User Guide

English

731-00710A-EN

Spire CXP50 Color Server 1.0 for Xerox DocuColor 5000 Digital Press

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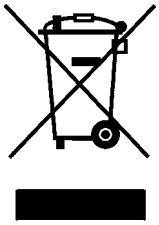

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Creo

info@creopod.com

http://www.creopod.com

Internal 731-00710A-EN

Revised January 2006

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Welcome

Welcome to the Spire CXP50 Color Server User Guide

Welcome to your *Spire* CXP50 Color Server 1.0 for *Xerox* DocuColor 5000 Digital Press User Guide.

The powerful and comprehensive *Spire* CXP50 color server provides high throughput and print predictability for digital workflows. In combination with the *Xerox* DocuColor 5000 digital press, the *Spire* CXP50 color server effectively addresses the growth of on-demand printing needs and delivers the best output quality available. To enhance the benefits of your *Spire* CXP50 color server, you can add the *Spire* CXP50 color server Professional Kit, which is activated by a dongle.

This user guide will help you operate the *Spire* CXP50 color server. It can also be used as a reference guide for questions or procedures. Study this user guide to take full advantage of the many unique and advanced features of the *Spire* CXP50 color server.

This user guide is for *Spire* CXP50 color server operators and system administrators. This guide explains how you can quickly and easily print from the *Spire* CXP50 color server or from a client workstation. Step-by-step procedures are included for new and occasional *Spire* CXP50 color server users. Detailed information is provided for users who require in-depth knowledge of the *Spire* CXP50 color server.

Overview of Spire CXP50 Color Server

The *Spire* CXP50 color server is an on-demand prepress system that uses *Creo Spire* advanced prepress technologies, to drive a *Xerox* DocuColor 5000 digital press.

As an optimal digital color solution for printers, the *Spire* CXP50 color server enables you to print from *Windows*, *Macintosh*, and *UNIX* client workstations. The *Spire* CXP50 color server processes image files in page-description language (PDL) formats—for example, *PostScript*, PDF, and Variable Information—using RIP (Raster Image Processor) technology. The system converts image files into a suitable RTP (Ready-To-Print)

format for direct, high-quality digital printing. The *Spire* CXP50 color server also streamlines the printing process by allowing printing with preset workflows.

In combination with the *Xerox* DocuColor 5000 digital press, the *Spire* CXP50 color server enables you to efficiently print flyers, brochures, pamphlets, dummy catalogs, short-run trials, and print-on-demand publications. When installed as a fast, network printer with the *Spire* CXP50 color server, the *Xerox* DocuColor 5000 digital press prints up to 50 full-color A4 (210mm x 297mm) or Letter (8.5 inches x 11inches) pages per minute.

The *Spire* CXP50 color server combines RIP functionalities, automation, control tools and special hardware development capabilities with PC architecture.

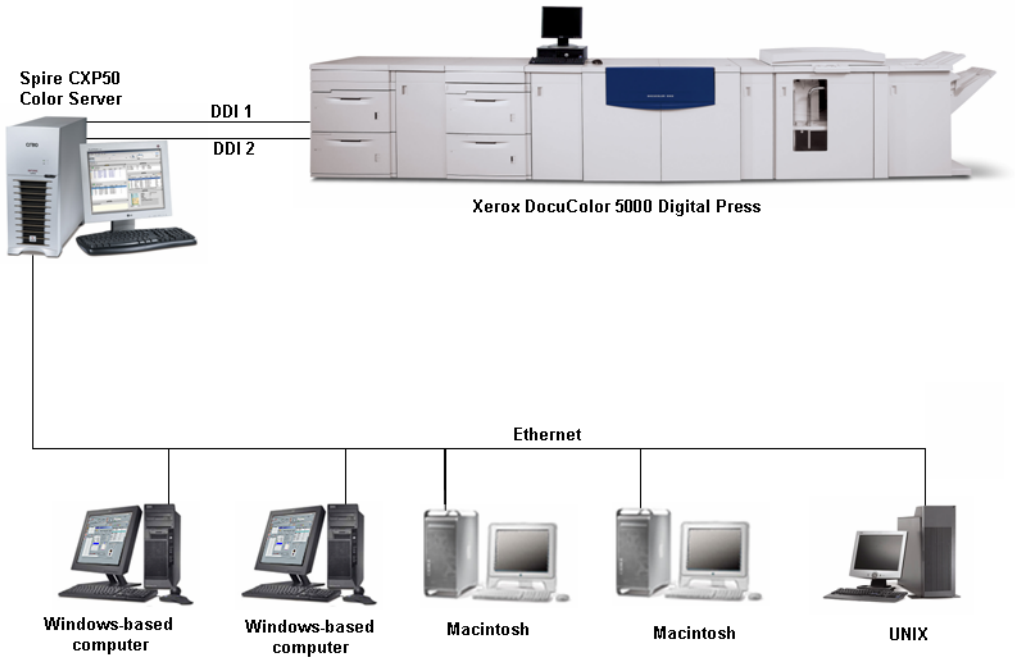


Figure 1: Spire CXP50 Color Server for Xerox DocuColor 5000 Digital Press

WARNING: A shielded ethernet cable must be used from the Token Ring board to the Token Ring Hub to maintain compliance with Council Directive 89/336/EEC.

Hardware and Software Components

The *Spire* CXP50 color server is a dedicated *Creo* platform running in a *Windows* XP environment.

The *Spire* CXP50 color server includes:

- *Creo* hardware, including the interface board
- Software, including:
  - *Creo* software
  - *Windows* XP Professional Operating System
  - *Adobe Acrobat* version 6.0

Supported Formats

The *Spire* CXP50 color server supports the following file formats:

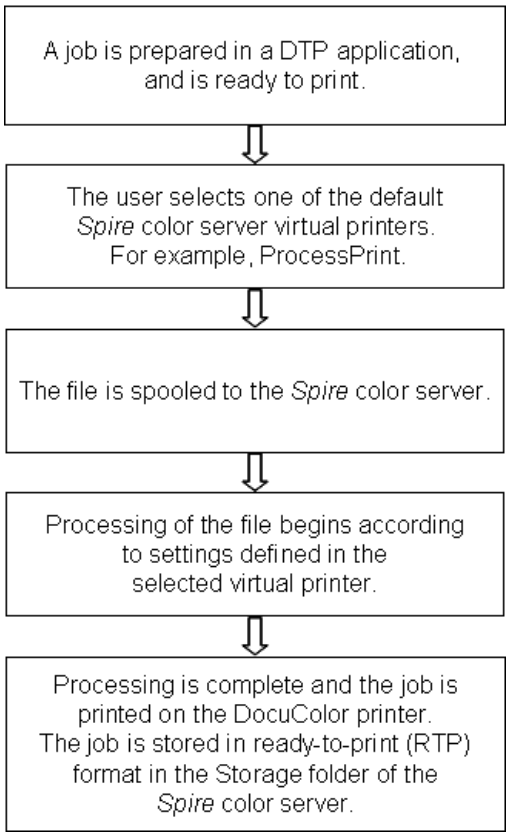
- *PostScript* (composite or pre-separated files)
- PDF
- EPS
- *Creo* VPS (Variable Print Specification)
- VIPP (Variable Data Intelligent *PostScript* Params)
- PPML (Personalized Print Markup Language)
- GAP (Graphic Art Port) files (file formats from various prepress systems, for example Brisque job and TIFF / IT)
- *Creo* CT & LW
- JPG, TIFF
- Pre-separated formats

Workflow

The *Spire* CXP50 color server receives and processes files from the following client workstations:

- *Macintosh* – running Mac OS 9.x or later and Mac OS X (10.1 and later)
- *Windows* – running *Windows* ME, 2000, and XP
- *UNIX* Workstations and Servers

The *Spire* CXP50 color server basic workflow is as follows:



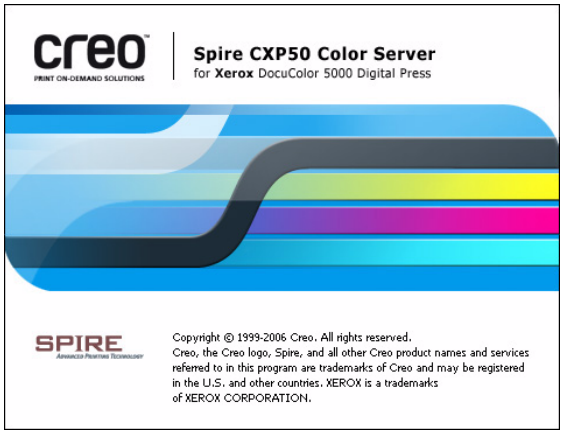
2

Getting Started

Turning On the Spire CXP50 Color Server

1. Turn on the monitor.
2. Press the power button on the front panel of the *Spire* CXP50 color server.

   The power indicator on the front panel lights up. The *Windows* operating system starts, and the *Spire* CXP50 color server splash screen appears.



Notes:

- If the *Spire* CXP50 color server workspace is already turned on, open the workspace from the **Start** menu.
- By default, the **Auto Log On** check box is selected in the Settings window. This option enables you to open the workspace without having to go through the logon process each time. If you want to designate different access levels for each user, you need to set security settings in the Settings window. For more information about designating access levels, see “Security” on page 181.

The Workspace

After you turn on the *Spire* CXP50 color server, the workspace automatically appears.

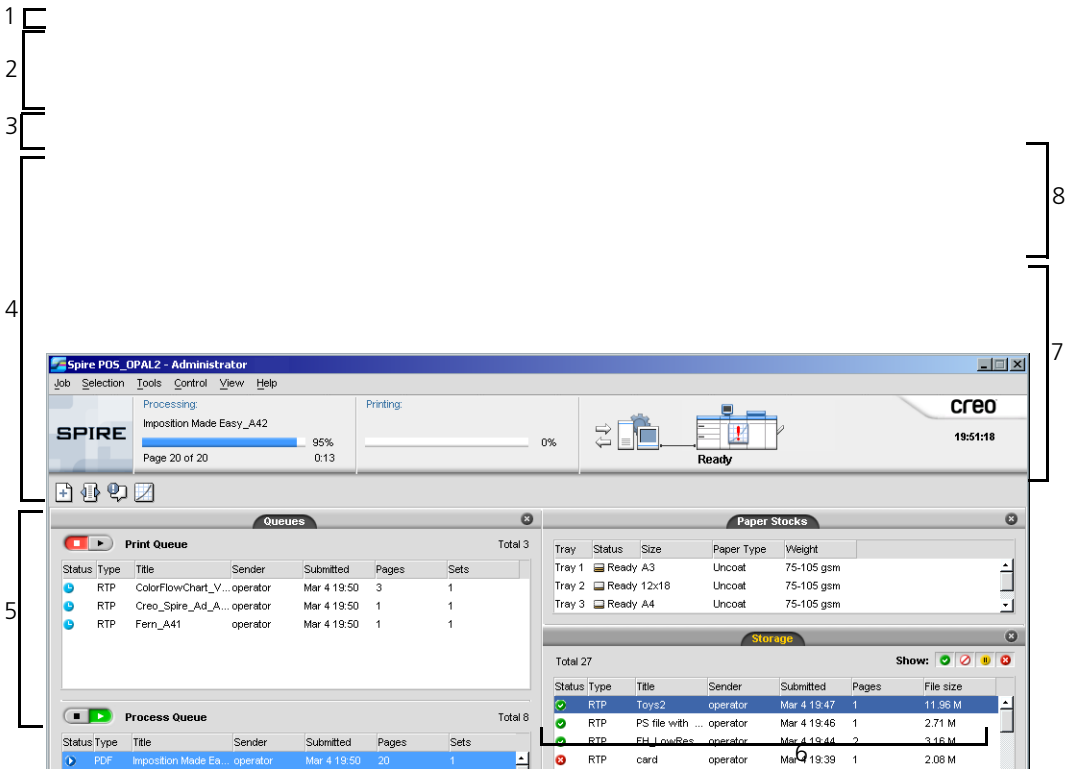


Table 1 describes the *Spire* CXP50 color server workspace.

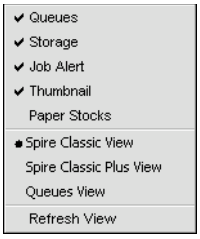
Table 1: Spire CXP50 Color Server workspace

Item	Name	Description
1	**Menu Bar**	Consists of the **Job**, **Selection**, **Tools**, **Control, View,** and **Help** menus. Click a menu name to open the corresponding menu.
2	**Status Panel**	Contains the logo **Pane**, **Processing** status area, **Printing** status area, **server** icon, and **printer** icon. For more information on the server and printer icons, see “The Server and Printer Monitors” on page 11.
3	**Toolbar**	Consists of shortcut buttons for the Import window, Resource Center, Message Viewer, and Calibration window.

