resolution of the job, since the soft proof is not intended for printing.

- 1 Click File > Export > Soft Proof PDF.
- **2** Specify the page range. Use commas to separate page numbers or page ranges.
- **3** Select the desired resolution.
- 4 Click OK.
- **5** Type a name for the file. The file type is always PDF.
- **6** Browse to the location where you want to save the file, and click **Save**.

Export black and white soft proof to PDF

For a black and white job, you can save a soft proof in PDF format for viewing at a different time or location. When you save a soft proof to PDF, you can select a page range and resolution.

Note: The soft proof does not display the effects of calibration, which can affect color, and it does not show the color replacement changes applied in the job.

The resolution of the soft proof can be different from the resolution of the job, since the soft proof is not intended for printing.

- 1 Click File > Soft Proof PDF.
- **2** Specify the page range. Use commas to separate page numbers or page ranges.
- **3** Select the desired resolution.
- 4 Click OK.
- **5** Type a name for the file. The file type is always PDF.
- **6** Browse to the location where you want to save the file, and click **Save**.

Compare the monitor profile to the output profile

For color jobs, if Fiery Color Profiler Suite is installed on your computer, you can use Fiery Profile Inspector to view a model of the gamut of your monitor profile compared to the gamut of the output profile specified for the job.

This comparison helps you generate an accurate soft proof. It gives you an idea of how the image you see in Fiery ImageViewer might compare to the printed output.

The Fiery server will use the current monitor profile for the monitor running Fiery ImageViewer. For best results, use Fiery Color Profiler Suite to profile the monitor.

Note: (For Fiery ImageViewer 3.0) If Fiery Color Profiler Suite is installed on your computer, you can click **Create a Monitor Profile** in Fiery ImageViewer Preferences to create a new monitor profile in Fiery Monitor Profiler.

• In Fiery ImageViewer, select View > Compare Monitor Profile with Output Profile.

Install current edits on the Fiery server

For a black-and-white Fiery server, you can install the gray response curve edits of the current job on the server. After you install the current curve edits, the same gray level adjustments will be applied to all jobs that are processed subsequently.

You might use this feature if you make the same edits to many jobs.

CAUTION If you install curve edits on the Fiery server and then later decide that you want to install a different set of curve edits, be sure to restore the factory default state *before* you create the new curve edits.

- 1 Select Server > Install curve edits.
- 2 Click **OK** to confirm.

Restore the factory default response curve on the Fiery server

For a black-and-white Fiery server, if you want to undo the effect of installing gray response curve edits, you can restore the factory default response curve. After you restore the factory default curve, no gray level adjustments will be applied to jobs that are processed subsequently. The gray levels will be processed according to the default behavior of the Fiery server.

- 1 Select Server > Restore to factory.
- 2 Click **OK** to confirm.

Set Fiery ImageViewer preferences

For color jobs, you can specify Fiery ImageViewer preferences such as units and monitor profile.

The image size (dimensions) and resolution are displayed at the bottom of the screen.

- 1 Select Edit > Preferences (Windows) or ImageViewer > Preferences (macOS).
- **2** Set any of these preferences in the **Preferences** window:
 - **Units** Sets the units for displaying the dimensions and resolution.
 - 'Clear' Separation Display Settings If the Fiery server supports a clear varnish separation in addition to C, M, Y, and K separations, use this setting to specify Mask Color and Opacity of the clear separation as shown in Fiery ImageViewer.
 - Cross Hair Color Picker Click the color block to select the color of the bounding box in the Navigator pane.

- (For Fiery ImageViewer 3.0) **Monitor Profile** Either displays the operating system setting for the monitor profile or allows you to select the monitor profile. To obtain an accurate soft proof, use a profile that is accurate for your monitor.
 - If Fiery Color Profiler Suite is installed on your computer, you can click **Create a Monitor Profile** to create a new monitor profile in Fiery Monitor Profiler.
- Reset Preferences Resets the Fiery ImageViewer preference settings back to their default values.
- (For Fiery ImageViewer 3.0) **Always launch ImageViewer 3** Clear the check box to run Fiery ImageViewer 4.0 for future sessions.
- (For Fiery ImageViewer 4.0) **Always launch ImageViewer 3** Select to run Fiery ImageViewer 3.0 in the current session and for future sessions.
- (For Fiery ImageViewer 4.6) **Always launch ImageViewer 3** is removed from **Edit** > **Preferences**. Fiery ImageViewer 3.0 cannot be launched explicitly.

To use dark mode, make a setting in Set Command WorkStation preferences on page 29.

Changes from Fiery ImageViewer 3.0 to Fiery ImageViewer 4.0

Description of changes between Fiery ImageViewer 3.0 and Fiery ImageViewer 4.0.

- 1 Fiery ImageViewer 4.0 is based on OpenGL rendering architecture. For this reason, Fiery ImageViewer 4.0 requires a video card/GPU that supports OpenGL version 3.2 and above. If this requirement is not met on macOS, then Fiery ImageViewer 3.0 is started. The OpenGL version can be checked using third party software, such as OpenGL extension viewer.
 - For Windows http://download.cnet.com/OpenGL-Extensions-Viewer/3001-18487_4-34442.html
 - For macOS https://itunes.apple.com/in/app/opengl-extensions-viewer/id444052073?mt=
- **2** On a Windows computer that does not have a video card, or has a video card or GPU that does not support OpenGL version 3.2 and above, Fiery ImageViewer 4.0 will start in software rendering mode.

Note: You may experience slow performance when you use Fiery ImageViewer in software rendering mode. However, you can use all the features of Fiery ImageViewer 4.0.

- **3** When you log on to a Windows client computer using Remote Desktop Connection, Fiery ImageViewer 4.0 starts in software rendering mode.
- **4** Fiery ImageViewer 4.0 can have only five sessions open at a time.
- **5** Fiery ImageViewer 4.0 shows the raster at the center of the canvas; Fiery ImageViewer 4.0 has the capability of centered image panning.
- **6** The **Monitor Profile** option and information to download Fiery Color Profiler Suite has been removed from the **Preferences** window. Fiery ImageViewer 4.0 uses the operating system default profile for the monitor, including for multiple monitors.
- 7 Unfocused area in the **Navigator** pane is grayed out.
- **8** The **Halftone simulation** option is not supported.
- **9** The Magnifier tool is not supported.

Booklet Maker

Booklet Maker imposition

Booklet Maker is an imposition feature that allows you to print multiple pages of a print job in a booklet style without relying on more advanced imposition programs.

Imposition is the process of printing multiple pages on single sheets of paper. When the imposed sheets are folded together as signatures, the pages follow in sequential or reading order.

Booklet Maker is designed for 2-up imposition, which imposes four individual pages from your document on a single sheet that is printed duplex, where two document pages are printed on each side of a single sheet of paper. It is capable of imposing jobs from nearly any application.

