

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 printing.

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

- Import and preview jobs
- View information about Fiery servers
- Specify print options
- · View and modify custom workflows
- Manage prepress job workflows
- Use Fiery applications such as imposition software and makeready applications for job preparation and assembly

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 13).

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 19.

Note: The content displayed varies for each Fiery server. The list below provides a general description. For specific information, see the Command WorkStation help for your Fiery server accessed from the **Help** menu in Job Center.

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 IQ 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, Processing, and Ready to Print queues and the Held, Printed, Archived, and Completed views.

In Job Center, you can do the following:

- Search for jobs, view job properties, and preview jobs in each Fiery server that you search. A toolbar provides access to different functions.
- · Assign workflows and manage jobs.
- Use custom views of the job list 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 the press.
- Preview jobs.

- View thumbnail icons of jobs.
- Edit properties in 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.
- Access the *Help* for your Fiery server.

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** pane.

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 on 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 64.

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

the selected job.

Archive Archives a selected job.

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

selected job. For more information, see Fiery JobExpert on page 64.

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.

Delete Deletes a selected job.

Duplicate Creates a copy of the selected job.

ImageViewer Opens Fiery 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 264.

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

custom printing, binding, and trimming. Fiery Impose Plus also applies impositions to variable data jobs and saves imposed jobs as PDF files.

impositions to variable data jobs and saves imposed jobs as FDF files

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.

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 261.

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 263.

Preview Opens the **Preview** window, where you can view images of pages in the job.

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

Processing queue.

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.

Move To

Send to Printing Queue Sends a selected job to the press for printing.

Note: Send to Printing Queue may not be supported for all Fiery servers.

Send to Ready to Print Allows you to send the job to the press for printing.

Note: Send to Ready to Print may not be supported for all Fiery servers.

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 64.

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

For more information, see Preflight on page 261.

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

The Command WorkStation shows system information in a single workspace. You can use the 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.

In Device Center, you can do the following tasks:

- View information about the connected Fiery server.
- Set job property defaults, including color defaults.
- View and modify substrate catalogs, variable data printing (VDP), color profiles, spot color tables, and font settings.
- View and create available virtual printers and server presets.
- 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 substrate catalogs, variable data printing (VDP), color profiles, spot
 color tables, and font settings. The Resources section includes Size Catalog, VDP Resources, Profiles, and Fonts
 and may include the Substrate Catalog, Spot Pro, and Specialty Colors if these features are supported by the
 connected Fiery server.
- **Workflows** allows you to view a list of available virtual printers and server presets. 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.

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 substrate catalogs, virtual printers, and color management functions, but cannot edit them. Only an Administrator can edit.
- 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 24.

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

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 20.

- 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 substrate or ink that the press uses to print jobs.

Information about consumables is available in:

Note: This feaures is available if the connected press supports it.

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

Server information

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

Errors and alerts

The Servers list provides information about the status of the Fiery server and error messages about the press.

Status messages

Status messages may be about the Fiery server or press. The messages are as follows:

Idle Fiery server or press is idle.

Busy Fiery server is processing a job.

Printing Fiery server is printing a job.

Canceling Fiery server is canceling a job.

Sleep Press is in Sleep mode.

Low Power Press is in Low Power mode.

Calibration Press is performing calibration.

Maintenance Required Scheduled press maintenance is required.

Warming Up Press is warming up after waking from sleep or low power mode.

Error messages

Error messages are very important messages about issues that impact the Fiery server and the press and prevent jobs from printing, for example, a paper jam. If multiple errors occur simultaneously, the most critical error appears first. After you resolve the first error, the next error appears.

The following are examples of error messages that may appear:

- Check press power and cable connections
- Press serial communications lost
- Printing suspended
- Check your network connection
- Check your gateway/router configuration
- Unstable connection. Check your network environment

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 local 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** to open Fiery Software Manager to check for a more recent version of Command WorkStation software and the Fiery workflow applications online.
 - **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 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.

- **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.
- 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 cloud Click Get Started to sign in to your Fiery Account or create one. After you are logged in, you can backup or restore workspace settings. For more information, see Back up the workspace settings on page 38 and Restore the workspace settings on page 38.
 - **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 39.
 - 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)
 - Inks

- Feeder
- 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 in 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.

For a list of the standard set icons, see Job Center toolbar icons on page 27.

- **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.

Send to Press Sends the selected job to the press for printing.

Note: Send to Press may only be supported for some Fiery servers.

Send to Printing Queue Sends a selected job to the press for printing.

Note: Send to Printing Queue may only be supported for some Fiery

servers.

Send to Ready to PrintSends the selected job to the press for printing.

Note: Send to Ready to Print may only be supported for some Fiery servers.

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

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

Delete Deletes the selected job.

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

Logs Opens the **Job Log** window.

Substrate Catalog Opens the Substrate Catalog window.

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.
- **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 default settings.

- **1** Save the configuration file.
- **2** Print the saved file to an office printer.

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. All users in a group have the same privileges.

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

In addition to assigning to a group the users that you have created, 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.

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.

- **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.

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 this group to calibrate the Fiery server. For the default groups, only Administrator and Operator groups have this privilege.
- **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.
- **Manage Workflows** Allows members of a group that have this privilege to create, edit, and delete Server Presets and virtual printers.
- Edit jobs Allows members of a group that have this privilege to edit jobs in the Held or Printed queues.

Delete users

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.

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

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 IQ 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

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

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 39.

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 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 44.

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 44.
- Fiery ImageViewer Available if supported by the Fiery server. See Fiery ImageViewer on page 264.

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 select **Preview** for a processed job, the job opens in raster preview mode. Archived jobs with raster data must be archived on the Fiery server.

Viewing jobs in the Job Summary pane

The **Preview** pane in **Job Center** displays specific information for a processed job. Thumbnails for all surfaces in that job are also displayed in the **Preview** pane. You can view a processed job in the **Fiery ImageViewer** window.

Note: A spooled, unprocessed job can be viewed in the **Fiery Preview** window.

Start Command WorkStation and select a processed job in the **Held** list to display it in the **Preview** pane. Information about the job is displayed. Some categories of information are editable as indicated by the pencil icon.

The **Job Summary** pane is at the right side of the **Command WorkStation** window. If the job is processed, tools are provided for navigating through the document.

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.
Copies	The number of copies you want to print.

Job Summary pane categories	Description
Media	Any media information, such as page size, media type, or media weight.
Preflight	The information related to Preflight . An icon indicates the status.
	You can view the errors and warnings 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
- Substrate size, type, weight, and assigned substrate catalog entry

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

When you open a PDF or a Fiery Impose Plus job, 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.

Preview a raster image

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.

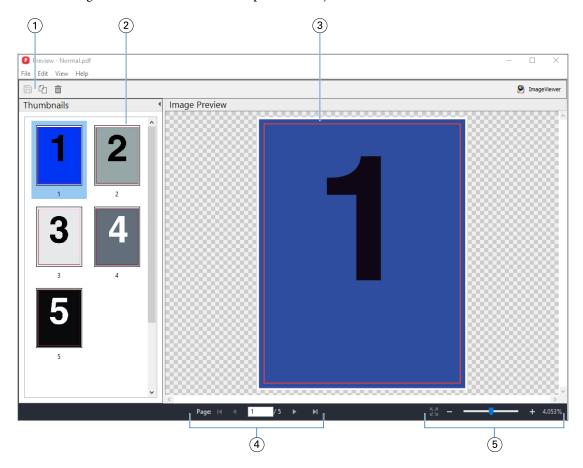
You can open Fiery ImageViewer in the Preview window.

- 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:
 - Click **Preview** in the **Actions** menu.
 - Click the **Preview** button in the toolbar.
 - Right-click (Windows) or cmd-click (macOS) the selected job in the Held list and select Preview.
 - Double-click the image 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

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.

You can import multiple jobs at a time. Importing files to a queue is similar to printing through an application, but importing files maintains the file format and does not convert the job into PostScript. You can import files by dragging and dropping them to

- Connected Fiery servers in the Servers list
- Processing queue
- Held queue

However, for the best control over how files import, use the **Import** icon in the **Job Center** toolbar, or **Import Job** in the **File** menu. You are immediately taken to the browse dialog on your computer. When files are selected, they are displayed in the **Import Files** dialog. In this dialog box, 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, PDF, PSD, PSB, EPS, TIFF, PDF/VT, PPML, ZIP, VPS, and Fiery FreeForm Plus.

Note: The PSD, PSB, 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 is opened. See step 5 on page 51.
- **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 dialog on your computer, select the files you want to upload. The **Import Files** window is opened.

- **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:
 - Hold (default)
 - Process and Hold (default)
 - Send to Press or Send to Print Queue/Send to Ready to Print

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 are accessed from the **Job Properties** window.

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 in 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 in an imported job.

Jobs that are imported into Command WorkStation will show either the settings included with the job (for PostScript jobs and some JDF jobs) 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 select **Process and Hold**, **Send to Ready to Print**, **Send to Press**, or **Send to Printing Queue** to save and send the job with your settings to the press for printing.

Note: The print action or queues listed may not be supported for all Fiery servers.

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: 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.

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.

Send to Printing Queue Allows you to send the job to the press for printing.

Note: Send to Printing Queue may not be supported for all Fiery servers.

Send to Ready to Print Allows you to send the job to the press for printing.

Note: Send to Ready to Print may not be supported for all Fiery servers.

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 most print options 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 page range, proofing, and die printing.

Media Attributes and sources of substrate to print.

Layout Defines the image shift, image origin, mirror or rotate print options for

positioning and to compensate for finishing options.

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

turned on).

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

press.

Finishing Print options related only to the finishing capabilities on the press.

VDP All Variable Data Printing (VDP) settings.

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.

Jobs imported to the Fiery server with **Apply default settings** selected in the **Import Files** dialog box, 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.

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 > Server 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 (vertical 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.

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 41.

Imposition templates

You can create custom templates in Fiery Impose Plus.

To create a custom template in Fiery Impose Plus, you can change the settings of a product intent. Select a product intent, make changes, and type a name for the template. The new settings are applied immediately. You must have a Fiery Impose Plus license to save a template.

In the **Preferences** window, you can set a path to the folder or directory where you want to store custom templates. This setting is in the **Impose** tab, under **Imposition Template Path**.

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, Job Properties, Virtual Printers, and Presets, if you have a Fiery Impose Plus license.

Note: The **User Defined** and **Based on Trim Box** finish size workflows require PDF source files. PostScript files and VDP formats other than PDF/VT are not supported.

For more information about the imposition templates, see Fiery Impose Plus Help.

Access Fiery Impose Plus from Job Properties

When you open a job in the Fiery Impose Plus window from **Job Properties**, the job appears in wireframe view in the **Sheet View** pane.

- **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.
- 4 Click Edit Impose Template.

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

Fiery Impose Plus templates in Job Properties

Fiery Impose Plus provides several pre-defined imposition templates accessible from the **Layout** tab in the **Job Properties** window. If you have a Fiery Impose Plus term 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 Impose Plus Help*.

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

Modify print options after applying a Fiery Impose Plus template

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

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

- 1 Click Layout in the Job Properties window.
- **2** Select a Fiery Impose Plus 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 they can be applied to workflows such as Fiery Hot Folders and Virtual Printers.