Table 1: Spire CXP50 Color Server workspace

Item	Name	Description
4	**Queues**	Consists of the **Process Queue**, which lists the files to be processed. After a file has been processed successfully, it moves either to the **Print Queue** (the upper area) or to the Storage window. For more information on queues, see "The Job Queues" on page 13.
5	**Job Alert**	Displays the last detailed error that is related to a selected job. For more information on the Job Alert window, see "The Job Alert Window" on page 201.
6	**Thumbnail**	Displays a thumbnail view of a specific page in an RTP job that has finished processing.
7	**Storage**	The Storage window contains files that: • were successfully printed • were held, were aborted, or failed during processing or printing • were sent directly from the client workstation to the Storage window or were imported to the Storage window.
8	**Paper Stocks**	Displays information about the paper in each tray and also shows whether the trays are ready for printing. **NOTE:** This window is only included in Classic Plus view. For more information, see "Customizing the Workspace View" on page 10.

Customizing the Workspace View



The **View** menu enables you to customize the workspace. From this menu, you can open and close the workspace windows. The menu also provides the following view options:

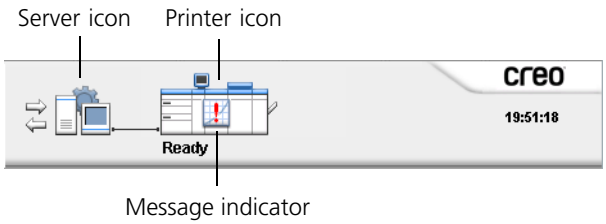
- **Spire Classic View:** Displays the status panel, toolbar, Storage window, Queues window, Thumbnail window, and Job Alert window

- **Spire Classic Plus View:** Displays the status panel, toolbar, Paper Stocks window, Storage window, Queues window, Thumbnail window, and Job Alert window
- **Queues View:** Displays only the **Print Queue** and **Process Queue**
- **Refresh View:** Reverts to the factory default view for the view that is currently displayed

Tip: By default, the windows in the workspace are all docked—that is, attached to the workspace. You can detach, or undock, a window from the workspace by right-clicking the window's title bar and selecting **Undock Window**.

The Server and Printer Monitors

The **server** and **printer** icons are on the right end of the status panel and indicate (through animation) whether processing and printing are taking place. If a finishing device is connected to the printer, the finishing device also appears in the printer icon. You can click the **printer** or **server** icon to display status information. You also view messages regarding the printer operation mode and status next to the **printer** icon.



The DFE Monitor

➢ Click the **server** icon to open the DFE Monitor window.

The DFE Monitor window displays the following information:

Table 2: Description of DFE Monitor window

This tab	Shows you
Disk Usage	How much space is available on the user disk and printer disk
Network	Information about the network
Virtual Printers	Lists the virtual printers that you have defined

The Printer Monitor

➢ Click the **printer** icon to open the Printer Monitor window.

The Printer Monitor window displays the following information:

Table 3: Description of Printer Monitor window

This tab	Shows you
Paper Stock	Information about the paper in each tray and also shows whether the trays are ready for printing
Finisher	Information about finishing devices that are connected to the *Xerox* DocuColor 5000 digital press
Toner	Whether there is enough toner
Consumables	Status of other refillables

The Job Queues

After entering the *Spire* CXP50 color server, a job resides either in the Queues window or in the Storage window, depending on the job flow.

The Queues window consists of two areas, the **Process Queue** and **Print Queue**.

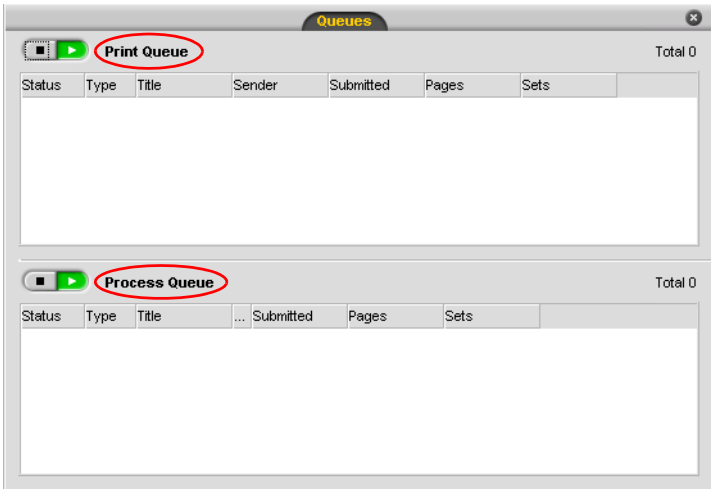
- The **Process Queue** lists the job that is currently being processed and the jobs that are waiting to be processed.
- The **Print Queue** lists the currently printing job and the jobs that were processed successfully and are waiting to be printed. The **Print Queue** also lists frozen jobs (jobs for which the specified option is not available—for example, paper stock or finisher).

Each queue holds jobs in the order in which they enter it (unless a rush job "interrupts" the submission order).

For more information about managing jobs, see "Managing Job Queues" on page 32.

At any time, you can view information regarding the number and status of the jobs in the queues. You can also change the order of the jobs and suspend or resume the queue.

After you start the *Spire* CXP50 color server, the Queues window is displayed.



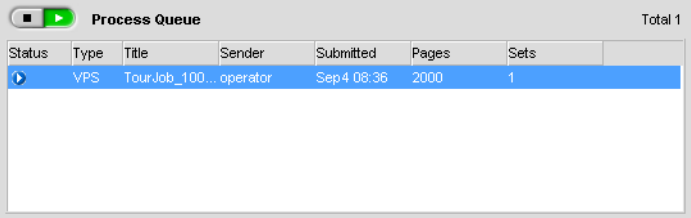
Each queue holds jobs in the order in which they enter it. The top job in the queue is currently running, while all others are waiting to run.

Note: If there are very short jobs in the print queue, several jobs may be running at the same time. The jobs marked as **running** are listed first and printed in the order they are listed.

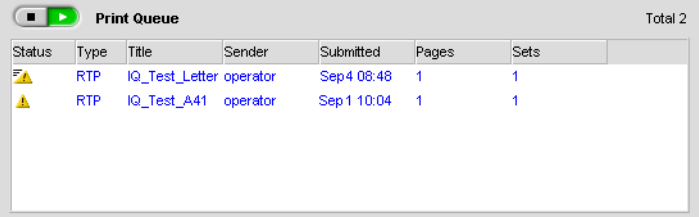
If necessary, you can change the order of the jobs that are waiting in the queues. You can also view and edit job parameters.

The Queues Window

The process queue lists the files to be processed.



Once a file has been processed successfully, it moves to the print queue to be printed, or to the Storage window (depending on the current job flow or virtual printer).



For more information about operations on the jobs residing in the Queue Manager, see “Aborting a Running Job” on page 34.

The Queues window lists information about the jobs that are being processed. Status indicators indicate the status of each job. Table 4 describes the status indicators used in both the process queue and print queue.

Table 4: Process Queue and Print Queue status indicators

This Status Indicator	Indicates This:
	The job is running.
	The job is frozen and held in the print queue. If a job is frozen, it indicates that the specified option is not available—for example, paper stock or finisher
	The job is waiting.
	The job is a rush job.
	The rush job is frozen.
	The rush job is waiting.

For more information about rush jobs, see "Running a Rush Job" on page 37.

Right-click the column heading row to select the columns that you want to view.

Table 5: Process Queue and Print Queue column descriptions

This Column	Indicates This Information:
Status	The status of each job.
Job Type	File format of the PDL job—for example, **PS** (.ps), **PDF**(.pdf), **VPS**(.vps)
Title	Name of the file to be printed. If you submit a file whose name already exists in the *Spire* CXP50 color server, a number is automatically added to the file name—for example, if you submit a file called **lobster** and this file name already exists, the newer file is renamed **lobster1**.
Sender	User name of the system from which this file originated
Submitted	Date and time this job was first submitted to the *Spire* CXP50 color server
Pages	Number of pages to be processed in a PDF job. For other PDL jobs, the number of pages is indicated only if the DTP software in which they were created supports this feature.
Sets	Number of copies to be printed
Paper Set/ Stock Name	Paper set name or stock name
Paper Size	Paper size
Weight	Paper weight
Type	Paper type
Coating	Paper coating
File Size	File size of the job
Account	Account name taken from the **Job Info** parameter

Table 5: Process Queue and Print Queue column descriptions

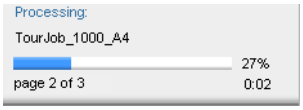
This Column	Indicates This Information:
Job Info	Job information taken from the **Job Info** parameter
Imposition	Type of imposition used
Page Exception	Whether or not the job has page exceptions
Server	Name of the server being used
Virtual Printer Names	Name of virtual printer being used

Status Information

The Queues window status areas contain the following:

- The **suspend** and **resume** buttons (for more information see “Suspending and Resuming Queues” on page 33)
- The queue name.
- The number of jobs in the queue—for example, 2.

If a job is currently being processed or printed, the name of the job and a process indicator are displayed in the **Processing** status area.



Note: For PDF jobs, the **Processing** status area indicates the total number of pages. For other PDL jobs, the number of pages is indicated only if the DTP software in which they were created supports this feature.

The Storage Window

The Storage window is displayed by default. If you close the Storage window, you can reopen it by selecting **Storage** from the **View** menu.

The Storage window is the main repository for jobs. It can contain:

- Printed (completed) jobs
- Jobs that you manually moved to the Storage window or that you aborted during processing or printing
- Jobs that failed during processing or printing
- Retrieved jobs
- Jobs that were imported directly to the Storage window from the client workstation (by selecting the **Spool & Store** option for the job flow)

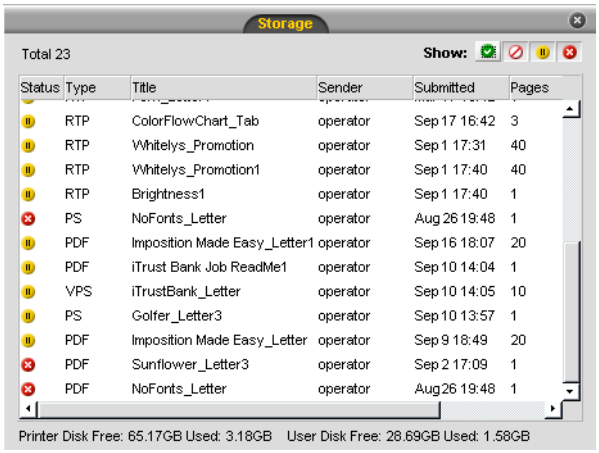
In the Storage window, you can see the number of jobs that are in storage and their status.

Each job in the Storage window is assigned a status as shown in Table 6:

Table 6: Storage window status buttons

Icon	Status	Indicates This
	**Completed**	The job has finished printing.
	**Held**	You moved the job from the Queues window to the Storage window; or the current job flow or virtual printer moved the job to the Storage window automatically.
	**Failed**	The job failed during processing or printing.
	Aborted	You aborted the job in the Queues window while the job was running.

By default, the Storage window shows all the jobs, whatever their status. All the status buttons are selected—that is, they appear pushed in. If you click a status button now—for example, the **Completed Jobs** button—the button is released and the list hides all the completed jobs:



If you click the **Completed Jobs** button again, the button is pushed in and the list shows the completed jobs.

Note: When all the status buttons are in the released position (not selected), the Storage window shows no jobs.

In the Storage window you can perform the following actions:

- Submit a job. See “Importing and Printing a Job” on page 28.
- Run a rush job before other jobs. See “Running a Rush Job” on page 37.
- Archive a job. See “Archiving and Retrieving a Job” on page 39.
- Export a job as a PDF file. See “Export as PDF2Go” on page 91.
- Export an RTP job as an *InSite* job. See “Export as Creo Synapse InSite Job” on page 111.

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

- View and edit the parameters of a job. See "Viewing and Editing Job Parameters" on page 36.
- Preview and edit a job, using PitStop Edit for unprocessed jobs, or the Job Preview & Editor window for processed jobs. See "Editing a Job" on page 43.

Note: Editing unprocessed jobs using PitStop Edit is available only for the *Spire* CXP50 color server with the Professional Kit.