The order in which pages are imposed is determined by the binding method you select.

You can access Booklet Maker from the Fiery Driver or from the **Job Properties** window in Command WorkStation. You can work with Booklet Maker in two ways:

- Using the Booklet Maker wizard Recommended for first-time or novice users
- Specifying settings in the main Booklet Maker pane Recommended for experienced or advanced users

Note: Mixed Media with 1-up perfect binding is not supported in the Fiery Driver. To use this feature, you must send your job to the Held list in Command WorkStation.

If your printer is equipped with an advanced finisher, such as a Perfect binder, see *Printing*, which is part of the user documentation set, for additional options.

About Booklet Maker and Fiery Impose

Booklet Maker settings are supported by Fiery Impose. You can open a job with Booklet Maker settings in Fiery Impose to preview the imposition layout or further modify the imposition layout.

Fiery Impose translates and maps all Booklet Maker settings to Fiery Impose commands. When a job with Booklet Maker settings has been edited in Fiery Impose, the job can no longer be edited in Booklet Maker. Fiery Impose offers more settings than Booklet Maker and they cannot be mapped backward.

Note: To use the full functionality of Fiery Impose, you must have an active license for the application. Otherwise, Fiery Impose is available for use in demo mode, which means that jobs are saved with a "Demo" watermark.

For more information about Fiery Impose, see the Fiery JobMaster-Fiery Impose-Fiery Compose Help.

Access Booklet Maker

You can access Booklet Maker from the Fiery Driver or from the **Job Properties** window.

Access Booklet Maker from the Fiery Driver

You can access Booklet Maker from the **Layout** tab in the Fiery Driver.

- 1 In your application, choose **File** > **Print**, and select the Fiery server from the list of printers.
 - On Windows, click **Properties**.
 - On macOS, select Fiery Features.
- **2** Do one of the following:
 - On Windows, select the Fiery Printing tab.
 - On macOS, click Full Properties in the Quick Access pane.
- **3** Click the **Layout** tab, and then select the **Booklet** option.

Access Booklet Maker from Command WorkStation

You can access Booklet Maker from the Job Properties window in Command WorkStation.

Before you begin, import your job into the **Hold** queue in Command WorkStation.

- 1 To open the **Job Properties** window, do one of the following:
 - Double-click your print job in the **Held** list in **Job Center**.
 - Right-click (Windows) or ctrl-click (macOS) the job in the **Held** list in **Job Center**, and select **Properties** from the menu that appears.
 - Select your job in the **Held** list in **Job Center**, and select **Properties** from the **Actions** menu.
- 2 Select the **Layout** tab in the **Job Properties** window.
- **3** Select the **Booklet** option.

Create a booklet

You can create a booklet in the **Booklet Maker** window or use the Booklet Maker wizard.

When you select **Booklet** in the **Layout** tab of **Job Properties** window in Command WorkStation or in the Fiery Driver, Booklet Maker dynamically displays all of the controls applicable to creating a booklet. You can use the main **Booklet Maker** window or the Booklet Maker wizard, which displays images for each step, to complete the process.

Create a booklet in the Booklet Maker window

You can create a booklet by choosing options in the **Booklet Maker** window.

1 Select the **Layout** tab in the **Job Properties** window.

- **2** Select the **Booklet** option.
- **3** Choose one of the following **Booklet Type** binding methods:
 - Saddle
 - Nested Saddle
 - Perfect

Note: If your printer is equipped with an advanced finisher, such as a Perfect binder, the option of **1-up Perfect** may be available.

- **4** Select one of the following binding edge options:
 - Left Binding
 - · Top Binding
 - Right Binding
- **5** Specify a paper size:
 - Select from Paper Catalog or Media Catalog (depending on whether Paper Catalog or Media Catalog is supported on the Fiery server).
 - Create a custom paper size.
 - Select Same as document size.
- **6** Select a **Shrink to fit** setting to scale down the pages of your document while preserving the aspect ratio of the original document.
- **7** Select page alignment settings to determine the placement of the page image on the page.

To compensate for creep (available for Saddle and Nested Saddle booklets), select the setting for your media type:

- **Plain** Select this option for booklets with a large number of pages.
- **Thick** Select this option for booklets printed on thick or heavyweight media. You must also specify the desired thick or heavy media in the Fiery Driver or **Job Properties** > **Media**.
- **8** Specify cover settings (available for Saddle booklets).

Note: For more information, see Add a cover on page 395.

9 Click **OK** to save your settings or select a **Print** setting to print or process the job.

Create a booklet by using the Booklet Maker wizard

The Booklet Maker wizard guides you step by step in the process of creating a booklet.

- 1 Click the **Layout** tab, and then select the **Booklet** option.
- 2 Click Launch Wizard.

- **3** Use the following controls to navigate the wizard:
 - To advance from one window to the next, click Next.
 - To return to previous windows, click Back.
 - To cancel settings and exit Booklet Maker, click Cancel.
- **4** Follow the steps in the wizard.

Note: If **Saddle** or **Nested Saddle** are selected for **Booklet Type**, specify cover settings and content. If **Nested Saddle** is selected, specify number of sheets in a subset.

- **5** View the settings summary.
- **6** Click **Finish** to save your booklet, **Back** to change any settings, or **Cancel** to cancel the job.

Booklet type

When creating a booklet, you select the booklet type option and choose the binding method and binding edge.

The binding method determines the way the job is imposed. The binding edge determines the placement of the spine, the layout orientation, and any rotation of page content in your booklet.

Binding methods

Booklet Maker supports the following binding methods:

- Saddle binding on page 376
- Nested Saddle binding on page 377
- Perfect binding on page 379
- 1-up perfect binding on page 380

If your printer is equipped with an advanced finisher, such as a Perfect binder, see *Printing*, which is part of the user documentation set, for additional binding methods.

Binding edge

Booklet Maker has three binding edge options:

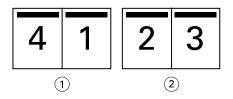
- Left Binding used for languages that read from left to right. The booklet opens from right to left.
- Top Binding used for calendars, landscape, and cinema-size documents. The booklet opens upward.

With top binding that includes a cover, the outside of the back cover automatically rotates 180 degrees to match the orientation of the front cover.

• Right Binding - used for languages that read from right to left. The booklet opens from left to right.