Job presets are listed in the **Presets** list in the 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 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** queue 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** list and do one of the following:
 - Right-click to select **Properties**. In the **Job Properties** window, under **Presets**, select a different 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 (previously known as Printer's 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 54.

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)
- Fiery Hot Folders (see Fiery Hot Folders Help)
- Virtual Printers (see Virtual printers on page 223)

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 the Processing and Printing queues.

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 (*). In other words, the preset was edited by an Administrator since 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 lists (Printing, Processing, Held, Printed, or Archived), the asterisk and job name are displayed in the **Preset** column.

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 for use in the **Job Properties** window. After you unpublish a Server Preset, you can publish it again.

1 Select one or more presets with the published icon 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 **Unpublish** on the toolbar.

The preset is shown with the unpublished icon.

3 Click Yes.

Any Fiery Hot Folders and 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 for a server preset print settings in Device Center, by selecting **Workflows** > **Job Presets**.

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

Locking a setting in a Server Preset ensures that:

- It is applied to all files imported to Command WorkStation using the preset.
- Fiery Hot Folders jobs also inherit the same locked settings (assuming the Fiery Hot Folders uses the Server Preset).
- Virtual printers show the settings as locked.

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 are at 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 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.

Job Editor

Job Editor is used in the preprocessing workflow to preview and edit individual jobs before printing.

Note: Job Editor may not be supported for all Fiery servers.

Job Editor is used to perform the following tasks:

- Edit nesting jobs
- Create a step and repeat (pattern repeats)
- Scale jobs
- Flip and rotate jobs
- Position jobs on the substrate
- Select a job-specific substrate
- Define the print settings
- Create templates from predefined job settings

Spooled jobs are listed in the Fiery Command WorkStation Held list. You can open a maximum of five jobs simultaneously in Job Editor. Each job is displayed on a separate tab in Job Editor.

Open Job Editor

In Job Editor, you can preview and edit any spooled or processed job in the Held list.

- In Job Center, do one of the following:
 - Right-click the job, and click **Edit**.
 - Select the job and select **Actions** > **Edit**.
 - Select the job and click the **Edit** icon on the toolbar.
 - Double-click the thumbnail image of the selected job.

The job opens in the **Job Editor** window.

Job Editor window

Job Editor allows you to preview and edit your job before printing.

The menu bar provides the following menus:

- File Options to save, process, print, and cancel jobs. You can also close Job Editor from this menu.
- Edit Options to undo or redo a performed action. To temporarily override the default unit of measurement, select Measurement Unit.

Note: You can specify the default unit of measurement in Job Center. Click **Edit** > **Preferences**, and in the **Region** tab, select **Measurement units**.

- **View** Options to scale the view of the image. These viewing options also have corresponding icons in the lower-right corner of the window. Settings such as **Snap To** and **Visual Aids** that help with job alignment on the substrate are also available.
- **Template** Options to save, manage, and apply templates. Templates are created from predefined settings for a job. Templates are categorized as **Normal**, **Step and Repeat**, or **Nesting**, according to the settings that have been applied.
- **Help** Opens the *Job Editor Help*.

The following tabs are available on the right side of the **Job Editor** window:

- **Job Info** The **Job Information** pane shows the job name, ID number, size, color mode, print resolution, corrected substrate size, and selected template. You can capture job-specific information in the **Job Notes** area.
- **Layout** On the **Step and Repeat** pane, you can create multiple copies (clones) of a job and apply flip, offset, rotate, and drop settings to design seamless repeat patterns required in the textile industry.
- **Substrate** The **Substrate Settings** pane allows you to select a job-specific substrate that overrides the setting configured in Job Properties.
- **Printer** On the **Print Settings** pane, you can specify the required number of print copies, a print length, or a print range.

Note: Print range settings are only available for a multipage job.

The toolbar provides the following controls:

- Save Saves the job with its current settings.
- Transform tool Activates the scaling, positioning, rotate, flip, and margin settings.
- Crop tool Activates the settings that enable you to select a focal point of an image and remove unwanted space around it.
- Pan tool Moves the job around the window.
- Zoom tool Zooms in and out.
- Undo Reverts the last performed action.
- Redo Performs or repeats the last undone action.

The status bar provides the following controls:

- Connected to Displays the IP address of the connected Fiery server.
- Job Info Provides a quick view of the details and settings specified for the job.

- Page navigation Navigates through the pages of the job.
- Scaling options Scales the view to the required size.

Options include zoom controls and icons for Fit to Window, Actual Size, Fit to Width, and Fit to Selection.

Job Editor visual aids

Visual aids help align jobs on the substrate. Visual aids do not appear on the printed job.

The following visual aids are available:

- Rulers Displays rulers along the top and left edges of the preview. You can change the unit of measurement in the Edit menu.
- Guides Displays nonprintable lines that help you to position the placeholder job at exact coordinates.
- Grids Displays horizontal and vertical lines that do not print. The grid spacing is fixed but adapts automatically according to the selected zoom factor. Activating snapping causes nearby jobs to snap to the grid.
- Job Margins Displays the defined job margins. You can adjust the job margins on the toolbar.
- Printer Margins Displays the nonprintable margins as defined by the printer. By ensuring that jobs are within the non-printable margins, you can avoid unwanted cropping in the printed job.
- Page Frame Displays a black border around each job. This helps you to view the white space around a job and check whether it overlaps other jobs in a nesting layout.
- Mouse Tracker Displays the current cursor position as x or y coordinates.
- Job Lock Locks manually positioned jobs in place. This option is available for nesting jobs.

Show visual aids in Job Editor

You can show or hide visual aids in the preview window.

• Click **View** > **Visual Aids**, and then click an item.

Set ruler coordinates in Job Editor

By default, the ruler's 0, 0 coordinates are located at the upper left corner of the sheet. You can move the 0, 0 coordinates, for example, to the corner of a job.

• Drag the pointer from the top left corner of the ruler area to the required position.

You can reset the 0, 0 coordinates by double-clicking the ruler intersection area.

Work with guides in Job Editor

Guides are nonprintable lines that help you to position jobs at exact coordinates on the substrate.

- Do any of the following:
 - Create a guide Drag the pointer from the horizontal or vertical ruler.
 - Move a guide Drag the guide to a new position.
 - Remove a guide Drag horizontal guides to the horizontal ruler and vertical guides to the vertical ruler.

Turn on snapping in Job Editor

You can assign some visual aids a magnetic property that causes jobs in their proximity to snap to them. You can apply snapping to grids or guides.

• Click **View** > **Snap to**, and then click an item.

Editing jobs in Job Editor

In Job Editor, you can scale, crop, rotate, flip, and realign jobs on the substrate. Visual aids are available in the preview window to help you position jobs exactly.

Note: The settings you make in Job Editor override the default settings of the same name made in Job Properties.

Scale a job in Job Editor

You can scale jobs by a percentage, by typing new dimensions, or by dragging. You can also scale jobs to the media width.

Jobs that do not fit on the media are indicated by a red border. To print oversize jobs, you must scale them down. By default, scaled jobs retain their original proportions.

- 1 On the toolbar, select the **Transform Job** tool.
- **2** Do one of the following:
 - Scale freely Rest the pointer on a corner of the job. The pointer changes to a double-headed arrow. Drag the job to the required size.
 - Scale by typing dimensions In the toolbar, under **Scale**, type a width and height.
 - Scale by any percentage On the toolbar, under **Scale**, click the % button, and type a percentage in the width or height box.
 - Scale by a default scaling factor Right-click the job, click **Scale** and click an item. Choose from the following scaling factors: 10%, 25%, 50%, 100%, 125%, 150%, or 200%.
 - Scale to media width Right-click the job and click **Fit to Width**. The job is scaled proportionally to the printable width of the substrate.

Align a job on the sheet in Job Editor

You can align a job to the sheet edge, or you can reposition a job by adding margins, by typing the x and y coordinates, or by dragging.

By default, the job is positioned in the top left corner of the sheet, while taking the printer margins into account.

- 1 On the toolbar, select the **Transform Job** tool.
- **2** Do one of the following:
 - On the toolbar, under **Position**, type x and y coordinates for the top left corner of the page. By default, Job Editor displays the x and y coordinates of the printer's nonprintable left and top margins. You can make Job Editor ignore the printer margins by typing x or y values of **0**.
 - On the toolbar, under Align, click a horizontal and vertical alignment type.
 - On the toolbar, under **Job Margins**, type a top, bottom, left, or right margin width (step and repeat only). You can apply identical margins to all four sides by clicking the **Link all margins** button and defining a top margin only.

Rotate a job in Job Editor

You can rotate jobs by 90, 180, or 270 degrees.

- 1 On the toolbar, select the **Transform Job** tool.
- **2** Do one of the following:
 - Click **Rotate Clockwise** or **Rotate Counterclockwise** on the toolbar. The job is rotated by 90 degrees in the selected direction.
 - Rest the pointer near, but not directly on, a page corner until the pointer changes into an arrowed circle. Then, drag in the direction you want to rotate. The job snaps to 0 degrees, 90 degrees, 180 degrees, or 270 degrees, whichever angle is nearest.

Flip a job in Job Editor

You can flip a job along its horizontal or vertical axis.

- 1 On the toolbar, select the **Transform Job** tool.
- 2 Click Flip Horizontal or Flip Vertical on the toolbar.

Crop a job in Job Editor

You can enhance the focal point of an image by removing distracting background elements around it.

1 On the toolbar, select the **Crop Job** tool.

2 In the preview window, drag the pointer to select the section that you want to crop.

You can cancel the selected cropped area by pressing **Esc**.

- **3** (Optional) Do any of the following to fine-tune the selected section:
 - Reposition the crop box Hold down **Alt**, and drag the pointer from the center of the crop box.
 - Resize the crop box Drag the edge of the crop box.
 - Adjust the margin widths between the edge of the job and the crop box On the toolbar, type new margin widths.

4 Press Enter.

You can return a cropped job to its original state by clicking **Reset Crop** on the toolbar.

Job Editor templates

Predefined settings in Job Editor can be saved as templates. Templates can be applied to new and existing jobs and support automation workflows.

Saved templates are listed in Job Properties and can be applied to jobs imported into Command WorkStation. To access saved templates, select **Actions** > **Properties**, and then select **Layout** > **Job Editor Template**.

The following options are available in the **Template** menu in Job Editor:

- Save as Template Allows you to save predefined settings as a template.
- **Manage Template** Allows you to view created templates, organized by name and type. You can filter the view by type (**Normal**, **Step and repeat**, **Nesting**). You can delete any selected template.
- **Apply Template** Allows you to choose a template from a list of all saved templates and apply the template to a job opened in Job Editor.

Note: In Template Manager, a separate application, you can create templates that are not associated with a specific job.

To open Template Manager, click Create Template in the Layout tab in the following workflows:

- Creating a preset
- Creating a virtual printer
- Creating a hot folder
- Specifying default settings

For more information, see Template Manager on page 82.

Step and repeat in Job Editor

A step and repeat consists of one original file and multiple copies (clones) that are arranged on the substrate to create a seamless pattern repeat for textile printing.