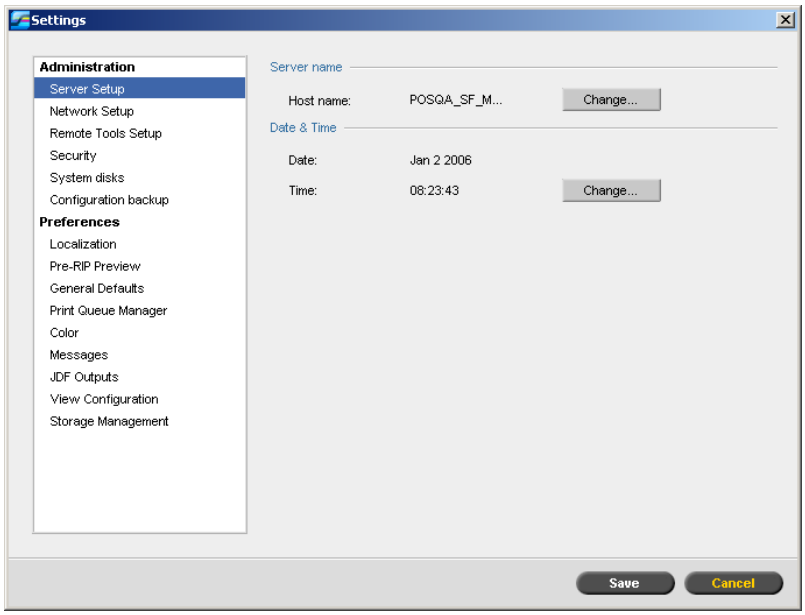
- View a job's history in the Job History window. See "Viewing a Job's History" on page 42.
- View the job ticket report for a job. See "Job Ticket Report" on page 42.
- View the preflight report for a job. See "Preflight Report" on page 107.

Note: You can only view a preflight report for a job if you enable the **Preflight** parameter before processing the job. For more information, see "Preflight Check" on page 105.
This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

- Delete a job. See "Deleting a Job" on page 37.
- Revert processed jobs to their original format.
- Duplicate a job. See "Duplicating a Job" on page 38.
- Use the PDF analyzer to detect problems in imported PDF files that may affect processing. See "Analyzing a PDF Job" on page 103.

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

The Settings Window



You can set all system preferences in the Settings window.

Note: If you log on to the *Spire* CXP50 color server as a guest, the Settings window is unavailable.

To open the Settings window:

➢ From the **Tools** menu, select **Settings**.

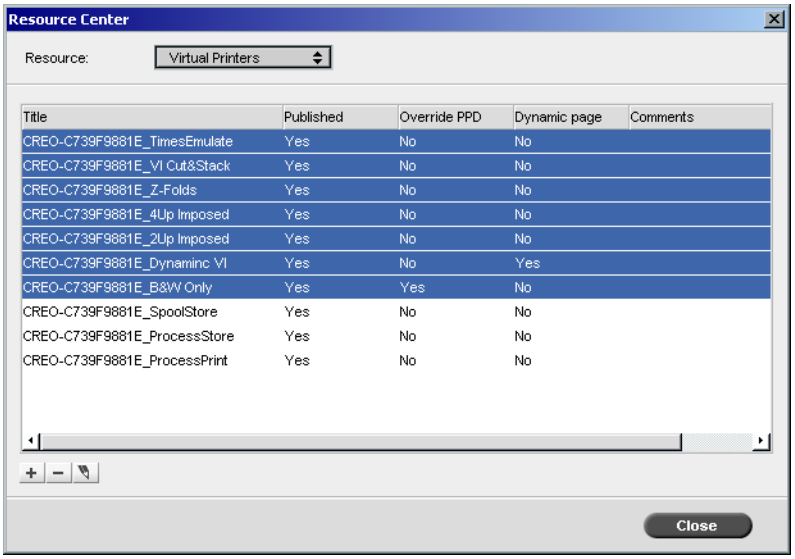
The window is divided into two areas:

- **Administration:** Contains system administration settings.
- **Preferences:** Contains system preferences.

Note: All users can view the **Administration** and **Preferences** settings, but only an administrator can configure these settings.

For more information about setting system preferences, see "Setting Up and Configuring the Spire CXP50 Color Server" on page 170.

The Resource Center



The Resource Center enables you to add, remove, and manage external resources for the *Spire* CXP50 color server.

To open the Resource Center:

➢ From the toolbar, click **Resource Center**  .

The Resource Center provides access to the following resources:

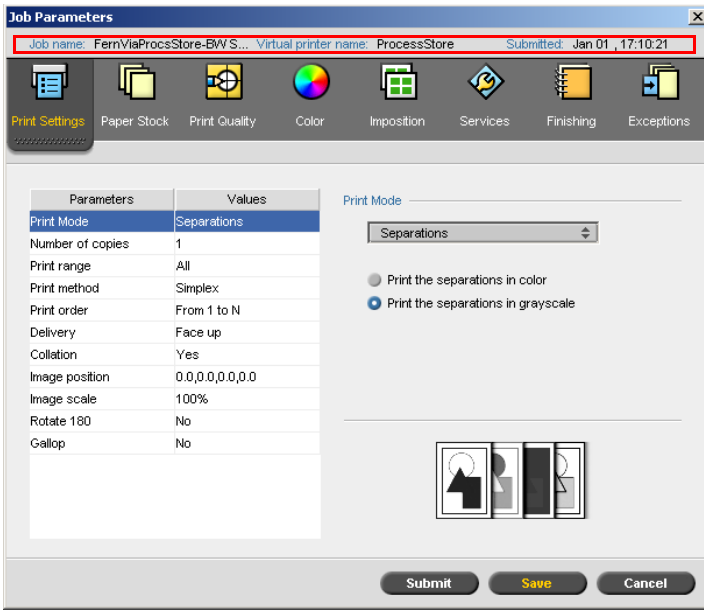
- Virtual Printers, see “Managing Virtual Printers” on page 53
- Fonts, see “Managing Fonts” on page 97
- Imposition Templates, see “Imposition Templates” on page 82
- Cached VI Elements, see “Managing VI Elements” on page 164
- Paper Sets, see “Managing Paper Sets” on page 57
- Profile Manager, see “Profile Manager” on page 137

The Job Parameters Window

The *Spire* CXP50 color server enables you to edit PDL files and change the job settings—for example, paper size, imposition, and color settings—in the Job Parameters window.

To open the Job Parameters window:

➢ Double-click a job in the Storage or Queues window.



The Job Parameters window title bar displays the following information:

- The name of the job
- The name of the virtual printer
- The time of submission

Each tab has a set of related parameters and values that you can select.

Table 7: Description of tabs in the Jobs Parameters window

This tab	Enables you to
Print Settings	Set print related job parameters—for example, **Print range** and **Print method**. See "The Print Settings Tab" on page 214.
Paper Stock	Set job parameters related to paper stock—for example, **Paper size** and **Paper set name**. See "The Paper Stock Tab" on page 219.
Print Quality	Set job parameters related to print quality—for example, **Trapping** and **Image quality**—and improve the quality of printed jobs. See "The Print Quality Tab" on page 221.
Color	Apply last minute color corrections, or set the output job to align with other output devices. See "The Color Tab" on page 225.
Imposition	Set job parameters related to positioning, folding, trimming, and binding of pages—for example, **Margins** and **Template**. See "The Imposition Tab" on page 231.
Services	Set job parameters that will assist your job workflow—for example, **APR path** and **Preflight**. See "The Services Tab" on page 238.
Finishing	Select from various options to finalize your printed document—for example, define settings for the front and back cover. See "The Finishing Tab" on page 245.
Exceptions	Define paper sets to include exceptions in a job, and add inserts or interleaves. See "The Exceptions Tab" on page 249.

The Help Menu

The Help menu provides information about the version of software that is installed on your *Spire* CXP50 color server and enables you to access the online help, which is based on this user guide.

To open the About window:

➢ From the **Help** menu, select **About**.

The About window displays the following information:

- *Spire* CXP50 color server software version number
- Date the version was installed
- Any updates that were installed on top of the version

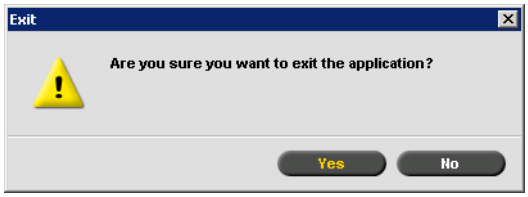
To open the online help:

➢ From the **Help** menu, select **Topics**.

Turning Off the Spire CXP50 Color Server

1. In the *Spire* CXP50 color server workspace, from the **Job** menu, select **Exit**.

   The following message appears:



   Note: If there are jobs that are being processed or printed, a different message is displayed. Running jobs are aborted.

2. Click **Yes**.

   The *Spire* CXP50 color server workspace closes, and you return to the *Windows* desktop.

3. Verify that the *Spire* icon has disappeared from your taskbar.

Taskbar with Spire icon

Taskbar without Spire icon

4. From the *Windows* desktop, select **Start > Shut Down > Shut down > OK**.

   When the *Windows* shut down is complete, the *Spire* CXP50 color server shuts down.

3

Basic Workflows

Importing and Printing a Job

The basic workflow for printing a job in the *Spire* CXP50 color server consists of three main stages:

1. Importing the job.
2. Processing the file.
3. Printing the job.

After the job is printed, it is stored in the Storage window and can be resubmitted for printing, see "Reprinting a Job" on page 31.

Importing a Job

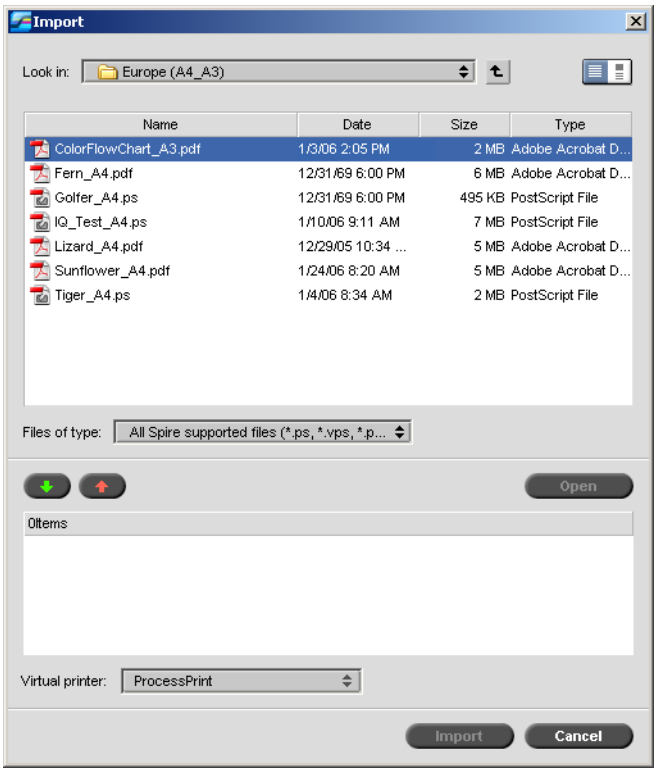
Use the importing feature to submit jobs in the following situations:

- When a page-description language (PDL) file is created on a client workstation that is not connected to the *Spire* CXP50 color server
- When a PDL file is located on an external medium, such as a CD-ROM
- When the desired file resides locally on the *Spire* CXP50 color server

To import a job to the *Spire* CXP50 color server:

1. From the **Job** menu select **Import Job**.

   The Import window appears.



2. To access the desired files, click the **up one level** button , or double-click on the file folders to go down the file tree.
3. In the upper list in the Import window, select the desired file(s) and click the **add** button .

Note: Use SHIFT or CTRL to select several files or CTRL+A to select all the files.

The file(s) appears in the lower list.

4. Select a printer from the **Virtual Printer** list.

Note: To remove a file, select the desired file in the lower list in the Import Job window and click the **remove** button .

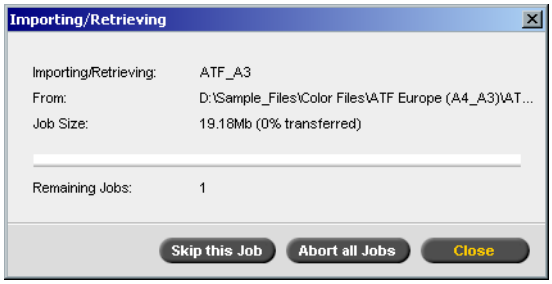
5. Click **Import**.

   All files currently listed on the lower list are sent to the *Spire* CXP50 color server to be processed and printed as defined in the selected virtual printer.

To check the status of imported jobs:

1. Click the **server** icon arrow.

   The Importing/Retrieving window appears.



   The Importing/Retrieving window indicates the name of the file being imported, its location and the job size. It also indicates the percentage of the job already transferred, both numerically and graphically.

2. Select one of the following options:

   - Click **Skip This Job** to stop importing the current file and import the next job in the import queue.
   - Click **Abort All Jobs** to stop importing all the files.
   - Click **Close** to close the Importing/Retrieving window.

Processing

After a job enters the *Spire* CXP50 color server, it goes into the process queue or the Storage window, depending on the job flow. Once the job is in the process queue, the job begins processing.

For more information on the Queues window, see "Managing Job Queues" on page 32.

Printing a Job

Once your job has been successfully processed, it becomes ready to print (RTP). Depending on the designated job flow, the job either moves to the print queue or to the Storage window.

- If your job is moved to the Storage window, submit the job for printing.