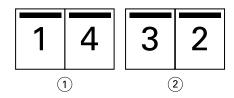
The following illustrations show 2-up imposition in relation to binding edge:

Figure 1: Left-edge binding



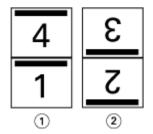
- 1 Front
- 2 Back

Figure 2: Right-edge binding



- 1 Front
- 2 Back

Figure 3: Top-edge binding



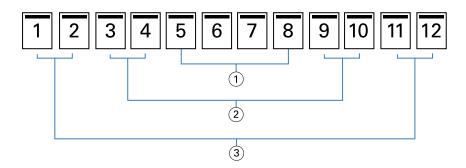
- 1 Front
- 2 Back

Saddle binding

Saddle binding, also called saddle-stitch binding, is the simplest binding method. In Saddle binding, the signatures are folded together as a group, and then stapled or stitched along the center fold, or spine. In Saddle booklets, creep is a factor.

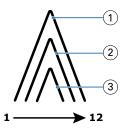
Saddle binding includes pre-printed and inline cover options.

The following illustration shows the imposition signatures for a 12-page document imposed for left-edge saddle binding:



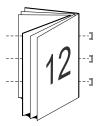
- 1 Signature 3
- 2 Signature 2
- 3 Signature 1

The following illustration shows how the signatures of a 12-page saddle booklet are folded together as a group:



- 1 Signature 1
- 2 Signature 2
- 3 Signature 3

The following illustration shows how the signatures are stitched or stapled along the common fold:

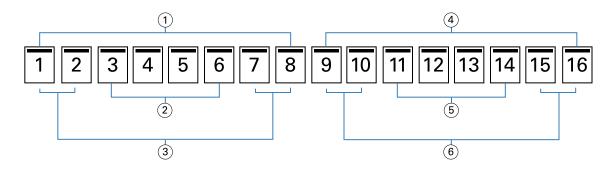


Nested Saddle binding

Nested Saddle binding joins two or more saddle booklets (called subsets) to form a larger booklet. The subsets are stacked along the common fold, or spine, for stitching or gluing after printing. In Nested Saddle booklets, creep is a factor.

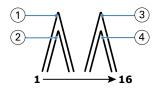
Use the Number of sheets in a subset (saddle) option to specify the number of sheets in each subset.

The following illustration shows Nested Saddle, left-edge binding imposition for a 16-page document with two sheets (equivalent to eight document pages) per subset:



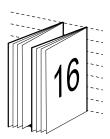
- 1 Subset 1
- 2 Signature 2
- 3 Signature 1
- 4 Subset 2
- 5 Signature 4
- 6 Signature 3

The following illustration shows how the signatures of a 16-page Nested Saddle booklet are folded and the subsets grouped together. Subset 1 includes Signatures 1 and 2; Subset 2 includes Signatures 3 and 4:



- 1 Signature 1
- 2 Signature 2
- 3 Signature 3
- 4 Signature 4

The following illustration shows how the subsets are joined together along the common fold for the nested saddle, left-edge binding, booklet:

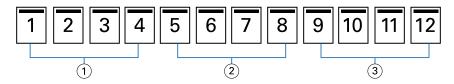


Perfect binding

In Perfect binding, the signatures are folded individually and stacked along the common fold, which forms the spine of the booklet.

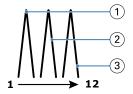
A *signature* is a press sheet that is folded to form the pages of a booklet in sequential order. Each signature in a booklet is folded in the same way. The Perfect binding process is more involved (the spine must be roughened to flatten before it is glued to the cover) and tends to require a larger gutter. In Perfect booklets, creep is not a factor.

The following illustration shows perfect, left-edge binding imposition for a 12-page document:



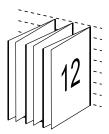
- 1 Signature 1
- 2 Signature 2
- 3 Signature 3

The following illustration shows how perfect signatures are folded individually, and how the signatures are joined together at the common fold:



- 1 Signature 1
- 2 Signature 2
- 3 Signature 3

The following illustration shows how the signatures are joined together at the common fold for the perfect, left-edge binding booklet:



1-up perfect binding

The 1-up perfect binding method prints single body pages that are stacked together, so that the edges may be trimmed (if desired) and glued, and then wrapped by a cover sheet.

To print a 1-up perfect binding booklet, your printer must be equipped with an advanced finisher that supports perfect binding.

If your printer supports 1-up perfect binding, see *Printing*, which is part of the user documentation set, for information.

You can specify **Mixed Media** settings in Booklet Maker for 1-up perfect binding methods.

Paper size for 2-up

Paper size is the actual size of the sheet of paper (unfolded) on which your booklet will print.

When you select a paper size for your booklet, you have several choices:

- Select the size from the available list
- Select from Paper Catalog or Media Catalog (depending on whether Paper Catalog or Media Catalog is supported on the Fiery server)
- Create a custom paper size
- Select Same as document size

Custom page sizes

Booklet Maker supports custom page sizes for the body pages and cover pages of your booklet. When you access Booklet Maker from the Fiery Driver, you can also create a custom document size. The minimum and maximum custom page sizes depend on the capability of your printer and finishers.

For information about the supported custom size range for your printer, see *Printing*.

Document size

Document size refers to the size of each page in your original document and is defined in your application's print setup (or page setup) window. In designing your booklet, it may be useful to think of document size as the digital input (the page size defined in your original document), and paper size as the physical output (the dimensions of the actual piece of paper in the printer tray).

Note: The size defined in your application's formatting menu may differ from the size defined in your application's print setup (or page setup) window. The size that is relevant to Booklet Maker is defined in your application's print setup (or page setup) window.

Edge feed

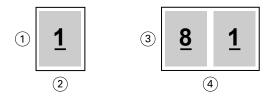
Edge feed is the side of the paper that first enters the printer. The feed direction (short-edge feed or long-edge feed) is associated with certain paper sizes.

When you select a document size in print setup (or page setup), it is not necessary to consider the edge feed associated with the paper size you select. However, the finisher may require edge feed in a certain direction. In Booklet Maker, paper sizes with feed direction that are not supported by the finisher are dimmed in the list of available sizes.

Same as document size

Select this option to keep your document page size the same as in your original file. You must select a paper size that is at least twice the size of your document page.

For example, an 8.5x11 in. document prints on an 11x17 in. sheet of paper. The document size (the input) is shown on the left, the paper size (output) is shown on the right in the illustration below:



- 1 11 in.
- 2 8.5 in.
- 3 11 in.
- 4 17 in.

Alternatively, an A4-size document (297x210 mm) prints on A3 paper (297x420 mm). The document size (the input) is shown on the left, the paper size (output) is shown on the right in the illustration below:



- 1 297 mm
- 2 210 mm
- 3 297 mm
- 4 420 mm

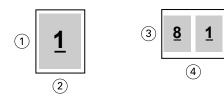
Note: These examples illustrate paper sizes within the same series (A4 to A3) or standard (Letter to Tabloid). Booklet Maker can also impose from one series to another (for example, A4 to Letter). For more information, see Page alignment on page 386.

Shrink document page to fit a selected paper size

Scale down your document pages to fit a particular paper size, by selecting the desired size from the **Paper Size** menu.