You can create a step and repeat from single-page jobs but not from multipage jobs.

Create a step and repeat in Job Editor

You can create multiple copies (clones) of a job and use the flip, offset or drop, and rotate settings to create a seamless pattern repeat.

Before you begin: Make all job settings before you create a step and repeat. You cannot modify the original job after you have created a step and repeat. If you want to modify the original job, you must delete all copies first.

1 On the **Layout** tab of Job Editor, expand the **Step and Repeat** pane. In the pane header bar, select the check box to activate the settings.

If you cannot activate the settings, make sure that the job width is less than the substrate width. You cannot create a step and repeat from a job that is equal to or wider than the width of the selected substrate. In this case, either scale the job down, or select a wider substrate.

- 2 Under Offset/Drop, define the amount of horizontal or vertical shift. Do one of the following:
 - Drop size Select the amount of drop as a fraction of the image width or height. As an example, 1/1 equals no shift, 1/2 equals a 50% shift, and 1/4 equals a 25% shift.
 - Percentage (%) Type the required amount of drop as a fraction of the image width or height if you do not want to use one of the fixed drop sizes.
 - Custom Type the required amount of vertical or horizontal drop in the unit of measurement selected for Job Editor.
- **3** Under **Repeat size**, select the required number of horizontal and vertical copies.
 - In a horizontal direction, you can do the following:
 - Fill the substrate width
 - Type the number of repeats
 - Define a custom width
 - In a vertical direction, you can do the following:
 - Type the number of repeats
 - Define a custom height
- 4 Click Save.

You can also select **Template** > **Save as Template** to save the settings as a template, which can then be used to create presets and virtual printers in Command WorkStation and Fiery Hot Folders.

Modify a step and repeat in Job Editor

To modify a step and repeat, you must first delete all the copies (clones).

- 1 On the **Layout** tab of Job Editor, expand the **Step and Repeat** pane. In the pane header bar, clear the check box to deactivate the settings.
- **2** Make your required changes to the original image.
- **3** In the pane header bar, reselect the check box to activate the settings.

Step and repeat templates in Job Editor

You can save a set of predefined step and repeat settings as a template in Job Editor. Job templates can be associated with presets in Command WorkStation.

Job Editor templates are displayed in Command WorkStation in Job Properties. Click **Layout** > **Job Editor Template** to view the templates.

You can apply a step and repeat template to the following:

- An imported job in Command WorkStation
- A new server preset
- A new virtual printer
- A hot folder
- Default job settings

Note: You can also create templates that are not associated with a specific job in Template Manager. For more information, see Template Manager on page 82.

Apply Job Editor templates to imported job

You can assign a server preset that uses a step and repeat template to an imported job.

Server presets using step and repeat templates must be available for the connected Fiery server.

- **1** To import a job, do one of the following:
 - Click the **Import** icon on the **Job Center** toolbar.
 - Select File > Import Job.
- 2 On your computer, browse to the location of the files you want to upload and select them.
- 3 In the **Import Files** window, select **Use Server Preset** and choose a step and repeat server preset.
 - If step and repeat virtual printers have been set up, you can also select **Use Virtual Printer** and choose a step and repeat virtual printer.
- 4 Optionally, if a job has been imported without using a preset or virtual printer, do one of the following:
 - Select the imported job, open the **Job Properties** window, and apply a step and repeat preset.
 - Select the imported job, open the **Job Properties** window, go to **Layout** > **Job Editor Template**, and choose a step and repeat template from the menu.
 - Right-click the imported job, select **Apply Workflow**, and choose a step and repeat preset.
 - Right-click the imported job, select **Apply Workflow**, and choose a step and repeat virtual printer.

Create a step and repeat preset

You can create server presets from a step and repeat template and also publish the preset as a virtual printer.

Presets can be created from an existing step and repeat template or by creating a new template in Template Manager.

- 1 Click Server > Device Center, and click Job Presets under Workflows.
- 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** Click **Define** to specify the job properties.
- **6** In the **Job Properties** window, open the **Layout** tab.
- **7** Select a template from the **Job Editor Template** menu.

You can also click **Create Template**, which opens Template Manager. After creating and saving a template in Template Manager, you can then select that template from the **Job Editor Template** menu in the **Layout** tab.

8 Click **OK** to close the **Job Properties** window, and then click **OK** to save the preset.

Note: To create a virtual printer from the preset, select the preset and click **Publish as Virtual Printer**.

Create a step and repeat virtual printer

Administrators can create virtual printers using step and repeat templates.

For more information on virtual printers, see Virtual printers on page 223. This procedure focuses on the information necessary for creating a step and repeat virtual printer.

- 1 To create a virtual printer, open Device Center. Select **Virtual Printers** under **Workflows**, and click **New** in the **Virtual Printers** window.
- **2** Specify the following:
 - **Printer Name** This is the alphanumeric name of the virtual printer.

Note: Once a virtual printer has been created or duplicated, its name cannot be changed, although the print settings can be changed.

- Description Add or modify comments to describe the virtual printer to users, for example, company brochure.
- Job Actions Select one of the Fiery server actions, such as Hold or Process and Hold.
- **Job Properties** Select **Define** to open the **Job Properties** window. In the **Layout** tab, select a step and repeat template from the **Job Editor Template** menu. Specify other print settings.

Note: You can lock any job setting by clicking the lock icon.

Create a step and repeat hot folder

When you create a new hot folder, you can select a step and repeat template as one of the print settings that are determined by the connected Fiery server.

Instructions for using Fiery Hot Folders are described in *Fiery Hot Folders Help*. This procedure focuses on information you need to create a step and repeat hot folder.

- 1 Open Fiery Hot Folders.
- 2 In the Fiery Hot Folders Console window, click New to display the Hot Folder Settings window.
- **3** Type a name for the hot folder in the **Folder name** field.
- **4** Optionally, type a description and details about the hot folder in the **Description** field.
- **5** Click **Browse**, and then specify the folder location.
- **6** Click **Select** to specify and connect to the Fiery server.
- **7** Choose the Fiery server queue or action from the **Job action** menu.
- **8** Choose **Define** in the **Job properties** menu.
- 9 In the Layout tab, select a step and repeat template from the Job Editor Template menu.
- **10** Continue to specify other settings as described in *Fiery Hot Folders Help*.

Set a Job Editor template as a default setting

Job Editor templates can be set as default job settings.

To include a Job Editor template in the default job settings for a Fiery server, follow the procedure below.

- 1 In Job Center, click the More icon (three dots) and select **Set Defaults**.
- 2 In the **Layout** tab, select a template from the **Job Editor Template** menu.

You can also create a template in Template Manager by selecting **Create Template**. For more information, see Template Manager on page 82.

Nesting in Command WorkStation and Job Editor

Nesting outputs multiple jobs collectively as a single job. Command WorkStation arranges nested pages in a space-saving manner to reduce media waste.

Import and select multiple jobs in Job Center to create a nesting. Job settings are set in Job Properties, either individually for the child jobs (the jobs that are included in the nesting) or for the parent job (the nesting). Not all job options are available. Nesting (layout) options are set in Job Editor. You can save these settings as a template in Job Editor, which can then be applied to other jobs opened in Job Editor.

You can also select nesting templates when creating presets or virtual printers.

Create a nesting in Command WorkStation

You can create a nesting from selected jobs that have been imported into Job Center, or you can import multiple jobs with the intention of nesting them.

- 1 Select multiple jobs in Job Center and choose one of the following:
 - Click **New nesting** on the toolbar.
 - Right-click the selected jobs and choose New nesting.

Note: Only Normal type jobs can be added to a nesting.

The nesting is displayed with the name of Nesting. To view the child jobs, click the plus sign.

- 2 To add a Normal job to a nesting in Job Center, drag and drop the Normal job to the nesting job.
- **3** To remove a child job, right-click and select **Remove job from nesting**.

You can edit the nesting in Job Editor.

Edit nested jobs in Job Editor

In Job Editor, you can edit a nested job. Make sure substrate settings have been selected before editing a nested job.

In Job Editor, you can arrange the placement of the jobs on the media, changing the orientation and alignment. You can also scale, rotate, flip, or crop nested jobs. You can lock each job and define job-specific margins.

- 1 In Job Center, do one of the following:
 - Right-click the nested job and select Edit.
 - Click **Edit** on the toolbar.
- **2** In Job Editor, click the **Layout** icon to display the **Nesting** pane.
- **3** Edit the job as required. Choices are automatically applied.

You can specify settings from any of the following:

- **Nesting** pane accessed from the **Layout** tab
- Child Job Information pane accessed from the Layout tab
- Job Editor menu
- Job Editor transformation toolbar

Nesting layout options in Job Editor

By default, jobs are arranged in the most space-saving manner. By overriding the default settings, you can prevent job rotation and arrange jobs to facilitate cutting after printing.

The following table describes the options in the **Nesting** pane of the **Layout** tab for arrangement of the parent job:

Option	Menu Choices	Description
Optimization	Minimal Media	Makes the maximum use of the media
	Cut Edges Horizontally	Arranges jobs so media can be cut horizontally
	Cut Edges Vertically	Arranges jobs so media can be cut vertically
	Cut Edges Horizontally and Vertically	Arranges jobs so media can be cut both horizontally and vertically
Orientation	Automatic	Arranges jobs in any orientation to make maximum use of the media
	Portrait	Arranges jobs in portrait orientation
	Landscape	Arranges jobs in landscape orientation
	Maintain orientation	Maintains the orientation of the source jobs
Uniform Scaling	On or Off (check box)	Type a width and height to scale all pages to the same size
	On enables Width and Height fields	
Spacing	Width and Height fields	Defines a horizontal and vertical distance between jobs

Options are available for the child jobs and their clones in the **Child Job Information** pane and toolbar. You can also select settings from the transformation toolbar.

Clone nested jobs in Job Editor

You can create multiple copies (clones) of child jobs.

You can apply individual job settings to each clone. However, if you remove the original job from the nesting, the clones are also removed.

- 1 Right-click the job, and click **Clone**.
 - This action clones every child job.
- **2** To clone an individual child job, select the job in the preview, right-click, and select **Clone** or click the **Add Clone** icon in the **Child Job Information** toolbar.
 - You can select a number of clone copies or enter the number.
- **3** To remove a clone, select it in the preview or in the **Child Job Information** pane, right-click, and select **Remove Clone** or click the **Remove Clone** icon on the toolbar.

- **4** You can choose from the following settings on the **Child Job Information** toolbar:
 - Toggle Placement removes selected clone.
 - **Toggle Lock** locks the selected clone so it cannot be moved. You can also select the **Lock** icon in the transformation toolbar.
 - **Delete Job** deletes the selected child job and its clones.

Save a nesting as a template in Job Editor

You can save the predefined settings for a nesting job as a template that you can then use to create a preset or virtual printer in Command WorkStation.

Create a new nesting job in Command WorkStation and open it in Job Editor.

After choosing settings, you can save the job or save the settings as a template. When you save a nesting as a template, you can specify options to automate nesting jobs. Command WorkStation creates a nesting when a sufficient number of jobs have been loaded to fill a certain percentage of the sheet or line, or creates and processes the nesting after a specified time period has elapsed, even if the minimum percentage of the sheet or line cannot be filled.