  The job is moved to the print queue.

For more information, see "Managing the Storage Window" on page 38.

The print queue lists the job that is currently printing, and all the jobs that were processed successfully and are waiting to be printed.

For more information on the Queues window, see "Managing Job Queues" on page 32.

Once the job is printed it moves to the Storage window.

Reprinting a Job

Submitting an RTP Job Requiring no Changes

- Select the job in the Storage window and from the **Job** menu select **Submit**.

  The job(s) are placed in the print queue.

Note: Use SHIFT or CTRL to select several jobs.

Submitting a Job that Requires Re-RIPing

1. Double-click the job to open the Job Parameters window.
2. Change the desired parameter and click **Submit**.

   The *Spire* CXP50 color server automatically determines if your job needs to be re-RIPed and places it in the appropriate queue.

Managing Job Queues

Batching Jobs

The job-batching workflow combines jobs with similar attributes into a single batch to enable the printer to print the jobs continuously without pausing. This feature saves printing time, especially for a large number of small jobs. Jobs that use paper of the same size and weight are suitable for batching.

When a job enters the print queue, the *Spire* CXP50 color server checks whether the job is suitable for batching with the previous one:

- A job that can be batched appears with the **running** status indicator. The printer prints both jobs without pausing between them.
- A job that cannot be batched with the previous one waits in the queue and appears with the **waiting** status indicator. It is printed only when the printer finishes the previous job.

Note: The *Spire* CXP50 color server batches suitable jobs only if they are consecutive in the queue. Two jobs are not batched if a job that is not suitable comes between them in the queue.

The following types of jobs cannot be combined into one batch:

- Collated jobs and uncollated jobs
- Jobs that use different output trays
- Jobs with different staple positions

Note: The job batching option is active by default.

To deactivate job batching:

➢ In the Settings window, select **Preferences** > **Print Queue Manager** > **Disable Job Batching**.

For more information about job batching, see "Print Queue Manager" on page 192.

Changing the Order of Jobs in the Queues

You can rearrange the jobs in a queue to change the order in which they will be processed or printed. For example, this feature is useful when you have an urgent job that takes priority.

Note: You can only move one job at a time.

To move a job up in the queue:

➢ Right-click the job and select one of the following options:

- **Promote:** to move the job up one step
- **Promote to top:** to move the job to the top of the queue

Note: The job is placed below the **Running** job.

To move a job down in the queue:

➢ Right-click the job and select one of the following options:

- **Demote:** to move the job down one step
- **Demote to bottom:** to move the job to the bottom of the queue.

Suspending and Resuming Queues

If necessary, you can stop a queue temporarily and then later continue its operation afterwards. To do this, use the **suspend** and **resume** buttons.

To suspend a queue:

➢ Click the **suspend** button .

The button turns red (suspend mode), and the processing/printing stops after the current job has finished running.

To resume a queue:

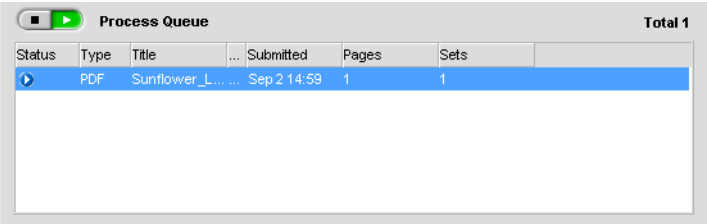
➢ Click the **resume** button .

The button turns green (resume mode), and the top job in the queue starts processing/printing.

Aborting a Running Job

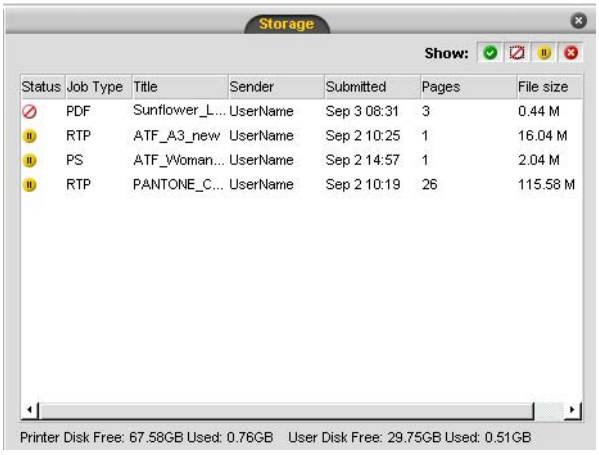
To stop processing or printing a running job:

➢ Right-click the running job in the Queues window, and from the menu, select **Abort**.



The job moves from the queue to the Storage window, and the Job Alert window is updated.

The **Aborted** status is assigned to the job, and the next job in the queue starts running.



Note: To return a job to the proper queue, right-click the job(s) in the Storage window and select **Submit**.

To return a job to the process or print queue:

➢ Right-click the job in the Storage window and select **Submit**.

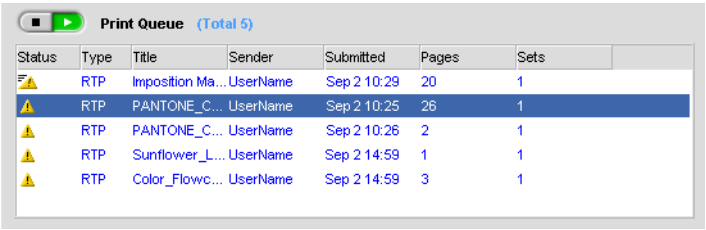
Moving a Job to the Storage Window

To the postpone processing or printing of one or more jobs, use the **Move to storage** option.

To move a job to storage:

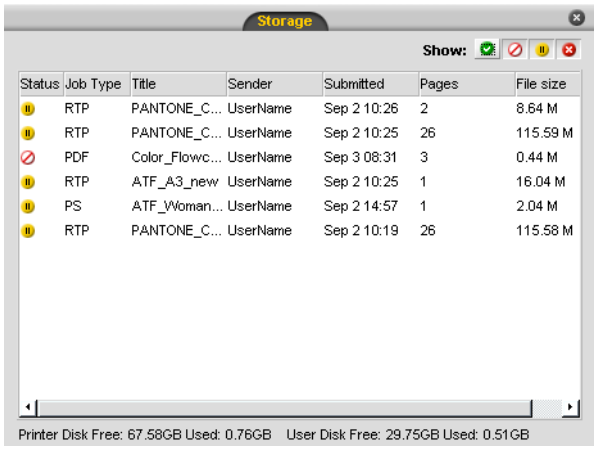
Note: If the job is running, this option is not available.

1. Select the job in the Queues window.



2. Right-click the job, and select **Move to storage**.

   The job moves from the queue to the Storage window, and appears with the **held job** indicator .



To return a held job from the Storage window to its original queue:

➢ Right-click the job, and from menu select **Submit**.

The job moves from the Storage window to the queue.

Viewing and Editing Job Parameters

➢ In the Queues or Storage window, double-click the job whose parameters you want to view.

The Job Parameters window appears.

Notes:

- In the Queues window, you can edit the parameters of jobs that have not begun to run. If you want to edit the parameters of a running job, you must first suspend the queue (click the suspend button).
- If you edit the parameters in of a job in the print queue and the changes require re-RIPing of the job, it automatically moves to the process queue.

For more information on the Job Parameters window, see "Setting Parameters in the Job Parameters Window" on page 214.

Running a Rush Job

When you have an urgent job, you can run it before other jobs. If you submit a job for processing while another job is being processed, the latter job pauses temporarily but retains its running status. When the rush job finishes processing and moved to the print queue, the processing of the paused job continues.

If you submit a rush job for printing while another job is being printed, the latter job pauses temporarily after the current page (both sides) or set is printed but retains its running status. When the rush job finishes printing, the printing of the paused job continues.

Note: Only one job can be processed or printed at a time. Therefore, if you select several jobs (one after the other) as rush jobs, they will be processed/printed in the order of their selection.

To submit a rush job:

Note: You can only perform this action if the job is waiting in the queue. If the job is active, this option is not available.

- In the Queues or Storage window, right-click the job, and select **Run Immediately.**

  The job appears with the **rush** status indicator  at the top of the appropriate queue and runs immediately.

Deleting a Job

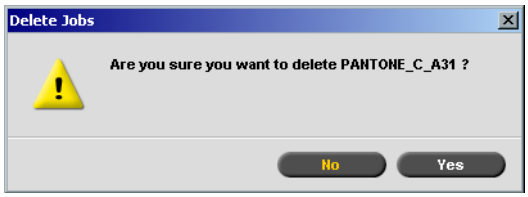
Deleting a job from the process queue, print queue, or Storage window, permanently removes the job from the *Spire* CXP50 color server. Thereafter, to print the job, you must resubmit it to the *Spire* CXP50 color server for processing. To temporarily remove a job from a queue, use the **Move to storage** option (see “Moving a Job to the Storage Window” on page 35).

To delete a job:

Note: You can only perform this action if the job is waiting in the queue. If the job is running, this option is not available.

1. Right-click the desired job in the queue or Storage window, and select **Delete**.

   The following message appears.



2. Click **Yes**.

   The selected job(s) is deleted.

Note: You can delete more than one job at a time: select the jobs, and from the **Job** menu, select **Delete**.

Managing the Storage Window

Submitting a Job

To submit a job in the Storage window:

➢ In the Storage window, right-click the job, and select **Submit**.

RTP jobs are submitted to the print queue; all other jobs are submitted to the process queue.

Duplicating a Job

To duplicate a job:

1. In the Storage window, right-click the job and select **Duplicate**.

   A warning message appears.

2. Click **Yes** to continue.

   The selected file is duplicated and is given the name of the original job followed by the suffix **_dup**.

Note: Duplicating an RTP job creates a PDL version of the job.

Discarding RTP Information

The RTP information can be discarded if desired. Under some circumstances, it is necessary to discard RTP data—for example, when you want to re-RIP a file, archive a job without the RTP information, or edit tabs.

For more information on editing tabs, refer to the Tabs Printing guides.

To discard RTP information from a job:

- In the Storage window, right-click the relevant job and select **Revert to source**.

  The RTP data is discarded and the file returns to its original format—for example, *PostScript*.

Archiving and Retrieving a Job

To keep enough disk space free, we recommend that you back up jobs and their related files to an external server and then delete them from the Storage window.

This backup process is called archiving. You can retrieve archived jobs and related files later for further use.

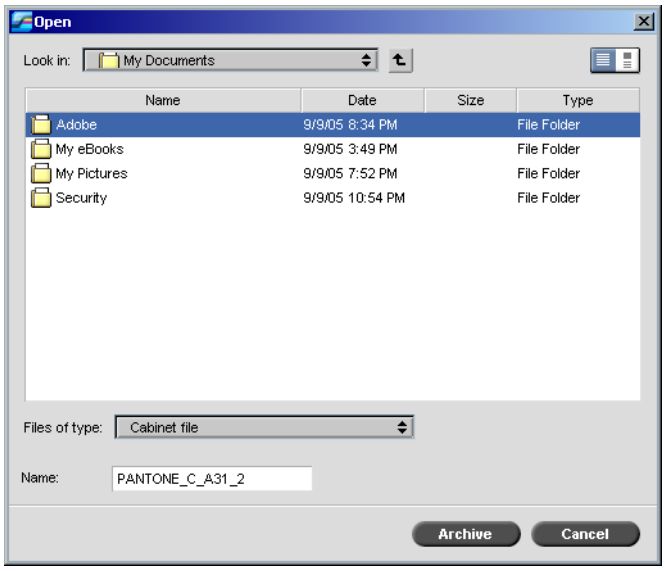
You can set a default archiving path that will automatically be displayed in the Open dialog box when you select **Archive** from the **Job** menu. Set this path in the Settings window under **Preferences** > **General Defaults**.

If a job includes VI elements, you need to archive or retrieve the VI elements before archiving or retrieving the job. For more information on archiving or retrieving VI elements, see “Managing VI Elements” on page 164.

To archive a job on an external server:

1. In the Storage window, right-click the job you want to archive and select **Archive**.

   The Open dialog box appears.



2. Locate the desired folder, and then click **Archive**.

   A cabinet file (a compressed file) that contains all the files related to the archived job is created at the selected location.