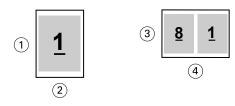
Booklet Maker automatically shrinks document pages to fit the selected paper size, preserving the aspect ratio of your original document.

For example, if your document size is 8.5x11 in. and you select 8.5x11 in. from the **Paper Size** menu for 2-up imposition, the document pages are scaled down to fit two 5.5x8.5 in. side-by-side pages. The illustration below shows the document size (input) on the left, and the paper size (the output) on the right:



- 1 11 in.
- 2 8.5 in.
- 3 8.5 in.
- 4 11 in.

If your document size is A4 (297x210 mm) and you select A4 from the **Paper Size** menu, the document pages are scaled down to fit two 210x148.5 mm side-by-side pages. The following illustration shows the document size (input) on the left, and the paper size (the output) on the right:



- 1 297 mm
- 2 210 mm
- 3 210 mm
- 4 297 mm

Note: The **Shrink to fit** option only reduces or scales down the document page size. **Shrink to fit** does not scale up or enlarge. For more information, see **Shrink to fit option** on page 382.

Shrink to fit option

By default, Booklet Maker is designed to scale down the pages of your document to fit the paper size you select, while preserving the aspect ratio of your original document.

Based on your document size and the paper size you select, Booklet Maker automatically calculates the scale factor as follows:

Document size in relation to paper size	Scale factor
If document size is less than or equal (<) to one-half paper size	100%
If document size is greater than (>) one-half paper size	Shrink to fit

Note: The **Shrink to fit** option only reduces or scales down the document page size. **Shrink to fit** does not scale up or enlarge.

The **Shrink to fit** menu has the following settings:

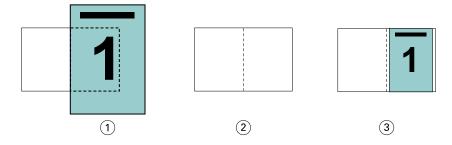
- **Sheet size** (default) makes maximum use of the sheet size by scaling the content (image) to the edge of the sheet.
- Imageable area scales the content (image) so it fits within the imageable area of the sheet.
- Off does not scale the content.

Sheet size setting

Booklet Maker automatically scales document pages to fit on one-half the selected paper size, making maximum usage of the sheet size. This may result in some clipping of the content, because the proportions are constrained to keep the ratio of the original document.

In the examples below, when shrink to fit the sheet size is applied, the top and the bottom edges of the page extend to the edge of the sheet, whereas on the right and left edges, margins are created.

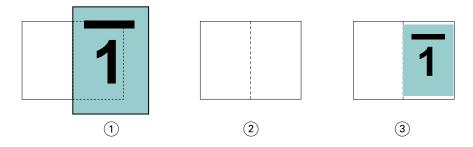
For example, a 13x19 in. document is scaled down to fit one-half of an 11x17 in. sheet of paper (one-half equals 8.5x11 in.):



- 1 Document size 13x9 in.
- 2 Paper size 11x17 in. paper size (one-half = 8.5x11 in.)
- 3 Result 13x19 in. document scaled to fit one-half paper size (8.5x11 in.)

Booklet Maker can impose differing or non-standard sizes.

For example, an A4 document is scaled down to fit a Letter-size paper, which equals 5.5x8.5 in (one-half of an 8.5x11 in. or a Letter-size sheet of paper):



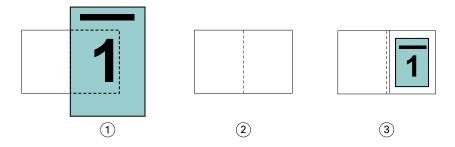
- 1 Document size A4 (210x297 mm)
- 2 Paper size 8.5x11 in. paper size (one-half = 5.5x8.5 in.)
- 3 Result A4 document scaled to fit one-half paper size (5.5x8.5 in.)

Imageable area setting

Booklet Maker automatically scales the content to fit on the imageable area of the sheet.

In the examples below, margins are created on all edges of the image so it can be printed within the imageable area of the sheet. Because the proportions are constrained to keep the ratio of the original image, the result is that the margins on the top and bottom edges will be larger than those on the right and left edges.

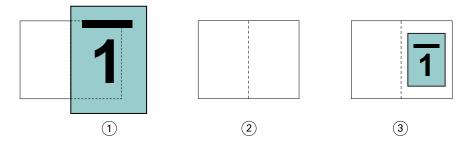
For example, a 13x19 in. document is scaled down to fit one-half of an 11x17 in. sheet of paper (one-half equals 8.5x11 in.):



- 1 Document size 13x9 in.
- 2 Paper size 11x17 in. paper size (one-half = 8.5x11 in.)
- 3 Result 13x19 in. document scaled to fit one-half paper size (8.5x11 in.)

The example below shows differing or non-standard sizes for the **Shrink to Fit** > **Imageable Area** option.

An A4 document is scaled down to fit a Letter-size paper, which equals 5.5x8.5 in (one-half of an 8.5x11 in. or a Letter-size sheet of paper):



- 1 Document size A4 (210x297 mm)
- 2 Paper size 8.5x11 in. paper size (one-half = 5.5x8.5 in.)
- 3 Result A4 document scaled to fit one-half paper size (5.5x8.5 in.)

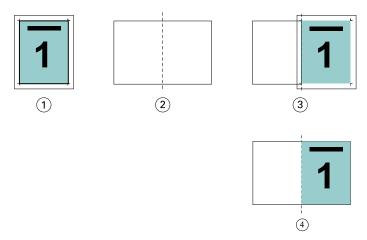
Off setting

If **Shrink to fit** is set to **Off**, the pages of your document print at 100%. Any page content that extends beyond one-half of the selected paper size is clipped.

In some cases, clipping may be your intent. For example, if your document includes printer's marks that extend the document size beyond one-half the paper size, turn **Shrink to fit** off so that the content prints at 100%, otherwise the entire page (including the printer's marks) is scaled down to fit within the specified paper size.

Likewise, if your document size is designed to be larger than one-half the paper size in order to ensure a full bleed, turn **Shrink to fit** off so that the page content prints at 100%.

The following illustration shows an 8.5x11 in. page area (desired content) with printer's marks that extend the document page size to 10.2x12.5 in. With **Shrink to fit** set to **Off**, the page content prints at 100% to fit on one-half of the paper size:



- 1 Document size 10.2x12.7 in. Desired content 8.5x11 in.
- 2 Paper size 11x17 in. paper size (one-half = 8.5x11 in.)
- 3 Before clipping
- 4 Result Desired content (8.5x11 in.) prints at 100%

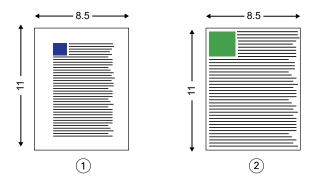
Sheet size and Imageable area settings

When resizing your document pages, you can select from the **Sheet size** or **Imageable area** settings when using the **Shrink to fit** option.