1 Select Template > Save as Template.

Nesting settings for saving as a template are displayed.

- **2** Type a name for the template.
- **3** Choose from the following:
 - None No criteria to support automation of nesting are active. This is the default option.
 - **Create Nesting after a minimum of** Offers the following two choices to support automation of nesting jobs in Command WorkStation:
 - Percentage **of the line is filled** Defines a minimum percentage width required to complete a nesting. Jobs will be placed to fill the width to that percentage.
 - Length (in units) of the print length is filled Defines the minimum length on the media to be filled to complete a nesting. Jobs will be placed across both width and height until the specified length is reached.
 - Always Nest after number mins Defines the period of time to elapse since the last job was loaded. After the time has elapsed, jobs are added to the nesting.

In Command WorkStation, create a preset or virtual printer associated with the nesting template.

Apply nesting templates created in Job Editor

Nesting templates created in Job Editor can be used to create presets or virtual printers or applied to jobs imported into Command WorkStation.

The steps for creating nesting presets and virtual printers are similar to those described for step and repeat templates in Create a step and repeat preset on page 76 and Create a step and repeat virtual printer on page 76.

Creating a preset or virtual printer

Follow the steps to create a preset or virtual printer, choosing a nesting template from **Layout** > **Job Editor Template** in the **Job Properties** window. Templates are organized by type: **Normal**, **Step and repeat**, and **Nesting**.

Applying a nesting template workflow

Select one or more normal jobs in the **Held** list, right-click and select **Apply Workflow**, and choose a nesting preset or virtual printer. A new nesting is created by adding all the selected jobs as child jobs.

Applying a nesting preset or virtual printer in Job Properties

Select one or more normal jobs in the **Held** list, open Job Properties, and choose a nesting preset or virtual printer. A new nesting is created by adding all the selected jobs as child jobs.

Select a substrate in Job Editor

You can select a substrate from the Substrate Catalog or define a new custom substrate size in Job Editor. This overrides the default substrate selected in Job Properties.

- On the **Substrate** tab of Job Editor, under **Substrate Catalog**, do one of the following:
 - Select a default substrate from the Substrate Catalog.
 - Select **Not defined**. Then, under **Substrate size**, click Add (+) and type a name and the required substrate width.

The size of the substrate after post-treatment (heating, washing) is displayed for reference. You can configure the amount of size correction that is needed due to shrinkage or stretch in Job Properties.

Print from Job Editor

You can print an edited job or a step and repeat or nesting job directly from Job Editor.

Before printing, make sure that you have saved your changes.

- 1 On the **Printer** tab of Job Editor, expand the **Print Settings** pane.
- **2** Do one of the following:
 - Select **Copies**, and type in the number of required copies.

Note: For a step and repeat job, one copy is equal to the repeat size configured on the **Step and Repeat** pane.

- Select **Print length**, and type in the length of substrate to be printed.
- For multipage jobs, select **Range**, and type in the range of page numbers to be printed. Type individual page numbers in ascending order and separated by commas, or type a range of pages separated by a hyphen.

Note: The **Range** option is only available for multipage jobs.

- **3** Do one of the following:
 - Select File > Process and Hold.
 - Select File > Rush Process and Hold.
 - Select File > Send to Ready to Print.

The job is displayed in Job Center in the corresponding queue.

- **4** Do one of the following:
 - Processed and held jobs Select the job and select Actions > Send to Ready to Print. At the press software, retrieve the job for printing.
 - Ready to print jobs At the press software, retrieve the job for printing.

If multiple jobs are ready for printing, rushed jobs go straight to the front of the print queue in the press software.

Template Manager

Template Manager is used in the preprocessing workflow to preview and edit templates before applying them to a job.

Note: Template Manager may not be supported for all Fiery servers.

Template Manager is used to perform the following tasks:

- Create a step and repeat (pattern repeats)
- Scale templates
- Flip and rotate templates
- Position templates on the substrate
- Select a template-specific substrate
- Define the print settings

Open Template Manager

In Template Manager, you can create and manage any template before applying it to an individual job.

- Do one of the following to open Template Manager:
 - In Job Center, click the More icon (three vertical dots) and select **Set Defaults**. In the **Layout** tab, click **Create Template**.
 - In Device Center, select **Job Presets**. Click **New** or select an existing preset, and then click **Edit**. Click **Define** in the **Job Preset Settings** window. In the **Layout** tab, click **Create Template**.
 - In Device Center, select **Virtual Printers**. Click **New** or select an existing virtual printer, and then click **Edit**. Select **Define** in the **Job Properties** window. In the **Layout** tab, click **Create Template**.
 - In Fiery Hot Folders, click **New** or select an existing hot folder, and then click **Edit**. Select **Define** in the **Job Properties** window. In the **Layout** tab, click **Create Template**.

A placeholder job opens in the **Template Manager** window.

Template Manager window

Template Manager allows you to preview and edit your templates before printing.

The menu bar provides the following menus:

- File provides option to close the Template Manager window.
- **Edit** options to undo or redo a performed action. To temporarily override the default unit of measurement, select **Measurement Unit**.

Note: You can specify the default unit of measurement. In Job Center, click **Edit** > **Preferences**, and in the **Region** tab, select **Measurement units**.

- **View** options to scale the view of the image. These viewing options also have corresponding icons in the lower-right corner of the window. Settings such as **Snap To** and **Visual Aids** that help with placeholder job alignment on the substrate are also available.
- **Template** options to save, manage, and apply templates. Templates are created from predefined settings for a job. Templates are categorized as **Normal**, **Step and Repeat**, or **Nesting**, according to the settings that have been applied.
- **Help** opens the *Template Manager Help*.

The following tabs are available on the right of the **Template Manager** window:

- **Layout** on the **Step and Repeat** pane, you can create multiple copies (clones) of a placeholder job and apply flip, offset, rotate, and drop settings to design seamless repeat patterns required in the textile industry.
- **Substrate** the **Substrate Settings** pane allows you to select a template-specific substrate that overrides the setting configured in Job Properties.
- **Printer** on the **Print Settings** pane, you can specify the required number of print copies or a print length.

The toolbar provides the following controls:

- Transform tool activates the scaling, positioning, rotate, flip, and margin settings.
- Pan tool aoves the placeholder job around the window.
- Zoom tool zooms in and out.
- Undo cancels or reverts the last performed action.
- Redo performs or repeats the last undone action.

The status bar provides the following controls:

- Connected to displays the IP address of the connected Fiery server.
- Template Info provides a quick view of the details and settings specified for the template.
- Page navigation controls to navigate through the pages of the template.
- Scaling options scales the view to the required size.
 - Options include zoom controls and icons for Fit to Window, Actual Size, Fit to Width, and Fit to Selection.

Template Manager visual aids

Visual aids help align templates on the substrate. Visual aids do not appear on the printed job.

The following visual aids are available:

- Rulers displays rulers along the top and left edges of the preview. You can change the unit of measurement in the **Edit** menu.
- Guides displays nonprintable lines that help you to position the placeholder job at exact coordinates.
- Grids displays horizontal and vertical lines that do not print. The grid spacing is fixed, but adapts automatically according to the selected zoom factor. Activating snapping causes nearby jobs to snap to the grid.
- Job Margins displays the defined job margins. You can adjust the job margins on the toolbar.
- Printer Margins displays the non-printable margins as defined by the printer. By ensuring that jobs are within the non-printable margins, you can avoid unwanted cropping in the printed job.
- Page Frame displays a black border around each job. This helps you to view the white space around a job and check whether it overlaps other jobs in a nesting layout.
- Mouse Tracker displays the current cursor position as x or y coordinates.

Show visual aids in Template Manager

You can show or hide visual aids in the preview window.

• Click View > Visual Aids, and then click an item.

Set ruler coordinates in Template Manager

By default, the ruler's 0, 0 coordinates are located at the upper left corner of the sheet. You can move the 0, 0 coordinates, for example, to the corner of the placeholder job in your template.

• Drag the pointer from the top left corner of the ruler area to the required position.

You can reset the 0, 0 coordinates by double-clicking the ruler intersection area.

Work with guides in Template Manager

Guides are nonprintable lines that help you to position the placeholder job at exact coordinates on the substrate for your template.

- Do any of the following:
 - Create a guide Drag the pointer from the horizontal or vertical ruler.
 - Move a guide Drag the guide to a new position.
 - Remove a guide Drag horizontal guides to the horizontal ruler and vertical guides to the vertical ruler.

Turn on snapping in Template Manager

You can assign some visual aids for a magnetic property that causes placeholder jobs in their proximity to snap to them. You can apply snapping to grids or guides.

• Click **View** > **Snap To**, and then click an item.

Editing placeholder jobs in Template Manager

In Template Manager, you can scale, rotate, flip, and realign placeholder jobs on the substrate. Visual aids are available in the preview window to help you position a placeholder job exactly.

Note: When the template is applied to a job, the settings you make in Template Manager override the default settings of the same name made in Job Properties.

Scale a placeholder job in Template Manager

You can scale placeholder jobs by a percentage, by typing new dimensions, or by dragging. You can also scale placeholder jobs to the media width or height.

By default, scaled templates retain their original proportions.

- 1 On the toolbar, select the **Transform Job** tool.
- **2** Do one of the following:
 - Scale freely Rest the pointer on a corner of the placeholder job. The pointer changes into a double-headed arrow. Drag the placeholder job to the required size.
 - Scale by typing dimensions On the toolbar, under **Scale**, type a width and height.
 - Scale by any percentage On the toolbar, under **Scale**, click the % button, and type a percentage in the width or height box.
 - Scale by a default scaling factor Right-click the job, click **Scale** and click an item. The following scaling factors are available: 10%, 25%, 50%, 100%, 125%, 150%, or 200%.
 - Scale to media width Right-click the placeholder job, and click **Fit to Width**. The template is scaled proportionally to the printable width of the substrate.

Align a placeholder job on the sheet in Template Manager

You can align a placeholder job to the sheet edge, or you can reposition a placeholder job by adding margins, by typing the x and y coordinates, or by dragging.

By default, the placeholder job is positioned in the top left-hand corner of the sheet, while taking the printer margins into account.

1 On the toolbar, select the **Transform Job** tool.

- **2** Do one of the following:
 - On the toolbar, under **Position**, type the x or y coordinates for the top, left-hand corner of the page. By default, Template Manager displays the x and y coordinates of the printer's non-printable left and top margins. You can make Template Manager ignore the printer margins by typing the x or y values of **0**.
 - On the toolbar, under Align, click a horizontal and vertical alignment type.
 - On the toolbar, under Job Margin, type a top, bottom, left, or right margin width (step and repeat only).
 You can apply identical margins to all four sides by clicking the Link all margins button and defining a top margin only.

Rotate a placeholder job in Template Manager

You can rotate a placeholder job by 90, 180, or 270 degrees.

- 1 On the toolbar, select the **Transform Job** tool.
- **2** Do one of the following:
 - Click **Rotate Clockwise** or **Rotate Counterclockwise** on the toolbar. The placeholder job is rotated by 90 degrees in the selected direction.
 - Rest the pointer near, but not directly on, a page corner until the pointer changes into an arrowed circle. Then, drag in the direction you want to rotate. The placeholder job snaps to 0 degrees, 90 degrees, 180 degrees, or 270 degrees, whichever angle is nearest.