Notes:

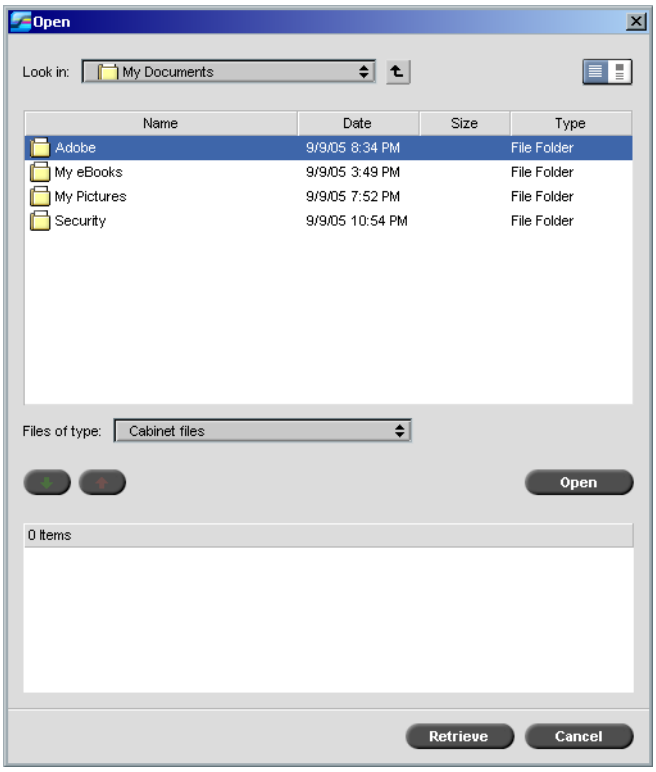
- The archived job retains its current status (that is, completed, failed, held, or aborted) and is archived with the information in its Job Parameters and Job History windows.
- When retrieved, the archived job retains the original job name, not the name assigned when archived.

3. In the Job Alert window, verify that archiving has been completed.
4. Delete the job from the Storage window.

To retrieve an archived job:

1. From the **Job** menu, select **Retrieve from Archive**.

   The Open dialog box appears.



2. Locate the archived job under its archive name, select the related cabinet file, and click **Open**.

   The selected job appears at the top of the list in the Storage window. It is assigned the status indicator (**completed**, **held**, **failed**, or **aborted**) that is had before archival.

Notes:

- You can retrieve more than one job at a time.
- The files related to the job (for example, PDL) are also retrieved.
- The job is retrieved with the information in its Job Parameters and Job History windows.
- The cabinet file is not deleted.

3. In the Job Alert window, verify that the file has been successfully retrieved.

Viewing a Job's History

➢ In the Queues or Storage window, right-click the job and select **Job History**.

The Job History window appears.

For more information about the Job History window, see "Job History" on page 202.

Job Ticket Report

The Job Ticket report contains all information from the Job Parameters window (including Job Parameters window title bar data). The Job Ticket report presents the job parameters on a single sheet and may be exported or printed as a hard copy.

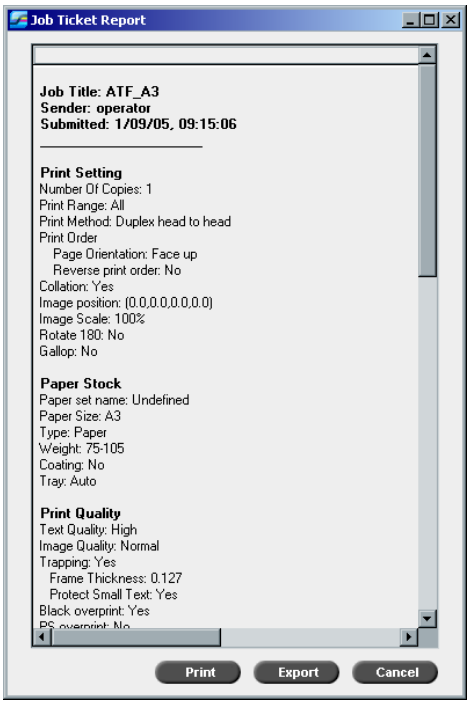
This feature is useful for:

- Making the job information available in case of customer query.
- Saving the job parameters for future use.
- Providing the client or customer a tool for following up printed jobs.

To display the job ticket report:

1. Right-click a job in the Storage window, and from the menu select **Job Ticket Report**.

   The Job Ticket Report window appears.



2. You can export or print the report by clicking **Print** or **Export**.

   The Job Ticket Report is exported as a text file.

Editing a Job

You can preview and edit jobs in two ways in the *Spire* CXP50 color server:

- Before processing, use the Enfocus PitStop Edit software for *Adobe Acrobat* software. See “Editing an Unprocessed Job” on page 44.
- After processing, use the *Spire* CXP50 color server Job Editor. See “Editing a Processed Job” on page 44.

Editing an Unprocessed Job

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

The PitStop Edit software enables you to:

- View and change an object's properties—for example, color properties
- Create action lists, which you can use to automate repetitive tasks

To edit your job using PitStop Edit:

1. In the Storage window, right-click the job and select **Job Preview&Editor.**

   Note: The job must be a PDF or *PostScript* file. For information on editing processed jobs, see "Editing a Processed Job", below.

   Your file opens in *Adobe Acrobat*.

2. Use the PitStop Edit software to edit your job as desired.

Tip: To familiarize yourself with the PitStop Edit software functions, refer to the PitStop Edit documentation (**C:\Program Files\Adobe\Acrobat\plug-ins\Enfocus\Documentation\PitStop Manual.pdf**).

Editing a Processed Job

The Job Preview & Editor window enables you to preview and edit RTP jobs before printing them. You can use the Job Preview & Editor window to insert, move, or delete pages. While you navigate to the various pages of a job, you can view thumbnails of the job. For an imposed job, you can view the imposed sheets, including the layout of the pages on each sheet. You can also view the pages' orientation, crop marks, and fold marks.

To open the job editor:

➢ In the Storage window, right-click an RTP job that you want to preview, and select **Job Preview&Editor.**

The Job Preview & Editor window appears, displaying the first page of the selected job.

Navigating in the Job Editor

The navigation buttons enable you to select a specific booklet or page to view, and to browse through the pages of the current job.

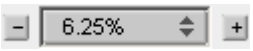
Note: When the first page of a booklet is in view, the **previous page** navigation button takes you to the previous booklet. When the last page of a booklet is in view, the **next page** button takes you to the next booklet.

Previewing a Job

The preview buttons enable you to switch the display mode of the page.

Table 8: Preview Buttons

This button	Enables you to:
Pan	View a different area of the image
Eye Dropper	Find out the CMYK values of a specific area on the page. To find the values, first click the **Eye dropper** button. Then move the pointer to the point on the page where you want to measure the color values, and click. The CMYK values appear briefly near the pointer.
Zoom In	Increase the magnification of the selected area by 100%
Zoom Out	Reduce the magnification of the selected area by 50%
One to One Zoom	View the page at a resolution of one screen pixel to one image pixel
Fit to Screen	Scale the page to fit the available screen space

This button	Enables you to:
	View the image at different preset levels of magnification by selecting a percentage in the list
 **Rotate View**	Rotate the page by 90°, 180°, and 270°
 **Show/Hide Separation**	Select the separations that you want the gradation graph to show

Viewing a Page in the Job Editor

The Job Preview & Editor window has three tabs—**Booklets**, **Thumbnails**, and **Imposed Sheets**—which enable you to switch views.

Using the Booklets Tab

The **Booklets** tab displays the booklets included in the selected job and the names and numbers of the pages in each booklet. The **Booklets** tab opens by default when you are previewing an RTP job that has not been imposed.

To view a page on the booklets tab:

➢ In the left pane of the **Booklets** tab, double-click the name of the page that you want to view.

The page is displayed in the right pane.

Using the Thumbnails Tab

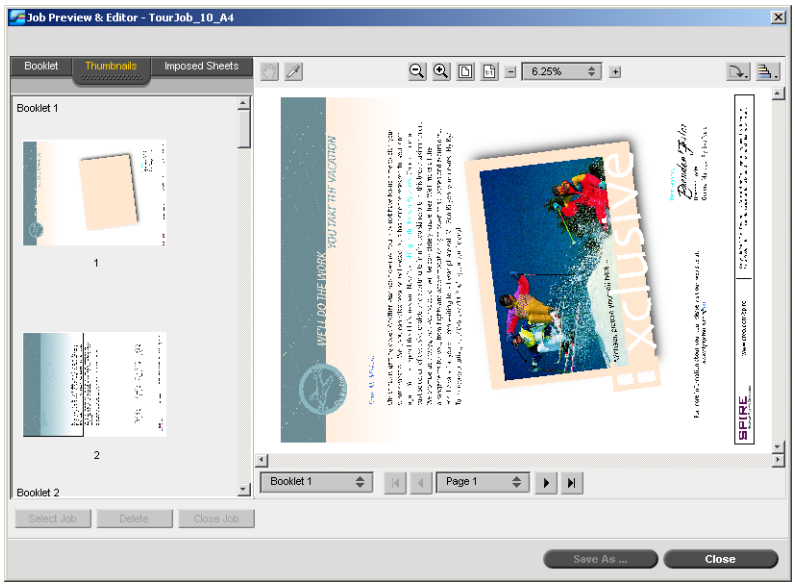
The **Thumbnails** tab displays miniature views ("thumbnails") of each page in the selected booklet. These thumbnails enable you to find a specific page easily.

To view a page on the Thumbnails tab:

1. Click the **Thumbnails** tab.

   Miniature versions of the pages appear on the left side of the tab, in the thumbnail pane.

2. Use the scroll bar to move from one page to the next.



3. To view the thumbnails side by side, resize the thumbnail pane by dragging the bar that divides the panes to the right.
4. Double-click the thumbnail of the page that you want to view.

   The page is displayed in the right pane.

Using the Imposed Sheets Tab

The **Imposed Sheets** tab is available only for imposed RTP jobs. This tab enables you to view the imposed sheets and check your imposition parameters. You cannot edit a job on this tab.

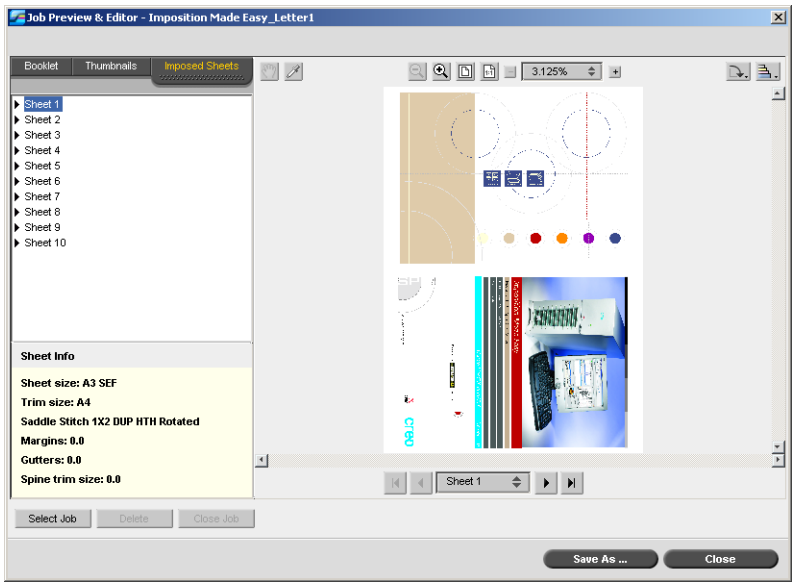
Notes:

- In VI jobs, the booklet number appears instead of the sheet number—for example, **Booklet 1**, **Page 15**.
- In duplex jobs, each sheet is displayed twice, once for side A and once for side B—for example, **Sheet 1**, **Side A**.

To display a page of an imposed job:

1. Click the **Thumbnails** or **Booklets** tab.
2. Select the desired thumbnail or page.
3. Click the **Imposed Sheets** tab.

   The selected page of the imposed job appears.



4. To edit the job, click the **Booklets** or **Thumbnails** tab.

Note: If you edit an imposed RTP job and then return to the **Imposed Sheets** tab, the view is updated according to the applied changes.

Editing an RTP Job

You can edit an RTP job in the following ways:

- Move pages within the job
- Delete pages from the job
- Insert pages from another job

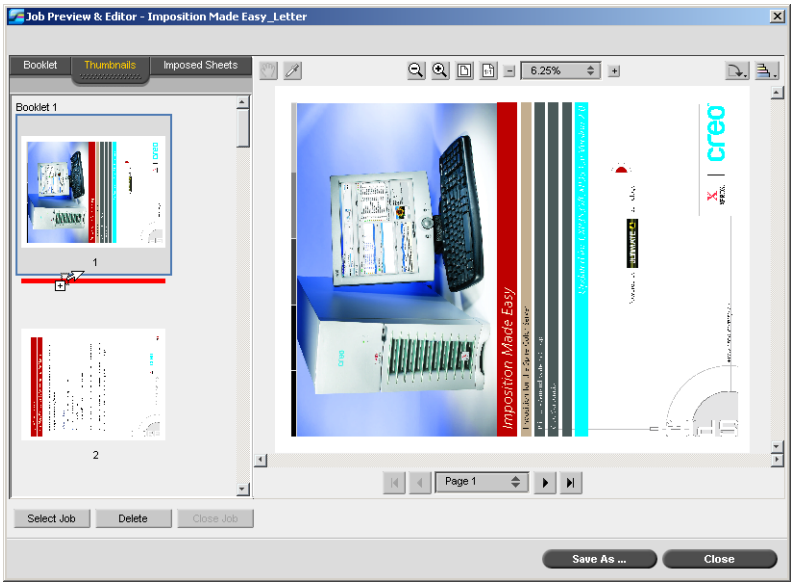
Note: Jobs that you edit in the Job Editor cannot be re-RIPed. Once you save a job in the Job Editor, it becomes a new RTP file without an associated PDL file. You cannot apply parameters that require re-RIPing to such jobs.