The **Sheet size** setting maximizes the usage of the paper size during calculation of the scaling factor. However, because of the layout of the content in the original document, the scaling may not produce the desired result. Clipping of the content may occur.

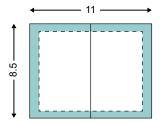
The **Imageable area** setting uses the imageable area of the paper size, which prevents content clipping. However, the document content will be scaled down more than with the **Sheet size** setting.

The following illustrations show two documents, both with the same page size, but with different layout:

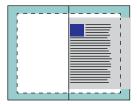


- 1 Original document with large margins on all four edges
- 2 Original document with content extending almost to all four edges

The following illustrations show the sheet with the imageable area displayed in white:



The following illustrations show the effect of selecting the **Shrink to fit** > **Sheet size** option. Although the document with large margins fits within the imageable area, the document with small margins will have content clipped when imposed and printed.





The following illustrations show what happens when you select **Shrink to fit** > **Imageable area** for the document with the small margins. All the content will be printed, but you end up with larger margins (more white space) on the top and bottom edges.



Page alignment

Page alignment shifts the entire page content and does not alter the page layout defined in your original document. The page content is defined as the printable area plus the margins.

You can use the following options to position the placement of page content:

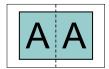
- Align pages aligns page content with the spine or to center on the page.
- **Increase gutter by** adds extra space (gutters) to allow for binding.
- Compensate creep counteracts the shift in page content that occurs in Saddle and Nested Saddle booklets.

Note: The page alignment options do not change the scale factor. When you set the **Shrink to fit** option to **Off**, clipping occurs if the document extends beyond the edge of the paper. You can use the page alignment or centering options and gutter options to adjust the position of page content to prevent clipping.

Align pages

The **Align pages** option defines the initial position of page content (**At the center** or **At the spine**), which can then be further adjusted by increasing the gutter value.

- Select **Booklet** in the **Layout** tab of the **Job Properties** and follow the prompts to set the **Align pages** option.
 - At the spine (default) Aligns the document page content toward the spine, at the center of the sheet where the document will be folded.



• At the center - positions the document page content at the center of one-half of the sheet size.

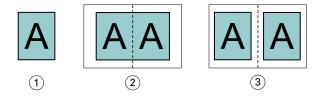


Aligning pages with the Shrink to fit option

You can choose to align pages with the Shrink to fit option on (enabled) or Off (disabled).

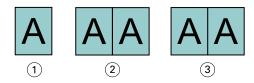
Aligning pages with Shrink to fit on

The following illustrations show page alignment when the document size is less than (<) one-half of the paper size:



- 1 Document size < one-half paper size
- 2 Pages aligned at the spine
- 3 Pages aligned at the center

The following illustrations show page alignment when the document size is equal to one-half of the paper size and there is no visible difference:

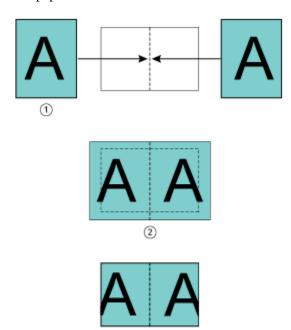


- 1 Document size = one-half paper size
- 2 Pages aligned at the spine
- 3 Pages aligned at the center

Note: When the document size is greater than one-half of the paper size and **Shrink to fit** is on, the final printed result is determined by the aspect ratio of the original document.

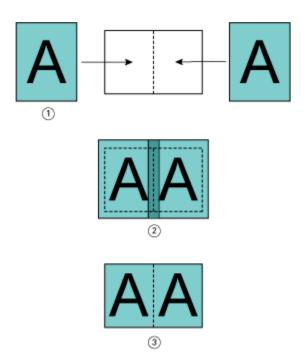
Aligning pages with Shrink to fit Off

The following illustrations show page alignment **At the spine** when the document size is greater than (>) one-half of the paper size and **Shrink to fit** is set to **Off**:



- 1 Document size > one-half paper size
- 2 Pages aligned at the spine, and **Shrink to fit** is **Off**
- 3 Final printed result

The following illustrations show page alignment **At the center** when the document size is greater than (>) one-half of the paper size and **Shrink to fit** is **Off**:



- 1 Document size > one-half paper size
- 2 Pages aligned at the center, and Shrink to fit is Off
- 3 Final printed result

Page alignment and gutters

A gutter is an additional margin designed to allow space for binding or other finishing options, such as folding, stapling, or binding.

The **Align pages** option defines the initial position of page content (**At the center** or **At the spine**), which can then be further adjusted by increasing the gutter value. The **Increase gutter by** option controls the distance (in millimeters or inches) between facing pages in a booklet.

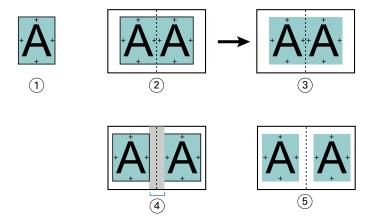
Note: The value specified for gutter does not change the page margins or layout defined in the original document. The gutter is an extra margin intended to allow space for binding.

For the supported range of gutter values for your printer, see *Printing*.

Aligned At the spine with gutter

When pages are aligned at the spine, the distance of the page content from the spine equals one-half of the gutter value.

The following illustrations show the initial alignment **At the spine**, the final printed result without a gutter, and the final printed result when a gutter is added:

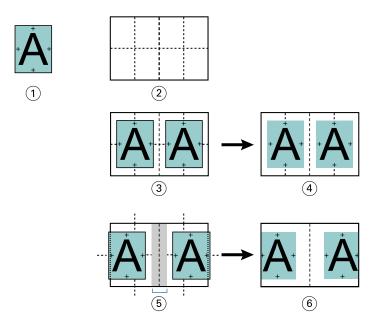


- 1 Document size < one-half paper size
- 2 Aligned at the spine without gutter
- 3 Final printed result of illustration 2
- 4 Aligned at the spine with gutter
- 5 Final printed result of illustration 4

Aligned At the center with gutter

When pages are aligned at the center, the distance from the spine equals one-half of the gutter value, plus the initial offset of the page alignment at the center.

The following illustrations show the initial alignment **At the center**, the final printed result without a gutter, and the final printed result when a gutter is added:



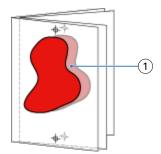
- 1 Document size < one-half paper size
- 2 Paper size
- 3 Aligned at the center without gutter
- 4 Final printed result of illustration 3
- 5 Aligned at the center with gutter
- 6 Final printed result of illustration 5

Note: As you increase the gutter, the page content may be clipped if it reaches the edge of the sheet or the non-imageable area of the paper.