Flip a placeholder job in Template Manager

You can flip a placeholder job along its horizontal or vertical axis.

- 1 On the toolbar, select the **Transform Job** tool.
- **2** Click **Flip Horizontal** or **Flip Vertical** on the toolbar.

Template Manager templates

Predefined settings in Template Manager can be saved as templates. Templates can be applied to new and existing jobs, and support automation workflows.

Saved templates are listed in Job Properties and can be applied to jobs imported into Command WorkStation. To access saved templates, select **Actions** > **Properties**, and then select **Layout** > **Job Editor Template**.

The following options are available in the **Template** menu in Template Manager:

- Save as Template allows you to save predefined settings as a template.
- **Manage Template** allows you to view created templates, organized by name and type. You can filter the view by type (**Normal** or **Step and repeat**). You can delete any selected template.
- **Apply Template** allows you to choose a template from a list of all saved templates and apply the template to a placeholder job opened in Template Manager.

Step and repeat in Template Manager

A step and repeat consists of one original file and multiple copies (clones) that are arranged on the substrate to create a seamless pattern repeat for textile printing.

Create a step and repeat in Template Manager

You can create multiple copies (clones) of a placeholder job in a template and use the flip, offset or drop, and rotate settings to create a seamless pattern repeat.

- 1 On the **Layout** tab of Template Manager, expand the **Step and Repeat** pane. In the pane header bar, select the check box to activate the settings.
 - If you cannot activate the settings, make sure that the template width is less than the substrate width. You cannot create a step and repeat from a template that is equal to or wider than the width of the selected substrate. In this case, either scale the template down, or select a wider substrate.
- 2 Under Offset/Drop, define the amount of horizontal or vertical shift. Do one of the following:
 - **Percentage (%)** Type the required amount of drop as a fraction of the image width or height if you do not want to use one of the fixed drop sizes.
 - **Drop size** Select the amount of drop as a fraction of the image width or height. As an example, 1/1 equals no shift, 1/2 equals a 50% shift, and 1/4 equals a 25% shift.
 - **Custom** Type the required amount of vertical or horizontal drop in the unit of measurement selected for Template Manager.
- **3** Under **Repeat size**, select the required number of horizontal and vertical copies.
 - In a horizontal direction, you can do the following:
 - Fill the substrate width
 - Type the number of repeats
 - Define a custom height
 - In a vertical direction, you can do the following:
 - Type the number of repeats
 - Define a custom width
- 4 Click Save.

You can also select **Template** > **Save as Template** to save the settings as a template, which can then be used to create presets and virtual printers in Command WorkStation.

Modify a step and repeat in Template Manager

To modify a step and repeat, you must first delete all the copies (clones).

- 1 On the **Layout** tab in Template Manager, expand the **Step and Repeat** pane. In the pane header bar, clear the check box to deactivate the settings.
- **2** Make your required changes to the original image.
- **3** In the pane header bar, reselect the check box to activate the settings.

Step and repeat templates in Template Manager

You can save a set of predefined step and repeat settings as a template in Template Manager. Templates can be associated with presets in Command WorkStation.

Template Manager templates are displayed in Command WorkStation in Job Properties. Click**Layout** > **Job Editor Template** to view the templates.

You can apply a step and repeat template to the following:

- An imported job in Command WorkStation
- A new server preset
- A new virtual printer
- A hot folder
- Default job settings

Note: You can also create templates that are associated with a specific job in Job Editor. For more information, see Job Editor on page 68.

Apply Template Manager templates to imported job

You can assign a server preset that uses a step and repeat template to an imported job.

Server presets using step and repeat templates must be available for the connected Fiery server.

- **1** To import a job, do one of the following:
 - Click the **Import** icon on the **Job Center** toolbar.
 - Select File > Import Job.
- 2 On your computer, browse to the location of the files you want to upload and select them.
- 3 In the Import Files window, select Use Server Preset and choose a step and repeat server preset.

If step and repeat virtual printers have been set up, you can also select **Use Virtual Printer** and choose a step and repeat virtual printer.

- 4 Optionally, if a job has been imported without using a preset or virtual printer, do one of the following:
 - Select the imported job, open the **Job Properties** window, and apply a step and repeat preset.
 - Select the imported job, open the **Job Properties** window, go to **Layout** > **Job Editor Template**, and choose a step and repeat template from the menu.
 - Right-click the imported job, select **Apply workflow**, and choose a step and repeat preset.
 - Right-click the imported job, select **Apply workflow**, and choose a step and repeat virtual printer.

Create a step and repeat preset

You can create server presets from a step and repeat template and also publish the preset as a virtual printer. Presets can be created from an existing step and repeat template or by creating a new template in Template Manager.

- 1 Click Server > Device Center and click Job Presets under Workflows.
- 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** Click **Define** to specify the job properties.
- 6 In the **Job Properties** window, open the **Layout** tab.
- **7** Select a template from the **Job Editor Template** menu.

You can also click **Create Template**, which opens Template Manager. After creating and saving a template in Template Manager, you can then select that template from the **Job Editor Templates** menu in the **Layout** tab.

8 Click **OK** to close the **Job Properties** window, and then click **OK** to save the preset.

Note: To create a virtual printer from the preset, select the preset and click **Publish as Virtual Printer**.

Create a step and repeat virtual printer

Administrators can create virtual printers using step and repeat templates.

For more information on virtual printers, see Virtual printers on page 223. This procedure focuses on the information necessary for creating a step and repeat virtual printer.

1 To create a virtual printer, open Device Center. Select **Virtual Printers** under **Workflows** and click **New** on the toolbar in the **Virtual Printers** window.

2 Specify the following:

• **Printer Name** - This is the alphanumeric name of the virtual printer.

Note: Once a virtual printer has been created or duplicated, its name cannot be changed, although the print settings can be changed.

- **Description** Add or modify comments to describe the virtual printer to users, for example, **company brochure**.
- Job Actions Select one of the Fiery server actions, such as Hold, or Process and Hold.
- **Job Properties** Select **Define** to open the **Job Properties** window. In the **Layout** tab, select a step and repeat template from the **Job Editor Template** menu. Specify other print settings.

Note: You can lock any job setting by clicking the lock icon.

Create a step and repeat hot folder

When you create a new hot folder, you can select a step and repeat template as one of the print settings that are determined by the connected Fiery server.

Instructions for using Fiery Hot Folders are described in *Fiery Hot Folders Help*. This procedure focuses on information you need to create a step and repeat hot folder.

- **1** Open Fiery Hot Folders.
- 2 In the Fiery Hot Folders Console window, click New to display the Hot Folder Settings window.
- **3** Type a name for the hot folder in the **Folder name** field.
- **4** (Optional) Type a description and details about the hot folder in the **Description** field.
- **5** Click **Browse**, and then specify the folder location.
- **6** Click **Select** to specify and connect to the Fiery server.
- **7** Choose the Fiery server queue or action from the **Job action** menu.
- **8** Choose **Define** in the **Job properties** menu.
- **9** In the **Layout** tab, select a step and repeat template from the **Job Editor Template** menu.
- **10** Continue to specify other settings as described in *Fiery Hot Folders Help*.

Set a Template Manager template as a default setting

You can include a Template Manager template in the default job settings for a Fiery server.

- 1 In Job Center, click the More icon (three dots) and select **Set Defaults**.
- 2 In the Layout tab, select a template from the Job Editor Template menu.

Nesting in Template Manager

Nesting outputs multiple jobs collectively as a single job. Command WorkStation arranges nested pages in a space-saving manner to reduce media waste.

Import and select multiple jobs in Job Center to create a nesting. Job settings are set in Job Properties, either individually for the child jobs (the jobs that are included in the nesting) or for the parent job (the nesting). Not all job options are available. Nesting (layout) options are set in Template Manager using placeholder jobs. You can save these settings as a template in Template Manager, which can then be applied to individual jobs.

Create a nesting in Template Manager

You can create a nesting template using placeholder jobs in Template Manager.

- 1 In Template Manager, expand the **Nesting** pane on the **Layout** tab.
- **2** In the pane header bar, select the check box to activate the settings.

You can select layout options for the nesting in Template Manager.

Nesting layout options in Template Manager

By default, placeholder jobs are arranged in the most space-saving manner.

The following table describes the options in the **Nesting** pane for arrangement of the parent placeholder job:

Option	Menu Choices	Description
Optimization	Minimal Media	Makes the maximum use of the media
	Cut Edges Horizontally	Arranges placeholder jobs so media can be cut horizontally
	Cut Edges Vertically	Arranges placeholder jobs so media can be cut vertically
	Cut Edges Horizontally and Vertically	Arranges placeholder jobs so media can be cut both horizontally and vertically
Orientation	Automatic	Arranges placeholder jobs in any orientation to make maximum use of the media
	Portrait	Arranges placeholder jobs in portrait orientation
	Landscape	Arranges placeholder jobs in landscape orientation
	Maintain orientation	Maintains the orientation of the placeholder jobs
Uniform scaling	On or Off (check box)	Type a width and height to scale all pages to the same size
	On enables the Width and Height fields	

Option	Menu Choices	Description
Spacing	Width and Height fields	Defines a horizontal and vertical distance between placeholder jobs

Save a nesting as a template in Template Manager

You can save the predefined settings for a nesting job as a template that you can then use to create a preset or virtual printer in Command WorkStation.

Click the **Layout** tab to expand the **Nesting** pane in Template Manager.

After choosing settings, you can save the settings as a template. When you save a nesting as a template, you can specify options to automate nesting jobs. Command WorkStation creates a nesting when a sufficient number of jobs have been loaded to fill a certain percentage of the sheet or line, or creates and processes the nesting after a specified time period has elapsed, even if the minimum percentage of the sheet or line cannot be filled.

1 Select Template > Save as Template.

Nesting settings for saving as a template are displayed.

- **2** Type a name for the template.
- **3** Choose from the following:
 - None No criteria to support automation of nesting are active. This is the default option.
 - Create Nesting after a minimum of Offers the following two choices to support automation of nesting jobs in Command WorkStation:
 - **Percentage of the line is filled** Defines a minimum percentage width required to complete a nesting. Jobs will be placed to fill the width to that percentage.
 - Length (in units) of the print length is filled Defines the minimum length on the media to be filled to complete a nesting. Jobs will be placed across both width and height till the specified length is reached.
 - Always Nest afternumber mins Defines the period of time to elapse since the last job was loaded. After the time has elapsed, jobs are added to the nesting.

In Command WorkStation, create a preset or virtual printer associated with the nesting template.

Apply nesting templates created in Template Manager

Nesting templates created in Template Manager can be used to create presets or virtual printers or applied to jobs imported into Command WorkStation.

The steps for creating nesting presets and virtual printers are similar to those described for step and repeat templates in Create a step and repeat preset on page 76 and Create a step and repeat virtual printer on page 76.

Creating a preset or virtual printer

Follow the steps to create a preset or virtual printer, choosing a nesting template in the **Job Properties** window. Select **Job Editor Template** in the **Layout** tab. Templates are organized by type: **Normal**, **Step and repeat**, and **Nesting**.