To move a page in a job:

1. Click the **Thumbnails** tab.
2. In the thumbnail pane, click the page that you want to move.

3. Drag the page to the target location.

Note: The red line indicates where the page will be inserted.



The page moves to the selected location, and the page numbers are updated accordingly.

4. Click **Save As** to save the changes in the job.

To delete a page from a job:

1. Select the page that you want to delete, and click **Delete**.

   The page is deleted, and the page numbers are updated accordingly.

2. Click **Save As** to save the changes in the job.

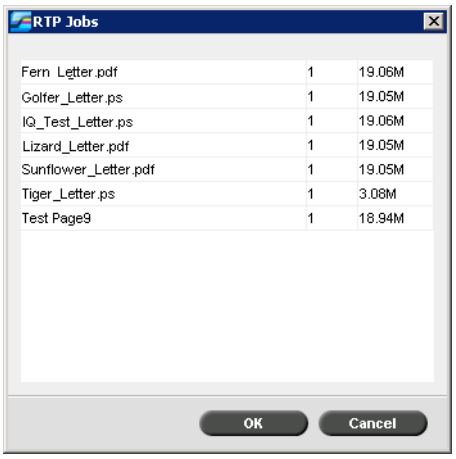
Inserting Pages Into a Job

You can copy pages from one job and insert them into another.

To insert one page into a job:

1. Click **Select Job**.

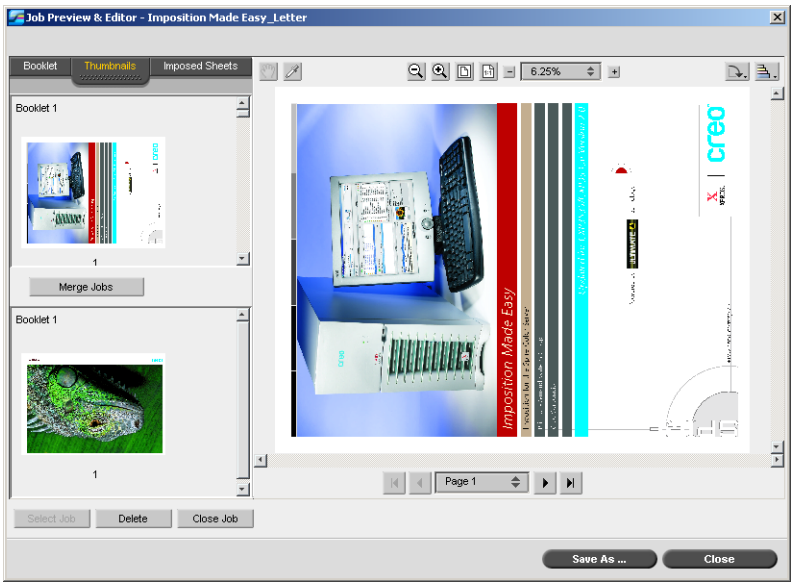
   The RTP Jobs window appears.



Note: The *Spire* CXP50 color server displays only those RTP jobs that have the same page size and orientation as the job that you are editing.

2. Select the job with the page that you want to copy, and click **OK**.

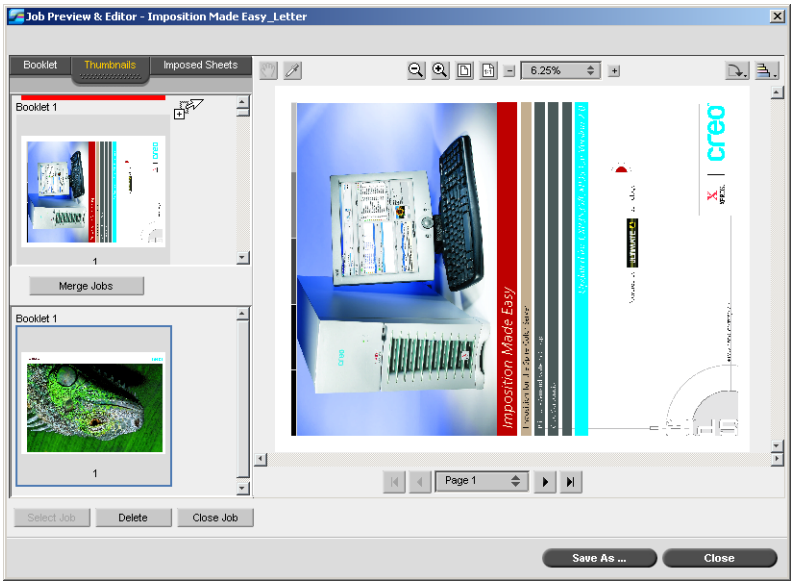
   On the **Thumbnails** tab, the left pane splits into two. The thumbnails of the second job appear below those of the job you are editing.



3. In the lower set of thumbnails, locate the page that you want to copy.

4. Drag the page to the upper set of thumbnails, to the desired location in the job that you are editing.

Note: The red line indicates where the page will be inserted.



The copied page is inserted in the desired location, and the page numbers are updated accordingly.

5. Click **Save As** to save the changes in the job.

To copy all the pages of a job into another job:

1. Follow steps 1-4 in the procedure for copying a page into a job (see page 50).
2. Click the **Merge Jobs** button.

All the pages of the second job that you opened are inserted at the end of the job that you are editing.

3. Click **Save As** to save the changes in the job.

Managing Virtual Printers

The *Spire* CXP50 color server provides three default network printers, also known as virtual printers. Virtual printers are a function used for automating workflows, which then define job streaming. They contain preset workflows that are automatically applied to all print jobs processed with that virtual printer. There is no need to reset job settings for each job, thus increasing printing efficiency.

A virtual printer is a printer published on the network with specific parameters set for processing and printing on the *Spire* CXP50 color server. The *Spire* CXP50 color server contains a mechanism that automatically installs the published virtual printers on your client workstation with the PPD and suitable printer driver.

The *Spire* CXP50 color server is predefined with three virtual printers:

- **ProcessPrint**
  Files sent to this printer are automatically processed and immediately sent to print from the *Xerox* DocuColor 5000 digital press.
- **ProcessStore**
  Files sent to this printer are automatically processed and stored in RTP format in the Storage window. Later, you can submit the job to print, or change the parameters of the job and resubmit it for processing or printing.
- **SpoolStore**
  Files sent to this printer are automatically stored in the Storage window until the you submit them for processing and printing. You can only import PDL files (such as: PS, PDF, VIPP, VPS) to the spool store, not RIPed, RTP files.

Note: The print-related job parameters that are set in the job from the driver or PPD override the parameters set in the virtual printer.

The **Printer Default** options defined in the PPD use the default parameters set for the chosen virtual printer.

Adding a new printer

When adding a new virtual printer, you can specify if it is published on the network and if the virtual printer parameters will override the PPD parameters.

In addition, based on predefined paper sets, you can specify that a virtual printer supports dynamic page exceptions and select the desired paper sets (up to four paper sets for each virtual printer). A job that has embedded dynamic page exceptions commands, and is submitted for print using a dynamic page exceptions virtual printer, is printed using the defined paper sets.

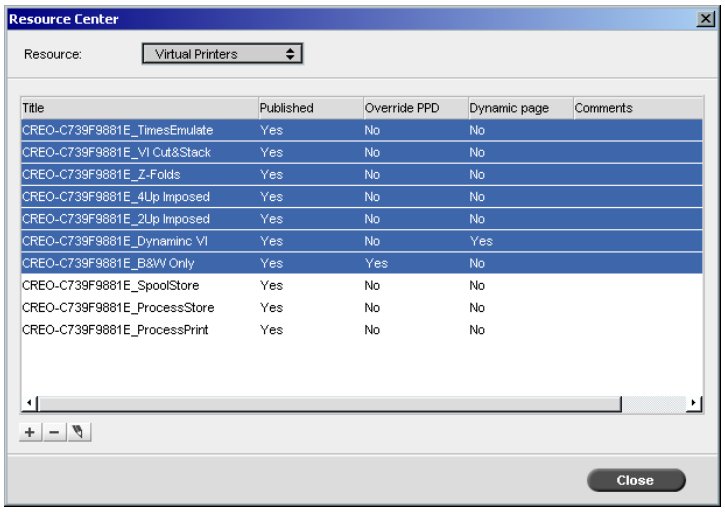
Note: Dynamic page exceptions are supported only in the *Spire* CXP50 color server with the Professional Kit.

To add a new printer:

1. From the **Tools** menu, select **Resource Center**.

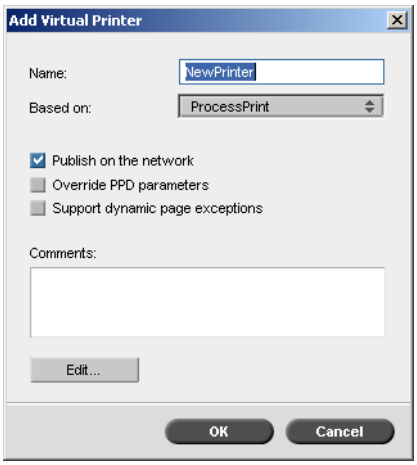
   The Resource Center window opens.

2. From the **Resource** list, select **Virtual Printers**.



3. Click the **Add** button  .

   The Add New Virtual Printer dialog box appears.



4. In the **Name** box, type a name for the new printer you want to add.
5. From the **Based on** list, select an existing printer.
6. In the **Comments** box, type any comment regarding the virtual printer parameters (optional).
7. The **Publish the printer on the network** check box is selected by default. Clear the check box if you do not want to publish the printer on the network.
8. Select the **Override PPD parameters** check box if you would like the Virtual Printer settings to override the PPD parameter selection.
9. If you would like this printer to support dynamic page exceptions, select the **Support dynamic page exceptions** check box.

For more information about dynamic page exceptions, see "Dynamic Page Exceptions" on page 94.

10. Edit the job parameters of your new virtual printer (see "Editing an Existing Printer").

Note: If you don't edit the Job Parameters, the settings of the new virtual printer are taken from the printer on which it was based.

11. Click **OK** in the Add New Virtual Printer dialog box.

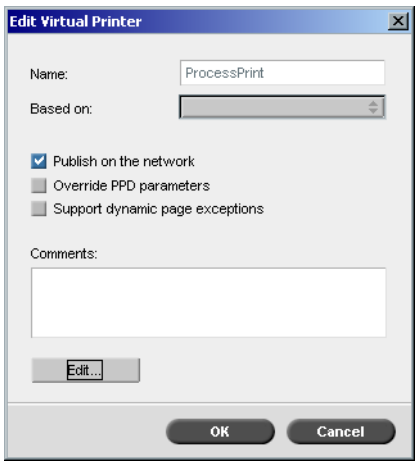
    The new printer appears in the **Printer** list.

Editing an Existing Printer

To edit an existing printer:

1. In the **Virtual Printers** area, select a printer from the list and click the **Edit** button .

   The Edit Virtual Printer dialog box appears.



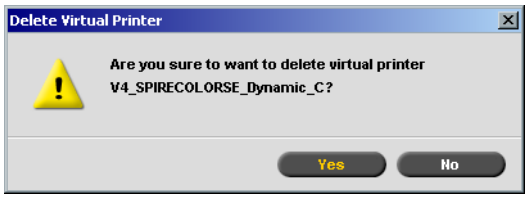
2. Click **Edit.**

   The Job Parameters window appears.

3. Select the desired parameters and change their settings according to your requirements.
4. Click **OK** to return to the Edit Virtual Printer dialog box.
5. Click **Save** to save the new settings.