Compensate creep

Creep occurs in booklets with saddle binding or nested saddle binding printed on heavy media or with a large number of pages. Use **Compensate creep** to counteract the effects of creep.

As the sheets are folded to create signatures (folded sheets that form the pages of a booklet), each fold causes a small incremental shift in the location of the page content. The result is that the outer margins become narrower toward the booklet's center when trimmed. The page content may be clipped or printed too close to the outer edge.



1 Creep

Mixed Media with 1-up perfect binding

You can specify Mixed Media settings in Booklet Maker in the **Job Properties** window only for 1-up perfect binding jobs. The Mixed Media enhancement integrates a Mixed Media window and viewer into the Booklet Maker window.

Note: Mixed Media with 1-up perfect binding is not supported in the Fiery Driver. To use this feature, you must send your job to the **Hold** queue in Command WorkStation.

The Mixed Media viewer presents the actual pagination of the final product, providing a real-time representation of the selections made in the Mixed Media window. You can view the layout of jobs as either pages or as sheets.

In Mixed Media for Booklet Maker 1-up Perfect binding, you can specify:

- Chapter starts when a chapter start is designated in a duplex job, implicit blanks are inserted.
- Page ranges and media for the page ranges.
- Blank inserts and media for the inserts blank inserts specified by the user are explicit blanks. Explicit and implicit blanks have different designations in the Mixed Media viewer.

Note: Tab insert and cover definition settings cannot be specified in Booklet Maker Mixed Media.

When you use Mixed Media in Booklet Maker, it is disabled in the **Media** tab. Selections made in Booklet Maker will be displayed in the **Media** tab and in Fiery Compose.

Specify Mixed Media settings in Booklet Maker

The Mixed Media viewer is displayed when 1-up perfect binding is selected for the booklet type.

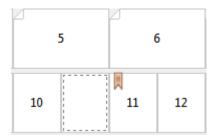
Not all printers support 1-up perfect binding. If 1-up perfect binding is not supported, the option is not displayed in the **Booklet Type** menu.

- 1 Select a job in Command WorkStation Job Center and open the Job Properties window.
- **2** Select **Booklet** in the **Layout** tab.
- 3 Choose 1-up Perfect for the Booklet Type.
- **4** Choose the binding edge.
- 5 Specify the Body Paper Size and Cover Paper Size.

Note: Define Cover is not available as a Mixed Media choice in Booklet Maker. Cover definitions are created using the standard Booklet Maker options.

- **6** Specify cover settings and any other settings as required.
- **7** Scroll down to the **Mixed Media** viewer and specify settings using the following controls:
 - **Pages** tab Click to display layout of the booklet organized by pages of the document and to show the relationship of document pages to sheets.
 - **Sheets** tab Click to display the layout of the booklet organized by sheets and to show the relationship of sheets to document pages.

• Chapter Start Page(s) field - Type the page numbers to designate as chapter starts with commas in between. Chapter start pages are marked in the viewer. Implicit blanks are inserted as needed. The following illustration shows the chapter start marker and the implicit blank inserted after page 10:



• **New Page Range** - Click the icon or button to type page numbers and then apply media settings to the specified page range.



 New Insert - Click the icon or button to insert a blank page at a specific location and apply media settings to the insert.



• Edit - Click the icon or button to modify a page range or new insert media settings.



• **Delete** - Click the icon or button to delete a page range or new insert settings.



For information about the media settings that apply for your Fiery server, see *Printing* and *Utilities* in the user documentation set.

Navigate through jobs in Mixed Media

The **Mixed Media** viewer is displayed when 1-up perfect binding is selected for the booklet type.

- In the Mixed Media viewer, navigate through the document in the following ways:
 - · Scroll bars
 - Navigational arrows Click the inner arrows to move backward or forward to the adjacent page in the sequence. Click the outer arrows to move to the beginning or end of the document. The text field displays the action. Enter a page number in the field to move to that page. Arrows are disabled if there is no possible navigation. If you add blank inserts, another set of navigational arrows is displayed, allowing you to navigate from one blank insert to the next.



View the layout of a job as pages

You can choose to show the pagination of the job according to the pages or sheets. The document pages and sheets are aligned with each other so you can see which pages print on which sheets.

• To view a job as pages, click the **Pages** tab at the top of the viewer.



The illustration shows a job viewed as pages. The number after **Pages** on the tab indicates the number of document pages, which are represented by the thumbnails in the top row. The pages are presented in linear order, corresponding to the logical reading order of the source document.

The second row shows how the sheets will be ordered on the printer. The content of the front cover, which in this example is the first two pages of the document, is displayed in reading order at the beginning. You can use the scroll bar or other navigation controls to view the back cover content at the end of the job.

View the layout of a job as sheets

When you view the job as sheets, the order of sheets is the primary focus.

• To view a job as sheets, click the **Sheets** tab at the top of the viewer.



The thumbnails in the top row represent the actual print order on the printer. The second row shows which pages will be printed on which sheets. For example, in the following illustration, the cover sheet includes the content of the first two pages of the document as the front cover, the content of the third last page as the spine, and the content of the last two pages as the back cover.

Note: The cover is always displayed first, even if the cover is printed as the last sheet on certain printers.

Booklet Maker Mixed Media limitations

The following actions are not available in Mixed Media for 1-up perfect binding.

- Inserting pages before, between, or after the document pages whose content is allocated for the cover.
- Inserting any pages outside of what will be the finished, bound book.
- Inserting any pages that physically split the cover.
- Specifying media of different sizes in one job. The media size selections for **New Page Range** and **New Insert** are limited to the same size as the body signature.

Note: Printers that support half-Z-fold insertion allow media sizes two times the size of the body signature.

Add a cover

In Booklet Maker, you can add a cover to Saddle booklets and specify media for the cover.

For Saddle booklets only, Booklet Maker includes two cover options, either pre-printed or inline, for which you can specify media. You can specify additional options for an inline cover. If your printer is equipped with an advanced finisher, such as a perfect binder, see *Printing*, which is part of the user documentation set, for additional cover options.

- 1 In the Layout > Booklet tab of the Fiery Driver or the Job Properties window, select Saddle for Booklet Type and select a binding edge.
- **2** Specify the settings for **Paper Size** and **Page Alignment** for the body of the booklet.
- **3** From the **Cover** > **Content input** menu, do one of the following:
 - To insert a pre-printed cover, select **Pre-Printed**. The pre-printed cover will be merged with the body pages of your booklet, which print separately. If you select this option, the **Front cover** and **Back cover** options are disabled.
 - To specify an inline cover, select **Front & Back Separately**. Specifying this option prints the cover pages and body pages as a single job. Separate pages from your document are imposed on a single sheet that forms the cover of your booklet.
 - You can specify an inline cover when your original document includes the cover pages and/or cover artwork for your booklet. The cover content may be the first and last pages of your document, or the first two and last two pages of your document, or any combination. If you select this option, you can specify the **Front cover** and **Back cover** options.
 - Front cover and Back cover options (inline covers only) These options allow you to quickly decide whether your front and back covers print on both sides of the sheet, single-sided, or both sides blank, without needing to add blank pages in your original document.