Applying a nesting template workflow

Select one or more normal jobs in the **Held** list, right-click and select **Apply Workflow**, and choose a nesting preset or virtual printer. A new nesting is created by adding all the selected jobs as child jobs.

Applying a nesting preset or virtual printer in Job Properties

Select one or more normal jobs in the **Held** list, open Job Properties, and choose a nesting preset or virtual printer. A new nesting is created by adding all the selected jobs as child jobs.

Select a substrate in Template Manager

You can select a substrate from the Substrate Catalog or define a new custom substrate size in Template Manager. This overrides the default substrate selected in Job Properties.

- On the **Substrate** tab of Template Manager, under **Substrate Catalog**, do one of the following:
 - Select a default substrate from the Substrate Catalog.
 - Select **Not defined**. Then, under **Substrate size**, click Add (+) and type a name and the required substrate width.

The size of the substrate after post-treatment (heating, washing) is displayed for reference. You can configure the amount of size correction that is needed due to shrinkage or stretch in Job Properties.

Modify print settings from Template Manager

You can modify print settings for a template in Template Manager.

- 1 On the **Printer** tab of Template Manager, expand the **Print Settings** pane.
- **2** Do one of the following:
 - Select **Copies**, and type in the number of required copies.

Note: For a step and repeat template, one copy is equal to the repeat size configured on the **Step and repeat** pane.

• Select **Range**, and type in the range of page numbers to be printed.

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 **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 278.

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 276.

Note: The **Preview** option is not available in the **Raster Curve Editor** window.

Determining the last printed page

If a job has been canceled or has failed to print successfully, you can determine the last printed sheet, so that you can readily resume printing the job.

- 1 In Command WorkStation, right-click anywhere in a column heading.
- 2 Select Add New > Other > Number of Pages Printed. This information also appears on the Job Log.

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.

- 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 26.

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.

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.

Move jobs to another queue

You can move or drag jobs to the Processing queue from the Held and Archived queues.

• Select any job from the Held or Archived queue, click **Actions**, and then select an action such as one of the following:

Note: The job actions available for the connected press are shown.

- Hold Sends a job to the Held queue.
- 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.

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 101.

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, entries for Substrate Catalog, 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

In the upper-left corner of Command WorkStation, click the Settings icon 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)
- Processing queue (when in focus in the main window)
- Held queue of any connected Fiery servers in the Servers list
- Processing pane at the top of Job Center

The following areas support drag and drop within Command WorkStation:

- Held queue
- Processing 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 pane at the top of Job Center

Estimate ink usage

With Command WorkStation, you can estimate the cost of ink that will be used for jobs, as well as the volume of ink and the area coverage. Estimates are provided only for processed jobs that have associated raster data.

Set cost and job columns

- **1** Log in as Administrator.
- 2 Select Server > Ink 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 relevant columns to Job Center, right-click any column header in the Job List and select the columns that you want (Estimated Cost, Estimated Volume, Estimated Coverage).
 - Estimated Coverage is based on input document size.

Estimate costs

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 Ink, or select the job and choose Actions > Estimate Ink.
 While a job is being estimated, a progress bar shows the progress of the estimate next to the job title in the Held list
- **3** To cancel an estimate in progress, right-click the job and choose **Cancel cost estimation**, or click the **X** in the progress bar.
- **4** To view the completed estimate, do one of the following:
 - View the **Estimated Ink** column in the job list.
 - Click the **Details** link at the bottom of the Job Summary pane.
 - Right-click the job and select **Ink Estimation Details**.
 - Select Actions > Ink Estimation Details.
 - For completed, printed jobs, add the columns 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 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

Fiery 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, Process and Hold, Send to Ready to Print, or Send to Printing Queue.
- 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.
- **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 223.

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 substrate catalog entry. Media for
 the JDF job can be mapped manually to a substrate catalog entry in this tab. See Enabling JDF-submitting
 applications on page 108.
- 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:

- **Substrate 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 Substrate 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 Substrate 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 Substrate 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 substrate catalog media 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 Substrate Catalog in the **Media** tab of the **Job Properties** window.
- 2 Select Add/Map to Substrate Catalog from the Map to Substrate Catalog menu.

For general information about adding new media to the Substrate Catalog, see Create a substrate catalog entry on page 235.

Resolve media conflicts in JDF jobs

If a JDF ticket uses media that cannot be automatically mapped to the Substrate Catalog, Command WorkStation displays an error for the job. You can add the media for the JDF job to the Substrate 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, select a corresponding media entry from the Map to Substrate Catalog menu or select Add/Map to Substrate Catalog, and click OK.

The parameters of the media specified for the JDF job are listed alongside the parameters of the substrate catalog media entry selected. You can now print the job.

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. A user can override the default settings for a job by changing them in Job Properties, unless the settings have been locked.

For more information about default job settings, see Set defaults for all job properties on page 54.

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.

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 press, 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

For more information on default output profiles, see Setting a default color output profile on page 115 and How does the Fiery server decide which output profile to use? on page 115.

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 116.

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 not using Substrate Catalog, or when Substrate 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.

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 Substrate Catalog on the Fiery server, which determines how the user will select the media for a job.

Substrate Catalog can be implemented in one of three ways:

- Substrate Catalog must be used for media selection.
- Substrate Catalog is optional for media selection.
- Substrate Catalog is not available for media selection.

Note: Implementation of Substrate 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 Substrate 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 Substrate Catalog 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 press without conversion, but with calibration applied.
- **ColorWise OFF** This setting sends the original CMYK data in the job to the press 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.

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.

If you do not want grayscale data in a job to be converted to the output color space, you can select the **Bypass conversion** setting to send the original grayscale data in the job to the press without conversion, but with calibration applied.

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 press. In proofing applications, when the CMYK source space is smaller than the gamut of the press, 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 press 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 press (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 press, 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 press.

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 press 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.
- 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 or Convert Rich Black to Pure.

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.

- Knockout Black text and graphics knock out colored backgrounds.
- **Off** Black text and graphics honors the document settings.

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 **Knockout**, 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 press.
- With **Black overprint (for pure black)** set to **Off**, the final text or graphic portions of the page honor the settings in the document.

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** 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 Substrate 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.

- · 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.

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 post-calibration 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 135
- L*a*b*-based calibration workflow on page 149
- Toner Delta E-based calibration workflow on page 165
- Inkjet Delta E-based calibration workflow on page 178

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** Choose the color mode that is required for your production output:
 - CMYK
 - CMYK + N

Note: Where N is an additional color mode licensed for the printer.

3 (Optional) Select **G7 calibration options**.

- **4** (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.

5 (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.

- **6** (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.
- 7 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 24.

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 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** Choose the color mode that is required for your production output:
 - CMYK
 - CMYK + N

Note: Where N is an additional color mode licensed for the printer.

- **3** (Optional) Select **G7 calibration options**.
- **4** (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.

5 (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.

- **6** (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.
- 7 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 CMY (composite) and K (black). Gray belongs is plotted as a*b*. In the table, the weighted everage must be less than 1.5 to show as green. The
 - 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 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 \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 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 24.

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 24.

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
 - 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.

- Choose an existing calibration set from the list.
 The comments shown are those that were added at the time the calibration was created.
- 2 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.

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 24.

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.

- 1 Click the **Enable/Disable spot color groups icon** ((())) 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.

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 queue	Initiates Print, Send to Ready to Print, or Send to Print queue for the selected spot colors or spot color group depending on the Fiery server.
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

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.

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.

Matching spot colors accurately on a monitor is very difficult. Always print a test page to get the proper color match.

- **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 204.
- **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.

Matching spot colors accurately on a monitor is very difficult. Always print a test page to get the proper color match.

- **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 (\circlearrowleft) 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 **Send to Ready to Print** > **Variations**.

Matching spot colors accurately on a monitor is very difficult. Always print a test page to get the proper color match.

- **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 Graphic Arts Pro Package must be installed on a Fiery server with Fiery system software FS400 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 (①) 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** () 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 Graphic Arts Pro Package must be installed on a Fiery server with Fiery system software FS400 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 217.

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.
- 9 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 Graphic Arts Pro Package must be installed on a Fiery server with Fiery system software FS400 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 (**3**).

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.

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 36.

After connecting your Fiery server with the Fiery IQ cloud, you can access the 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 on the Fiery ColorGuard Client application and track the
 verification results. For more information, see Fiery IQ Help for Industrial and Large Format presses.
- 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 Help for Industrial and Large Format presses.

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 221.
 - **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 104.
 - **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 99.

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 56.

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).

VDP resources

VDP (Variable Data Printing) jobs use global and reusable resources for variable elements inside jobs.

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.

VDP Resources allows an Administrator to manage disk space on the Fiery server by:

- Viewing and deleting global resources
- Allowing global resources to reside for future VDP jobs
- · Archiving and restoring global resources to the Fiery server

To access VDP Resources, connect to the Fiery server, click the More icon (three vertical dots), and choose **Device Center** > **Resources** > **VDP Resources**.

Back up VDP resources

You can back up global resources.

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 archived global resources.

Restore archived global resources for a project

Archived jobs can only be restored to the Fiery server where the files were originally archived.

Note: 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**.

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.

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.

- 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. All users in a group have the same privileges.

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

In addition to assigning to a group the users that you have created, 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 groups

With Groups, Administrators can add users to a group that has defined privileges.

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 34.

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**.

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** 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.

Substrate Catalog

Substrate Catalog is a system-based substrate warehouse database, which can store attributes of any substrate available in a production print shop.

Substrate Catalog is installed by default with Command WorkStation.

The Substrate Catalog resides on the Fiery server and is not affected when you reboot or clear the Fiery server .

Note: To set up and manage Substrate Catalog, you must log in to Command WorkStation with Administrator access.

To select a substrate, in Command WorkStation, select a job and click **Properties** > **Media**, and then select an entry from the Substrate Catalog. Substrate catalog entries are listed alphabetically in the **Substrate Catalog** list.

Each substrate catalog entry is associated with a specific output profile. When you create a new substrate catalog entry, you can associate the substrate catalog entry with either an existing profile or create a new profile.

Note: The terms "media" or "paper" refer to "substrate".

Access levels

Substrate Catalog allows Administrators to:

- Define multiple substrate attribute combinations and assign unique names to each combination
- Assign color profiles for each substrate
- Select predefined substrate when they submit their job
- Specify which substrate catalog columns are available for users
- · Centrally maintain the Substrate Catalog

Substrate Catalog allows Operators to:

• Select predefined substrate when they submit their job

Access Substrate Catalog

An Administrator creates substrate catalog entries that describe all the substrates available for use with the press. Administrators can access setup options for Substrate 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 Substrate Catalog icon on the Job Center toolbar. If the Substrate Catalog icon is not displayed, do
 the following:
 - On the Job Center toolbar, right-click the toolbar, and either click Standard Set or click Customize and add Substrate Catalog to the Selected Tools list.

Note: In the **Customize Toolbar** window, you can also click **Standard Set** to add Substrate Catalog to the **Selected Tools** list.