Deleting an Existing Printer

1. In the Virtual Printers window, select a printer from the list and click the **Delete** button .



2. In the message that appears, click **Yes** to delete the designated printer.

Managing Paper Sets

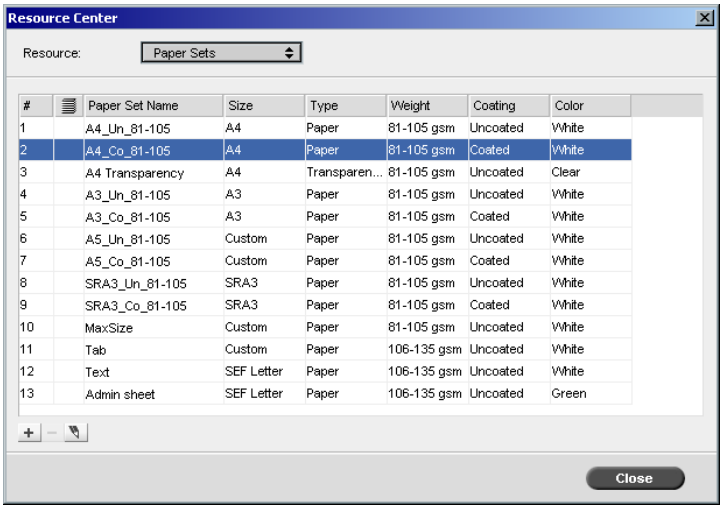
The *Spire* CXP50 color server is provided with predefined paper sets for your convenience. These paper sets cannot be removed but they can be modified. In addition, you can add, modify or remove custom paper sets according to your requirements.

To add a new paper set:

1. From the **Tools** menu, select **Resource Center**.

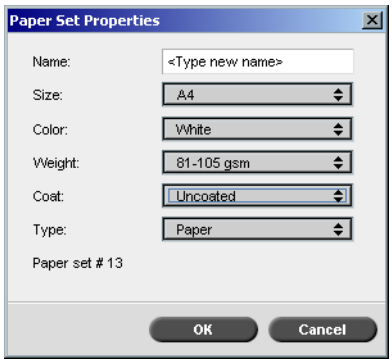
   The Resource Center window opens.

2. From the **Resource** list, select **Paper Sets**.



3. Click the **Add** button  .

   The Paper Set Properties window appears.



4. Enter the following parameters:
   - **Name:** enter the new paper set name. It is recommended that the name is as descriptive as possible—for example, **Letter90gsmuncoat**.
   - From the **Size**, **Color**, **Weight**, **Coat** and **Type** lists, select the desired properties for the new paper set.
   - If you have enabled the custom paper function, map the paper set to a **Custom Profile**.

Note: You can set up to ten custom profiles.

For information on enabling the custom paper function, see "General Defaults" on page 190.

5. Click **OK**.

To modify a paper set:

1. In the Paper Set window, select the paper set you would like to modify.
2. Click the **Edit** icon .

   The Paper Set Properties window appears.
3. Modify the desired properties of the paper set.
4. Click **OK**.

To delete a paper set:

1. In the Resource Center window, with the **Paper Sets** option selected, select the paper set you would like to delete.

2. Click the **Remove** icon  .

   The Paper Set is deleted.

Note: The system predefined paper sets can't be deleted.

4 Printing From Your Computer

Overview

To print a job from a client workstation, select one of the following methods:

- Print the job via one of the *Spire* CXP50 color server network (virtual) printers—for example, **ProcessPrint**.
  The job is spooled and then processed or printed (according to the selected job flow of the virtual printer). If you use this method, you can print from any software—for example, *Microsoft* Word— and use any file format from any client workstation (*Windows*, *Macintosh*, or *UNIX*).
- Drag the job to a hot folder.
  The job is spooled and processed or printed (according to the selected job flow of the corresponding virtual printer).

For more information about hot folders, see "Using Hot Folders" on page 76.

If you use the hot folder method, you can print most PDL files on the *Spire* CXP50 color server— for example, *PostScript*, PDF, EPS, Variable Print Specification, and VIPP files.

Note: PDL jobs that are spooled to the *Spire* CXP50 color server must have the appropriate file name extensions—for example, *.ps or *.pdf.

Working From Windows Client Workstations

The *Spire* CXP50 color server can print from a *Windows* client workstation that has one of the following operating systems:

- *Windows* 98, *Windows* ME
- *Windows* NT 4.0, *Windows* 2000, *Windows* XP

As an example, the following section describes how to define a *Spire* CXP50 color server network printer for a client workstation with a *Windows* XP Professional operating system.

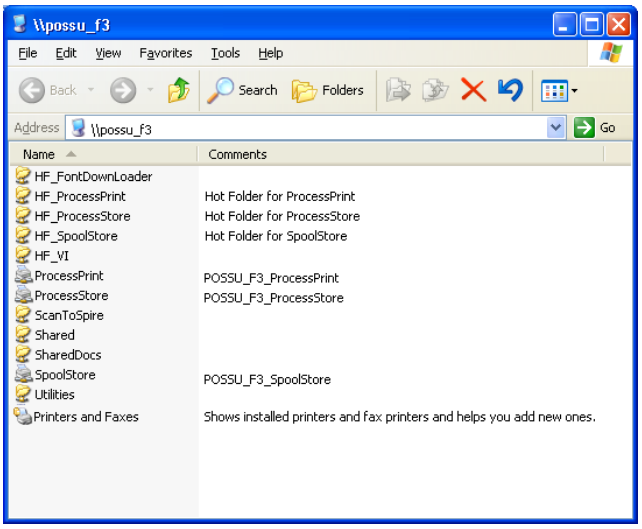
Defining a Printer - Windows XP

Use the *Windows* Add Printer wizard to define the *Spire* CXP50 color server network printers.

Note: When you add a new *Spire* CXP50 color server network printer to a client workstation, there is no need to install the *Spire* CXP50 color server PPD file and *Adobe PostScript* printer driver separately. They are installed automatically in the *Windows* Add Printer wizard.

To define a network printer in Windows XP using the network neighborhood:

1. On the desktop, double click **My Network Places** and browse to the desired network printer.



2. Double-click on the network printer icon.

   The network printer is defined on your *Windows* client workstation.

Copying the Printer Driver from Windows

Perform this procedure if you need to create *PostScript* files from workstations that are not on the same network as the *Spire* CXP50 color server—for example, at customer sites.

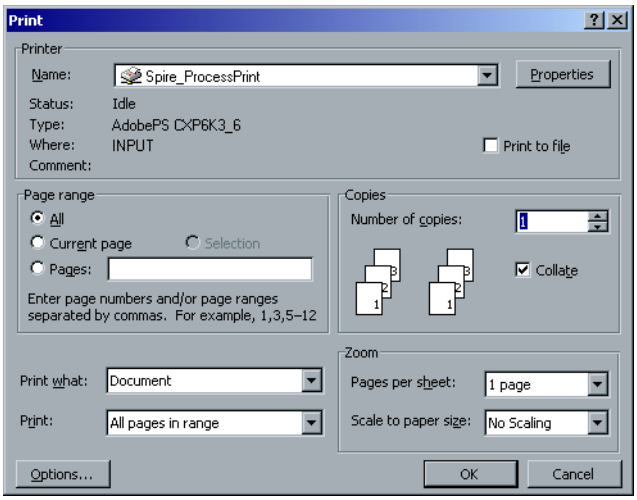
1. On the *Spire* CXP50 color server **D:** drive, double-click the **Utilities** folder.
2. Click **PC Utilities**, and then **Printer Driver**.
3. Find the directory of the driver relevant to your version of *Windows*.
4. Using a compression utility, such as *WinZip*, compress the directory, and either copy it to a disk or send it by email to the customer.

Printing From Windows

1. Open the file you would like to print in the corresponding software—for example, open a PDF file in *Adobe Acrobat*.
2. From the **File** menu, select **Print**.

   The Print window appears.
3. From the **Name** list, select the desired *Spire* CXP50 color server network printer—for example, **Spire_ProcessPrint**.

For more information about installing *Spire* CXP50 color server network printers on client workstations, see "Working From Windows Client Workstations" on page 62.



4. If desired, click the **Properties** button and modify the job parameters.

Notes:

- Unless the **Override PPD Parameters** option was selected in the virtual printer, any changes to the printer parameters override the parameters of the selected virtual printer.
- **Printer's Default** indicates that the value is taken from the settings of the selected virtual printer on the *Spire* CXP50 color server.

5. Click **OK**.
6. Click **OK** in the Print window.

   The file is sent to the *Spire* CXP50 color server.

Working From Macintosh Client Workstations

The *Spire* CXP50 color server can print to *Macintosh* client workstations running Mac OS 9 and Mac OS X (10.x).

As an example, the following section describes how to define a *Spire* CXP50 color server network printer for a *Macintosh* client workstation running Mac OS X.

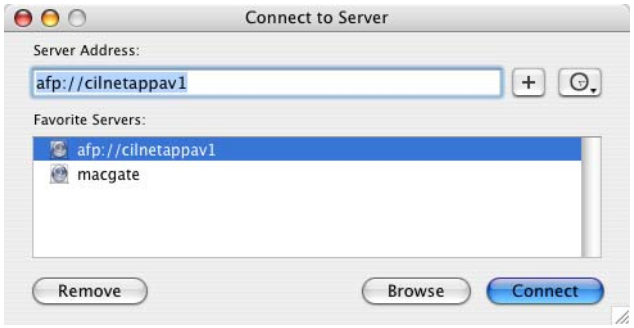
You can also submit jobs using the *Spire* CXP50 color server virtual printers over a TCP/IP protocol. This connection enables a significantly higher spooling speed.

Copying the Spire CXP50 Color Server PPD File for Mac OS X (10.4)

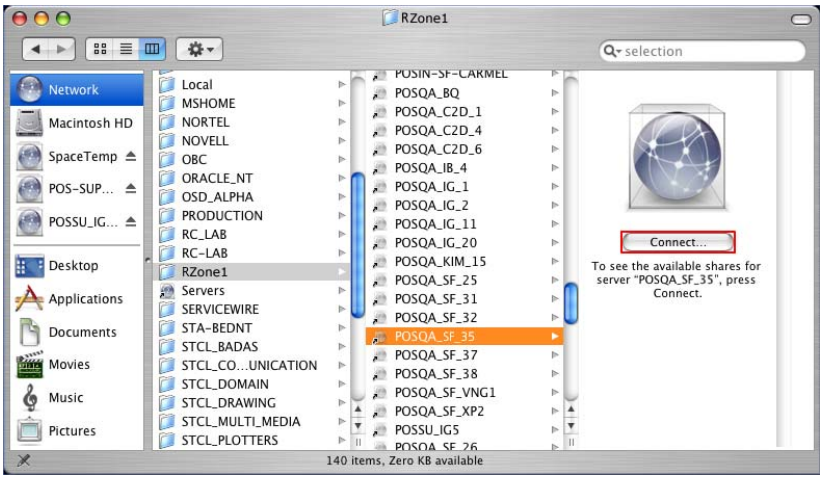
Before you define a network printer you need to install the *Spire* CXP50 color server PPD file on your *Macintosh* client workstation.

1. From the **Go** menu, select **Connect to Server.**

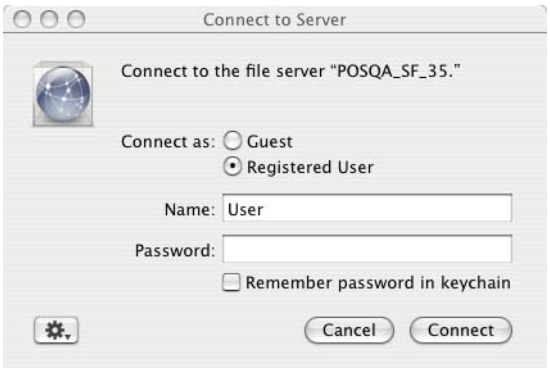
The Connect to Server window appears.



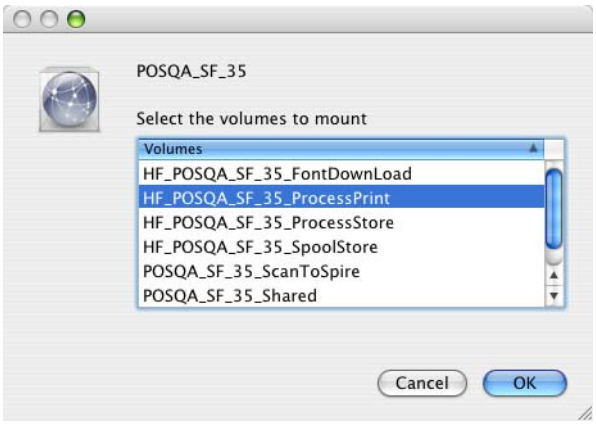
2. Click **Browse** to locate the desired *Spire* CXP50 color server, and then click **Connect**.



The Connect to Server window appears.