Note: When you print an inline cover with top-edge binding, the outside back cover automatically rotates 180 degrees to match the orientation of the front cover.

- **4** Click **Define Cover** to open the **Cover Media** settings window to specify media, size, and source tray. This option is available for both pre-printed and inline covers.
- **5** Specify the media and paper size for the pre-printed insert or for your inline covers.

6 Select the tray that contains the pre-printed inserts or inline covers, and click **OK**.

Change the document size within an application

Change the size of your original document in the print setup of the application in which you created the document. Before you change the document size, make sure your printer supports the paper size.

- 1 Open your original document and navigate to the print setup or page setup menu in the application.
- **2** Select your printer from the printer name menu.
- **3** Select from the list of available paper sizes, and click **OK**.

Note: When you select a paper size from the available list, you do not need to consider the edge feed of the paper.

Change the unit of measurement

You can use millimeters, points, or inches for measurement.

Note: You cannot change the unit of measurement in the Fiery Driver.

- 1 In Command WorkStation, go to Edit > Preferences.
- **2** Click **Region** to open the **Regional Settings** pane.
- 3 Select the unit of measurement from the Measurement units menu, and click OK.

Note: Your changes will be applied the next time you start Command WorkStation.

Preview a booklet

You can preview a booklet in the **Preview** or **Fiery Preview** window.

Note: You cannot preview jobs when working with Booklet Maker in the Fiery Driver.

- In the Command WorkStation **Held** list in **Job Center**, select your print job and select **Actions** > **Preview**.
 - If the job is spooled and held, the job is displayed in the **Fiery Preview** window.
 - If the job is processed and held, the job is displayed in the **Preview** window.

Booklet workflow examples

The Booklet Maker workflow examples provide an overview of the steps to create the following types of booklets using the wizard:

- Print a Perfect booklet on page 397
- Print a Saddle booklet on page 397
- Print a Nested Saddle booklet on page 398
- Print a 1-up Perfect booklet on page 398

Print a Perfect booklet

You can use the Booklet Maker wizard to print a Perfect booklet.

- 1 Access Booklet Maker from the Fiery Driver or the **Job Properties** window.
- 2 Click Launch Wizard.
- 3 Select the **Booklet Type** and **Binding** edge, and click **Next**.
- **4** Select the paper size for the body, and click **Next**.
- **5** (Optional) Set the page alignment and gutter value, and click **Next**.
- **6** Review the settings summary to confirm your booklet settings, and click **Finish** to return to **Layout** > **Booklet** in the Fiery Driver or the **Job Properties** window.
- **7** (Optional) Set other print options and finishing options (such as folding, stapling, or binding) in the Fiery Driver or the **Job Properties** window, and click **OK**.

Print a Saddle booklet

You can use the Booklet Maker wizard to print a **Saddle** booklet.

- 1 Access Booklet Maker from the Fiery Driver or the **Job Properties** window.
- 2 Click Launch Wizard.
- **3** Select the **Booklet Type** and the **Binding** edge, and click **Next**.
- **4** Specify the cover source and content.
- **5** If you selected **Front & Back Separately** for cover source and content, under **Inside** or **Outside**, specify how you want to print each cover:
 - Print Front Cover
 - Print Back Cover
- 6 Click Next.
- 7 If you selected **Insert** for cover source and content, click **Next**.

- **8** Select the paper size for the body, and for the cover, click **Define Cover**.
- **9** In the **Cover Media** settings window, specify the media, size, and source tray.
- 10 Click OK, and click Next.
- **11** (Optional) Set the page alignment, gutter value, and creep compensation.
- **12** Review the settings summary to confirm your booklet settings, and click **Finish** to return to **Layout** > **Booklet** in the Fiery Driver or the **Job Properties** window.
- 13 (Optional) Set other print options and finishing options (such as folding, stapling, or binding), and click OK.

Print a Nested Saddle booklet

You can use the Booklet Maker wizard to print a Nested Saddle booklet.

- 1 Access Booklet Maker from the Fiery Driver or the **Job Properties** window.
- 2 Click Launch Wizard.
- **3** Select the **Booklet Type** and **Binding** edge, and click **Next**.
- **4** Select the paper size for the body and the number of sheets in a subset, and click **Next**.
- **5** (Optional) Set page alignment, gutter value, and creep compensation, and then click **Next**.
- **6** Review the settings summary to confirm your booklet settings and click **Finish** to return to **Layout** > **Booklet** in the Fiery Driver or the **Job Properties** window.
- 7 (Optional) Set other print options and finishing options (such as folding, stapling, or binding) in the Fiery Driver or the **Job Properties** window, and click **OK**.

Print a 1-up Perfect booklet

You can use the Booklet Maker wizard to print a 1-up Perfect booklet.

Note: The setting is available if supported by the Fiery server.

- 1 Access Booklet Maker from the Fiery Driver or the **Job Properties** window.
- 2 Click Launch Wizard.
- **3** Select the **Booklet Type** and **Binding** edge, and click **Next**.
- **4** Select the paper size for the body, and click **Next**.
- **5** (Optional) Set the page alignment and gutter value, and click **Next**.
- **6** Review the settings summary to confirm your booklet settings and click **Finish** to return to **Layout** > **Booklet** in the Fiery Driver or the **Job Properties** window.
- **7** (Optional) Set other print options and finishing options (such as folding, stapling, or binding) in the Fiery Driver or the **Job Properties** window, and click **OK**.

Booklet Maker limitations

Booklet Maker has constraints related to PDF files, queue type, and other limitations.

Secured PDF

Adobe PDF files can be saved with security settings that restrict opening, printing, or editing the PDF file (a *Restricted Document*). Restricted Documents cannot be printed using Booklet Maker.

Queue type

Booklet Maker does not support jobs sent to the Direct queue. Booklet Maker print jobs must be sent to the Hold queue or Print queue.

Print options

- Variable Data Printing is not supported with Booklet Maker.
- Mixed Media is supported in Booklet Maker for 1-up perfect binding jobs only. See Mixed Media with 1-up perfect binding on page 392.
- The Remove White PPT Background print option (designed for use with PowerPoint documents) is not supported with Booklet Maker.

Booklet Maker glossary

These terms relate to the booklet-making process.