- If the **Substrate 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 **Substrate Catalog**.
- Click Server > Substrate Catalog.
- Right-click the Fiery server in the **Servers** list and select **Substrate Catalog**.
- Right-click the Fiery server in the **Servers** list and select **Device Center**. In Device Center, select **Substrate Catalog** under **Resources**.

In the **Substrate Catalog** window, you can create entries, edit entries, and manage the Substrate Catalog.

Substrate Catalog window

View substrates organized in different ways.

The default view of the **Substrate Catalog** window displays the names of all media in the catalog. As you click through the names, the following attributes are displayed for the selected name:

Note: Attribute names may vary depending on what is supported on your Fiery server.

- Name of the substrate catalog entry
- Description
- Thickness
- Type
- Size ID
- Dimensions
- Paper size
- Feed direction (when JDF based setting is selected)
- Grain direction
- Product ID

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.

Use the icons on the toolbar to do the following tasks:

- Add New create new entries
- Duplicate duplicate existing entries

- Favorite mark frequently used entries as favorites
- **Edit** modify existing entries

Additionally, you can import, export, and reset the Substrate Catalog to factory defaults.

Change the column display in Substrate Catalog

The column headings in the **Substrate Catalog** window change dynamically, according to whether you are using PPD based media attributes or JDF based media attributes.

You 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.

- 1 In the **Substrate 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 substrate catalog settings

When creating a substrate 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. Click **Server** > **Configure**, select **Job Submission** and click **JDF Settings**. In the **JDF Settings** window, 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 Substrate Catalog. For more information, see Access Substrate Catalog on page 232.
- 2 In the **Substrate Catalog** window, click **Settings** on the toolbar.
- 3 Select either PPD based or JDF based for Specification to use.

Attributes for new entries in Substrate Catalog

Attributes for new substrate catalog entries are grouped under different tabs.

Before creating a new entry, choose either PPD or JDF settings. For information, see Choose substrate catalog settings on page 234.

PPD based 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 substrate size from the size catalog.

Note: New sizes can be created from the Size Catalog. For more information, see *Fiery Command WorkStation Help*

• Color Settings - Choose the color profiles.

JDF based settings

The tabs are:

• General and Other Attributes - Include several 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 substrate catalog entry

Administrators can specify new media and media attributes in Substrate 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 Substrate Catalog. For more information, see Access Substrate Catalog on page 232.
- 2 In the Substrate Catalog window, click Settings on the toolbar and choose either the PPD based or JDF based setting.
- **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 242.

Define size attributes for substrate catalog entries

Administrators can set or modify size-related attributes when creating or editing a substrate catalog entry.

You can choose from several default sizes included with the Size Catalog. If you require custom sizes, you should define them in the Size Catalog before creating a substrate catalog entry.

- 1 Open Substrate Catalog and do one of the following:
 - Click Add New on the toolbar.
 - To edit an existing substrate catalog entry, select the entry and click Edit.
- 2 Click the Sizes tab.
- **3** Click "+" to add a new entry. To edit an existing entry, either double-click the entry or click **Edit**. If you need to delete an entry, click "-".
- 4 In Size ID field, make sure there is an entry for the size you want to add or edit.

Note: Several default sizes are included with the Size Catalog. We recommend that you set up the Size Catalog with any custom sizes you require before creating a a substrate catalog entry.

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 substrate catalog entry.

Note: If you choose a substrate size from the **Size Catalog** list, the **Size ID** field will reflect the Size ID assigned to the selected substrate size. You can modify the **Size ID**, as required.

- **6** Select the **Grain direction**.
- 7 Add a **Product ID** as required and click **OK**.

In the main **Substrate Catalog** window, select the substrate catalog entry in the **Name** column and you can view the substrate size that has been added or modified. It is also displayed in the **Sizes** tab of the substrate catalog entry.

Specify color profile settings

Administrators can associate a substrate catalog entry with a color output profile.

Any default or custom Fiery server output profile appears listed by name as a possible substrate catalog attribute.

- 1 In the **Substrate Catalog** window, click **Settings** in the toolbar.
- 2 Specify the substrate 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.

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. Depending on the job, you can choose either CMYK or CMYK combined with other specified colors, if supported on the Fiery server. You can override this attribute by specifying a different color profile in **Job Properties** > **Color** > **Output profile**. This attribute 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. Depending on the job, you can choose either CMYK or CMYK combined with other specified colors, if supported on the Fiery server. The **Back color profile** menu also includes the **Same as Front** option. You can override this attribute by specifying a different color profile in **Job Properties**. This attribute appears in both the PPD and JDF settings.

5 Click OK.

The new or modified substrate catalog entry appears under **Name** in the **Substrate Catalog** window.

For more information about output profiles, see Color Printing.

Marking or removing substrate catalog entries as favorites

You can mark or remove frequently used substrate catalog entries as favorites in the **Substrate Catalog** window.

Mark substrate catalog entries as favorites

To mark frequently used substrate catalog entries as favorites, do one of the following:

- Select an entry and click Favorite on the toolbar.
- Right-click a substrate catalog entry and select **Favorite** from the list. A star appears next to the substrate catalog entry.

Remove substrate 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 substrate catalog favorites in the media list available in the Job Properties window.

More information about substrate catalog favorites

The substrate catalog favorites are not applicable for the following:

- Export substrate catalog
- Backup and Restore option in Fiery Resources and Settings

Note: When you restore the substrate catalog entries to the Fiery server with **Import** > **Merge with Existing**, the existing favorites will be retained.

Search for jobs using a substrate catalog entry

You can perform an advanced search to list all jobs that use a particular substrate 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 in the column header bar and select Add New > Media > Substrate Catalog Name.
 Substrate Catalog Name appears in the column header bar.
- **3** On the toolbar, click the arrow next to the **More** filter.
- 4 In the Customize Search Filters list, select Substrate Catalog Name, and click Save.
- 5 Click the arrow next to the **Substrate Catalog Name** filter, select the required substrate catalog entry, and click **Apply**.
 - All jobs using the selected substrate 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 substrate catalog entry

Administrators can duplicate, edit, or delete substrate catalog entries. With Command WorkStation 6.7 and later, you can edit or delete a substrate catalog entry even if it is a default server setting or assigned to any of the following:

- Job
- Preset
- Virtual printer

To view all jobs using a particular substrate catalog entry, perform an advanced search. For more information, see Search for jobs using a substrate catalog entry on page 238.

Duplicate a substrate catalog entry

You can duplicate an existing catalog entry and then rename it to create a new entry.

1 In the **Substrate Catalog** window, select the entry that you want to duplicate and click **Duplicate** on the toolbar. Optionally, 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 substrate catalog entry appears in the **Name** column. You can select this entry and edit other attributes as required.

Edit a substrate catalog entry

You can edit attributes and values of substrate catalog entries.

- 1 In the **Substrate Catalog** window, do one of the following:
 - Select the entry and click **Edit** in 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 substrate catalog entry.

- **2** If the substrate catalog entry is associated with the following:
 - Job, preset, virtual printer, or a default server setting A message notifies you that one or more jobs use the substrate 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 Job Properties.

Delete a substrate catalog entry

You can delete a substrate catalog entry in the **Substrate Catalog** window.

1 In the **Substrate Catalog** window, select the substrate 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 substrate catalog entry is associated with the following:
 - Job, preset, virtual printer, or a default server setting A message notifies you that one or more jobs use the substrate catalog entry. Click **OK** in response to the message.

After you delete the substrate catalog entry, it will no longer be associated with the job. In the Job Properties window, the Substrate Catalog list will display **Not defined**.

Assign a substrate catalog entry to a job

Substrate 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 in the **Job Center** toolbar.
 - Double-click the job.
- **2** Select a substrate entry from the **Substrate Catalog** list. To view the substrate attributes associated with each entry, click the **Select** button.
 - The size id assigned to the substrate catalog entry is displayed in the Size ID list.
- **3** You can select a different size id or specify a custom size from the **Size ID** list.

Note: Entries in the **Substrate Catalog** and **Size ID** lists are listed alphabetically.

Assign a temporary custom substrate size

A temporary custom size can be assigned to a substrate. You do not have to select any of the pre-defined sizes that are applied when a substrate catalog entry is assigned to the job. When you assign a custom size to a substrate, 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/limited use of a particular substrate 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 in the **Job Center** toolbar.
 - Double-click the job.
- 2 Select Not defined from the Substrate Catalog list.

3 In the **Substrate size** field, click **Custom** and specify the custom size dimensions for the substrate. The custom size is displayed in the **Substrate size** list.

Note: Custom size dimensions are temporary and will not reflect in the list of sizes defined in the Size Catalog.

Assign a temporary custom substrate size to a substrate catalog entry

A temporary custom size can be assigned to a substrate without having to add the new size to the Size Catalog. You can override the Size ID defined by the substrate catalog entry and assign a temporary custom size to the substrate without reprocessing the job. Other media-related attributes defined in the substrate catalog entry are retained as is.

Note: To specify a temporary custom size, a substrate catalog entry must be assigned to the job and the Custom option must be available in the Size ID menu.

Note: Not all Fiery servers support the temporary custom size 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** From the **Substrate Catalog** list, assign a substrate catalog entry to the job.

Note: The **Size ID** field is enabled when a Substrate Catalog entry is assigned to the job.

3 From the **Size ID** list, select **Custom**. The **Substrate size** field is enabled.

4 In the **Substrate size** field, click **Custom** and specify the custom size dimensions for the substrate. The custom size dimensions are displayed in the **Substrate size** list.

Note: Custom size dimensions are temporary and will not reflect in the list of sizes defined in the Size Catalog.

Substrate entries

When you create or edit a substrate catalog entry, you can select from a number of substrate attributes. To set substrate attributes for a catalog entry, use the main **Substrate 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.

Substrate Catalog offers you two sets of substrate 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 substrate catalog entries with either PPD or JDF attributes. The PPD attributes provided to create a substrate catalog entry vary from product to product, so the terminology for the attributes will vary.

When you create a new substrate catalog entry, you must first choose either PPD based settings or JDF based settings. For more information, see Choose substrate catalog settings on page 234.

When you select PPD based settings, the attributes are displayed on the following tabs:

- General on page 242
- Sizes on page 243
- Color Settings on page 243

When you select JDF based settings, the attributes are displayed on the following tabs:

- General on page 243
- Other Attributes on page 248
- Sizes on page 243
- Color Settings on page 243

Note the following:

- Sizes on page 243 and Color Settings on page 243 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 "media" refer to "substrate".

General tab (PPD based)

Name	Descriptive name for the catalog entry	to describe the media. Type the
------	--	---------------------------------

desired name for the catalog entry. This field is common to both PPD and

JDF attributes.

Thickness of the media used, measured in microns (μm).

Type Lists different types of media that can be used depending on the type of job.

CIE Lab Color The device-independent color of the media. Specify the color using CIE

L*a*b* values.

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 Displays the dimensions of the media used.

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 > Color > Output profile .

General tab (JDF based)

Name Descriptive name for the catalog entry to describe the media. Type the

desired name for the catalog entry. This field is common to both PPD and

JDF attributes.

Description Descriptive information and additional details of the media used.

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.

Type details The Type details attribute describes additional details of the media stock

type used. See Type details on page 247.