2-up imposition	Prints two document pages on each side of a single sheet of paper.
Administrator	Has full access to all Command WorkStation and Fiery server control panel functions. Administrator password is required.
Alignment	Alignment controls allow you to specify the placement of a page within its predefined slot on the sheet. For example, if a page has been scaled smaller than the slot, you can align the page to the top-left corner of the slot by clicking the control that corresponds to that position.

aspect ratio

Relationship of width to height. In general, portrait equals a width less than

(<) the height. Landscape equals a width greater than (>) the height.

Back Color ProfileChoose the default color profile that will be applied only to the back side of your media. This attribute can be overridden by specifying a different color

profile in the Job Properties window.

bleed Extension of the content beyond a trim mark, used to ensure that the

printed area extends to the very edge of a trimmed page.

clipping indicators Appear when specified scaling values will cause the page to print beyond the

edge of the sheet. When the window is in Layout mode, any clipped page edge is highlighted in yellow. When the window is in Preview mode, the

Clipping icon appears to the left of the Scale Factor field. Also, the page

preview shows content truncating at the edge of the sheet.

creep Creep, or binder's creep, is the shift of the content area caused by the

incremental fold of signatures in Saddle and Nested Saddle binding.

creep adjustment Compensates automatically for binder's creep when saddle-stitched binding

is specified.

Creep Adjustment menuThe Creep Adjustment menu is used to compensate automatically for

binder's creep when saddle-stitched binding is specified.

Custom Custom enables the Scale Factor and Finished Height and Width fields, so

that you can specify new scaling values. The original height and width values are displayed for reference. When you specify a value, Impose automatically updates the other fields to preserve the height-to-width aspect

ratio of the page.

duplex Printing on both sides of the sheet.

edge feed The side of the paper that first enters the printer.

finisher Any device designed for the after-printing process, such as folding, stapling,

or binding.

finishing Any after-printing process, such as folding, stapling, or binding.

Fit Height Scales page(s) to fill the height of each page slot on the sheet.

Fit Width Scales page(s) to fill the width of each page slot on the sheet.

Fixed Page Fixed Page mode allows you to impose documents that contain pages of the

same size.

fold mark A dotted line that marks the location of a fold.

Front Color ProfileThe default color profile that will be applied only to the front side of your

media. This attribute can be overridden by specifying a different color

profile in the **Job Properties** window.

Gang Up Gang Up printing consists of grouping separate images, or pages, together

on a sheet rather than arranging each on a separate sheet.

gutter An additional margin that allows space for binding or other finishing

options (not to be confused with page margins).

imageable area Area of the paper where marks can actually be made.

inline cover Front or back cover matter that is printed with the body pages in the same

job.

job label Stores descriptive text used for the job name, sheet information, and date

and time.

landscape In a landscape document, the width is greater than the height.

Layout view Layout view mode displays numbered, generic pages that allow you to

determine the location of source document pages in the imposed jobs. You

can rotate individual pages in a layout view.

left edge Specifies binding across the left edge of the booklet. The booklet reads from

left to right.

margins White or blank space surrounding the printable area. Margins may vary

within a document.

Media Color ProfileThe default color profile that will be applied to both the front and back sides

of your media. This attribute can be overridden by specifying a different

color profile in the **Job Properties** window.

Mixed Page Mixed Page mode allows you to impose documents that contain pages of

different sizes.

nested saddle binding A combination of saddle and perfect binding methods. As with saddle

binding, the signatures are folded together as a group, which forms a subset. The subsets are then stacked on top of one another and glued, as with

perfect binding.

offline finishing Cover matter printed separately and assembled with the body pages after

printing.

offsets Offsets values are calculated in reference to the alignment position and reset

to zero when you specify a new alignment.

Operator Has access to all Job Center functions. In Device Center, does not have

access to Configure, Backup and Restore, changing passwords, and deleting the Job Log. Can view Paper Catalog or Media Catalog, virtual printers, and color management functions, but cannot edit them. Operator password is

required.

Pan tool Allows you to drag the desired portion of the job into view.

perfect binding A group of individually folded signatures that are stacked along a common

fold for binding. The spine is flattened and glued together.

portrait In a portrait document, the width is less than (<) the height.

post-inserter tray A tray that allows input of any blank or pre-printed matter that bypasses the

printer fuser.

Preview view Preview view mode approximates the appearance of the final printed

output. It is sometimes called WYSIWYG (What You See Is What You Get).

printable area Space assigned to page content (text or images).

printer's marks Designate the location of folds, cuts, margins, gutters, and bleeds. Printer's

marks appear on the printed sheet outside the main content area of the job.

printer's spread Shows pages in the order and layout in which they are printed as an

imposed job.

printing

For a Fiery server, printing refers to transferring the raster image from the Fiery server to the printer at high speed, freeing up RAM for the next job. While the print job's file is usually saved to disk, raster images are held in RAM during and after each print job. However, both users and Operators can request that the raster image be saved to disk along with the original print job's file. Saving the raster image to disk offers some advantages - raster files are already processed so they print quickly, and each part of the raster file is still identified with a page in the original document, which means that individual pages of a saved raster file can be accessed.

processed/held

Processing a job involves creating a raster file (raster image) after spooling in preparation for printing. A processed/held job is kept in the Hold queue until sent to the printer.

reader's spread

Shows pages in the order and layout in which they are intended to be read.

right edge

Specifies binding across the right edge of the booklet. The booklet reads from right to left.

RIPing

RIP stands for *Raster Image Processing*. RIPing refers to sending the job through the first part of the print process. Print option preferences specified for the job are interpreted, and a raster image file created. In this raster file (raster image), color data is associated with each dot that can be rendered on the printer. The color data tells the printer whether or not to apply cyan, magenta, yellow, or black toner to each position on the page.

saddle binding

A group of folded sheets stitched or stapled on a common, centered fold line. Saddle-stitched binding is the most basic type of binding and is the most common for booklets.

Scale to Fit

Scales pages to best fill the sheet without printing past its edge. Scale to Fit is the default mode.

sheet

Paper on which a printing job is imaged on a printing press.

signature

A press sheet that is folded to form the pages of a booklet in sequential order. Each signature in a booklet is folded in the same way.

simplex

Printing on only one side of the sheet.

Size menu

The Size menu includes items representing all page sizes defined by the currently selected printer PostScript printer description (PPD) file.

spine

Where the signatures are joined at the center fold and then stitched or bound.

spooled/held

Jobs are spooled and held on the Fiery server in preparation for job management. After a destination is assigned, the job is spooled for processing.

spooling

The job, a file sent for printing, is saved on the Fiery server hard disk. The file may arrive in packets from the network or be loaded from a disk. Jobs appear in the queue in the order they arrive and generally move through the print workflow in the same order unless the order is changed. If a job is suspended, it is held in the Hold queue.

top edge Specifies binding across the top of the booklet.

trim marks A solid line that defines the location of a cut.