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 247.

Texture Indicates the surface texture of the media used. See <u>Texture</u> on page 245.

% 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.

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.

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.

• **Inkjet**: Prints by releasing droplets of ink through the nozzles of the

printer.

Front: Settings that can be applied to the front of the media. See Front on page 244.

Settings that can be applied to the back of the media. See Back on page 245.

You can clear the **Same as Front** check box and select from the **Coating**,

Gloss value, and the Imageable sides options.

Front

Back

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 245.

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 244.

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 245.

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.

CoatedUses 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.

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 Size.

Continuous short Opaque media composed of sheets continuously connected along the

short edge, as defined by Size.

Labels Adhesive label stock, such as a sheet of peel-off labels.

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

Stock type	Conversion factor
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
Newsprint	1.63

Other Attributes tab (JDF based)

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 249.

Media unit Indicates the physical format of the media that is fed into the press or the

printer. See Media unit on page 249.

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 250.

Opacity level % The media's percentage of opacity. 0% represents full transparency, and

100% represents full opacity.

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.

Manage the Substrate Catalog

Administrators set up and manage the Substrate Catalog.

When the Substrate Catalog is set up, you can export it, merge it with another Substrate Catalog, or reset it to factory defaults.

Export the Substrate Catalog

When a substrate catalog is exported, it is saved as an .xml file and can be imported back into Substrate Catalog at any time.

Before you replace your Substrate 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.

1 In the Substrate 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 Substrate 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 Substrate Catalog is saved as an .xml file.

Replace the Substrate Catalog

Administrators can import and replace the existing Substrate Catalog.

Before you replace your Substrate Catalog, we recommend that you first archive your existing catalog by exporting it.

1 In the Substrate 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 Substrate Catalogs

Administrators can import entries from another Substrate Catalog to create a merged Substrate Catalog.

If the imported catalog contains an entry that has identical attributes as an entry in the original Substrate Catalog, the new entry is not imported and the original entry remains intact in the merged Substrate Catalog.

- 1 In the Substrate 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 Substrate Catalog is now merged with the one you just selected.

Note: When you merge two catalogs, all color profile associations in the imported Substrate Catalog are discarded. Repeat the process for additional catalogs that you want to merge into the existing one.

Reset the Substrate Catalog to factory defaults

Administrators can revert the Substrate Catalog to its factory default.

Any added or edited catalog entries are lost when you reset the Substrate Catalog to factory defaults. To save your customized entries, first export your existing catalog before you reset it to factory defaults.

1 In the **Substrate Catalog** window, click **Reset to Factory** on the toolbar.

Note: If the **Reset to Factory** icon is hidden from view on the **Substrate Catalog** toolbar, either enlarge the **Substrate Catalog** window or alternatively, click the More icon (three vertical dots), then click **Reset to Factory**.

2 Click **Yes** in response to the alert message.

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 substrate 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 substrate. 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 substrates.

Note: Default size catalog entries cannot be edited.

- 1 In Device Center, select **Size Cataloq** 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 substrate.
- 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 in Device Center (**Size Catalog** under **Resources**). Additionally, the unpublished size catalog entry cannot be selected by the user when specifying a substrate size. In Device Center, select **Size Catalog** under **Resources**, and 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.

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.

The following package is available:

• Fiery Graphic Arts Pro Package on page 255

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 255
- Fiery ImageViewer on page 264
- Preflight on page 261 (FS400 Pro)
- Preflight Pro on page 263 (FS500 Pro and later)
- Spot colors in Spot Pro on page 194

The following features of Fiery Graphic Arts Pro Package are not part of Command WorkStation:

- Ugra/Fogra Media Wedge
- Integrated Altona Visual Test

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

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.
 - **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. For more information, see View and edit a control bar on page 256
- **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.

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.

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 264.

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.

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

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 261.

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 accuracy, and a preview of a processed job (raster image).

Color output

Fiery ImageViewer displays the job with the actual CMYK values that are sent to the press and therefore provides an accurate soft proof. The soft proof does not display the effects of calibration, however, 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 that were created using CHROMiX Curve2, Curve3 or Curve4.

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 that are selected in Fiery ImageViewer.

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.

- 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.
a	
Duplicate	The Duplicate button duplicates selected pages in the Thumbnails pane.
台	•
Delete	The Delete key deletes selected pages in the Thumbnails pane.
Revert	The Revert button reverts to the previous settings for the job.
Ð	
Proof Print	The Proof Print button prints a single copy or iterative proof of a job directly from Fiery ImageViewer to verify output.
ତ	Proof print does not save changes if any are made or change the original job.
Magnifier	Zooms in on the image by a fraction.
Q	
Wiper	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.
Ruler	The Ruler button displays measuring rulers along the X and Y axes on the sides of the canvas.
	and on the states of the canvas.

Button	Description
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.
Shrink/Stretch	The Shrink/Stretch button toggles between showing the shrinkage or stretch that is applied to the job based on the Job Properties , Substrate tab > Width scaling and Length scaling options. The options must be set above or below 100% for the Shrink/Stretch icon to appear in Fiery ImageViewer. The button is available only for high-speed inkjet presses that support the feature.
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.
Soft Proof enabled	The Soft Proof button shows when ink limitation is turned off and provides an accurate soft proof of the job.
Soft Proof disabled	The Soft Proof button shows when ink limitation is turned on and a soft proof cannot be seen. To preview specialty colors, soft proof is disabled.

Button	Description
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:

 - 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 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**.

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.

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**

View color values in the image

ImageViewer displays the job with the actual color values that are sent to the press. You can inspect the color values of any point in the image.

• Hover over a pixel in the image.

The values for each colorant are displayed in the **Separations** pane.

Total Area Coverage reports the sum of the separation % values for the raster pixel being sampled.

Using Object Inspector, you can also see the object type that the pixel in the raster was rendered from. See Object Inspector on page 269.

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.

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, or Fiery Hot Folders 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.
- When a Fiery server is connected to a high-speed inkjet press, color replacement will not be shown in Front and Back Overlay mode.
- 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.

Front and Back Overlay

The Front and Back Overlay feature allows the preview of imposed sheets.

Four imposition styles (Work Style or Printing Method) may be previewed by setting the Overlay option to: Sheetwise, Perfector, Work & Turn, and Work & Tumble.

For most perfector presses, if a duplex job is received with duplex turned on, then the only available **Front and Back Overlay** option setting will be **Perfector**.

For duplex presses, the Front and Back Overlay feature will show either the four manual duplexing choices or the imposition styles defined by the **Duplex** print option in the **Job Properties** window for the raster image.

In all cases, the **Front and Back Overlay** preview can be disabled by setting the control to **Off**. The overlay control is for preview purposes only and does not change the duplex setting of the job.

Compare surfaces allows the comparison of any two surfaces in a job.

For **Display mode**, you can adjust the following settings:

- Continuous tone allows you to choose to preview impositions in true color.
- **Custom** allows you to select a custom color to preview for each front and back imposition.
- Front opacity allows you to adjust the opacity of the front surface so that the back surface can be seen.
- **Back opacity** allows you to adjust the opacity of the back surface to control visibility in the preview.

Image Position

The Image Position feature allows the placement of raster image of an imposition surface precisely on the printing sustrate in order to allow for mechanical press requirements such as gripper margin and also to have sheets that will work properly in finishing workflows for folding, cutting, and binding.

Fiery ImageViewer allows the you to precisely place jobs on the substrate with numeric offset values or visual positioning. Fiery ImageViewer shows the edges of the substrate, as well as the boundaries of the printable area on the substate for the press.

The benefits of the Image Position feature are:

- See placement of raster image on the substrate without trial and error.
- See imageable area on the sheet so that the imposition can be moved to the edge of the imageable area or the imposition can be clipped, if desired.
- Accurately position the imposition to allow for the press gripper margin or to produce sheets that are ready for finishing.

The page border is highlighted in black by default. You can edit the page border (color) in the **Preferences** window.

The imageable area of the substrate is highlighted in green.

To use the Image Position feature:

- 1 Origin substrate location from which offset is calculated. The choices are Center of substrate, Center of printable area, Center of custom printable area, and Bottom center to leading edge.
- **2 Offset** (can be turned on or off) lets you set X and Y offsets to position the raster image on the substrate. For duplex presses, back offset control is also available if **Front and Back Overlay** is not set to **Off**.
- **3 Offset unit** set the units that offsets are adjusted in (mm or inches).
- **4** Align front and back images locks the alignment of the front and back surface so that the offset of the front is inversely applied to the back.

Keep in mind the following when using the Image Position feature:

- On a duplex press, the back image position controls are only available if **Front and Back Overlay** is turned on.
- Align front and back images is turned on only if Front and Back Overlay is turned on.

Animate ink limit

Fiery ImageViewer helps you to see what pixels in the job are near the total area coverage (TAC) limit and any pixels that have been adjusted past the ink limit using Fiery ImageViewer curves or spot color edits.

To turn on the animation feature, start Fiery ImageViewer, open a processed and held job, and press ctrl+shift+L.

Flashing yellow areas in a job show pixels that are near the total area coverage (TAC) limit.

Flashing red areas in a job show pixels that are at or beyond the total area coverage (TAC) limit.

The total area coverage limit is loaded from the connected server. The limit can be manually adjusted or overwritten in the Fiery ImageViewer **Preferences** by turning on the **Ink Limit for Animations** option for viewing images only in Fiery ImageViewer.

Note: When ink limit animation is turned on, you are not seeing an accurate soft proof. The eye icon at the upper right of the Fiery ImageViewer window turns amber with a diagonal line to show that soft proofing is disabled. When animation is disabled by clicking ctrl+shift+L, the eye icon turns green to show you that soft proofing is turned on.

Note: The Animation ink limit feature is not available for all Fiery servers.

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 press.
 - 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.

Edit response using curves

You can edit the response curves in the **Color Adjust** pane to make precise edits to a job. This feature lets you customize the response curve for all the color curves together, and for an individual color separation in a 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 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** 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 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

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.

Apply color edits to one or all pages

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

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

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. When you import the curve in Fiery ImageViewer, it is applied to the current page, replacing the existing response curve.

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.

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.

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 job, set the separations in the **Separations** pane that you want to print.
- 2 Click File > Save.

Export soft proof to PDF

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**.

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.

Compare the monitor profile to the output profile

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.

• In Fiery ImageViewer, select View > Compare Monitor Profile with Output Profile.

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.
 - 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.

- **Image Border** Click the color block to select the color of the border around the page as shown on the substrate in the image preview.
 - **Front** Click the color block to select the color of the border around the document size as shown on the substrate in the image preview.
 - **Non-Imageable Area** Click the color block to select the color of the translucent fill for the non-imageable area, for example between the imageable area and substrate, as shown on the substrate in the image preview.
 - **Press Inspection Zone** Click the color block to select the color of the border for the press inspection zone on the page as shown on the substrate in the image preview.
- Ink Limit for Animations allows you to manually adjust the value that represents the total ink limit (which the default value represents) and highlight pixels that are close to the limit such that an edit made from Fiery ImageViewer can warn you of the pixels that have exceeded the limit.

To use dark mode, make a setting in Set Command WorkStation preferences on page 24.