3. Select **Guest**, and then click **Connect**.



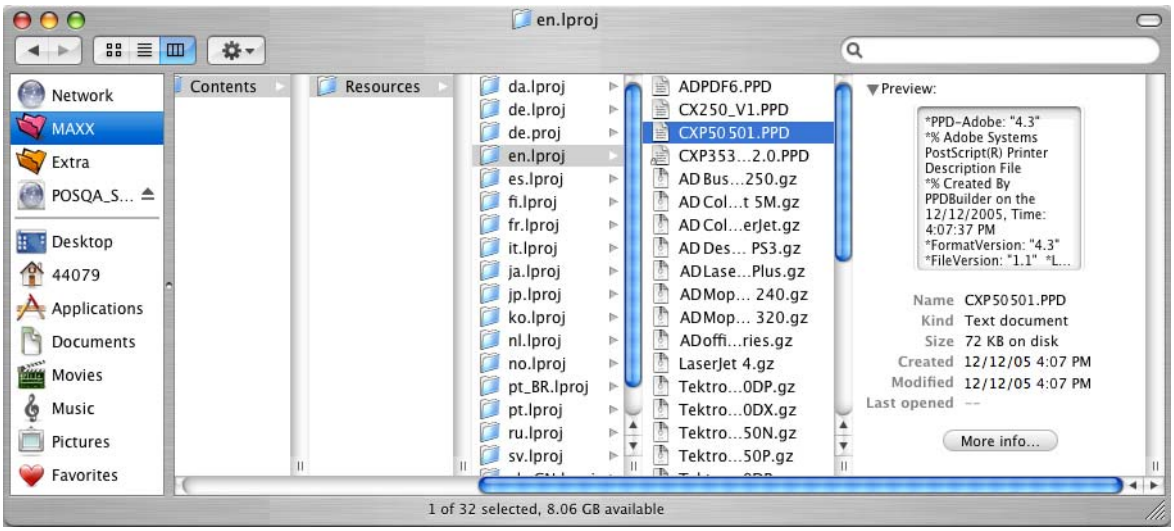
4. Select the server **Utilities** folder, and then click **OK**.

   The **CXP50_Utilities** folder is mounted on your desktop.

5. Double-click the **CXP50_Utilities** folder on your desktop.

6. Double-click the **PPD** folder, and then double-click the folder for the desired language.

7. Copy the PPD file from the *Spire* CXP50 color server to your *Macintosh* hard disk.



Tip: It is recommended that you copy the PPD file by dragging it from the *Spire* CXP50 color server to the **Library** > **Printers** > **PPDs** > **Contents** > **Resources** > **en.lproj** folder on your *Macintosh*.

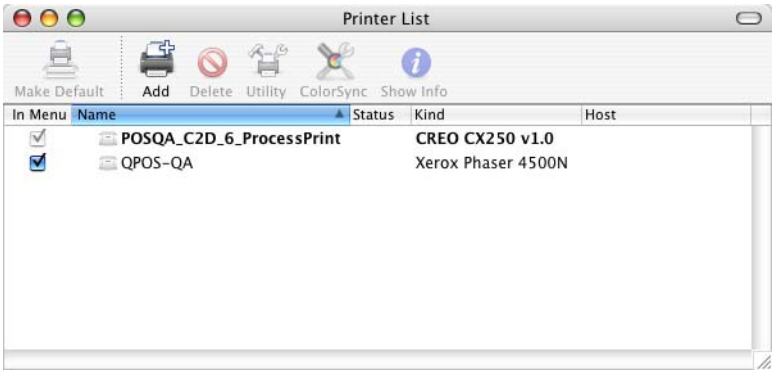
Setting the Network Printer for Mac OS X (10.4)

1. Copy the *Spire* CXP50 color server PPD file to the **Library** > **Printers** > **PPDs** > **Contents** > **Resources** > **en.lproj** folder on your client workstation.

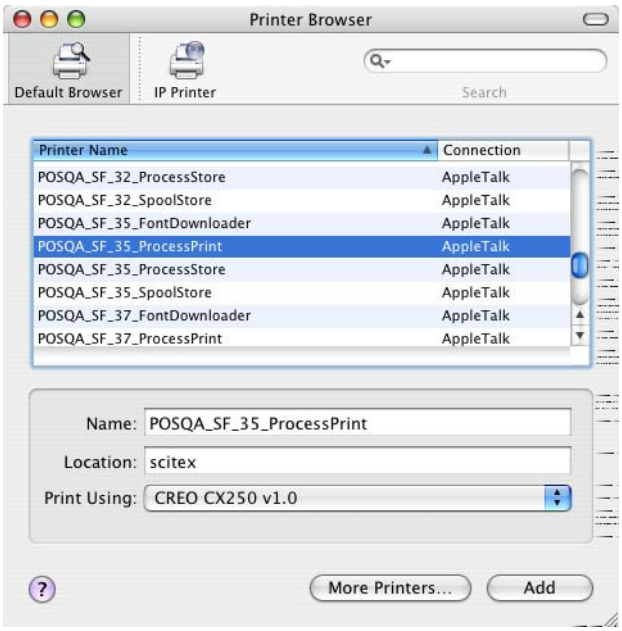
   For more information about copying the PPD file, see "Copying the Spire CXP50 Color Server PPD File for Mac OS X (10.4)" on page 66.

2. From the **Go** menu, select **Applications**.

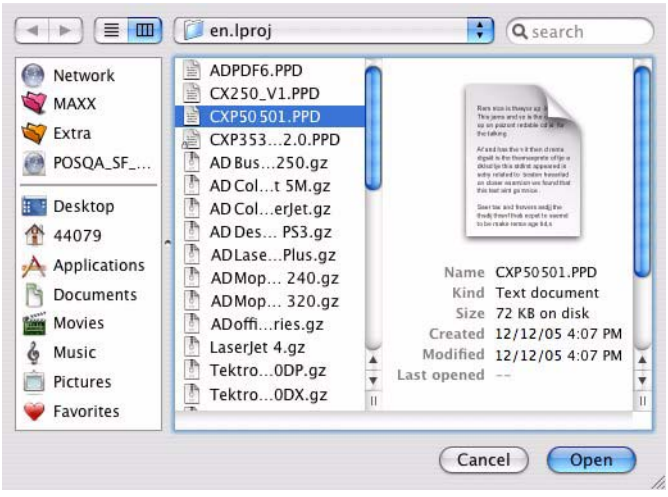
3. Open the **Utilities** folder and double-click the **Printer Setup Utility** icon.



4. Click **Add**.

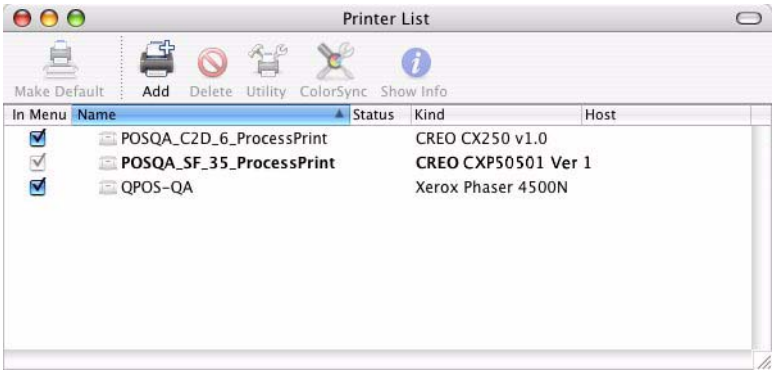


5. Select the *Spire* CXP50 color server.
6. In the **Print Using** list, select **Other.**
7. Locate the folder to which you have copied the PPD file, and then select the file.



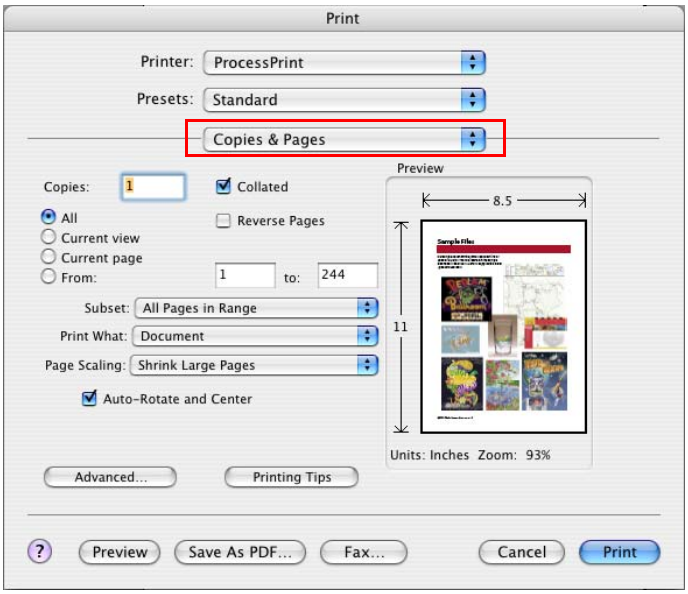
8. Click **Open** to assign the PPD file to the selected *Spire* CXP50 color server network printer.

9. Click **Add** to add the new printer to the printer list.



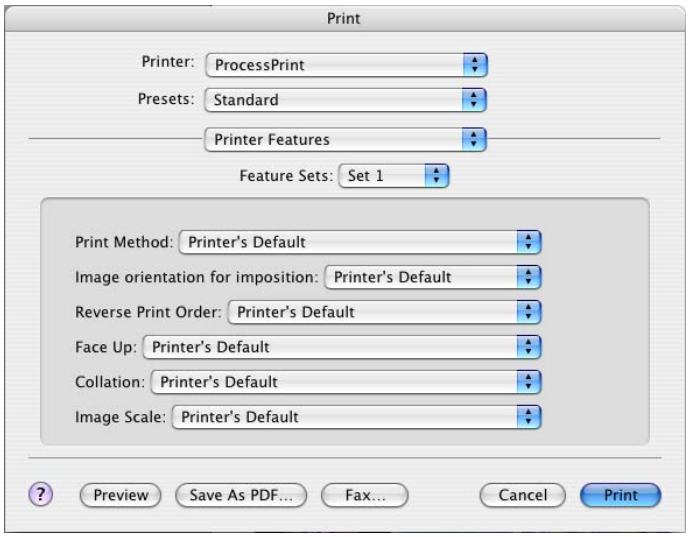
Printing from a Macintosh

1. Open the file you would like to print in the corresponding application—for example, open a *Quark* file.
2. From the **File** menu, select **Print.**



3. From the **Printer** list, select the desired printer.

4. In the **Copies & Pages** list, select **Printer Features.**



5. Adjust the printer options as desired.

Notes:

- The **Printer's Default** option indicates that the value is taken from the published printer that is currently selected.
- The PPD parameters are divided into five **Printer Specific Options** in the list.

6. After modifying the job settings, click **Print.**

   The file is sent to the *Spire* CXP50 color server.

Spire Web Center

The *Spire* web center is an internet site that provides *Spire* information and can be accessed from client workstations.

The *Spire* web center enables you to:

- View the status of jobs in the *Spire* queues, the Job Alert window in its current state, and the printer system information
- Download remote client tools, utility software, color profiles, and print drivers
- View *Spire* related documentation, such as release notes, *Spire* guides, frequently asked questions and answers, and other troubleshooting information
- Find links to related vendors or products

To connect to the web center from a client workstation:

Important: To connect to the *Spire* Web Center from a client workstation, you must first enable the web connect service on the *Spire* CXP50 color server. To enable this service, select the Settings window > **Administration** > **Remote Tools Setup**.

For more information about setting up the web connect service, see "Remote Tools Setup" on page 178.

1. On your desktop, click the **Internet Explorer** icon.
2. When the Internet Explorer starts, in the address field type: http://<spire name>—for example, if the *Spire* station name is FALCON_E, type http://FALCON_E.

Note: You can also use the *Spire* color server IP address—for example, http://192.168.92.0.

Important: If you would like to connect to the *Spire* CXP50 color server from a *Macintosh* client workstation, contact your system administrator to add the *Spire* name to the DNS. This is required since *Windows* name resolution protocols are not supported in *Macintosh*. The DNS addition is required when clients go through a main server on the network.

The *Spire* CXP50 color server web center appears.

The Web Viewer

The Web Viewer page enables you to view the printer configuration and system information, the jobs that currently reside in the *Spire* CXP50 color server Queues window and Storage window, and to view the alerts that currently appear in the Job Alert window. This information is important when you print from a client workstation because it enables you to monitor your jobs in the queues and then make any necessary changes.

In addition, if you have a system that uses XML protocol, you can retrieve information about the job list and printer status.

Table 9: Description of tabs in the Web Viewer

This tab	Enables you to view
Queues	Jobs that are currently running in the *Spire* CXP50 color server print and process queues
Storage	*Spire* CXP50 color server Storage window and the jobs that reside in this window
Alerts	The *Spire* CXP50 color server Job Alert window messages. For example, if a job that you sent to print from your client workstation has failed—you can view the message in the Job Alert window, edit the job parameters (PPD file), and then resend it for processing and printing on the *Spire* CXP50 color server.
Printer	*Spire* CXP50 color server system information

Web Viewer API

The **JobList.xml** file and the **Printer Status.xml** file enable you to retrieve information about the job list and the printer status.

The **JobList.xml** file contains information about files in the **Print Queue**, **Process Queue**, and the Storage window.

To see the Job List view, type the following path:
http://<ComputerName>/WebViewer/GetView.asp?View=JobList_xml.

The **Printer Status.xml** file contains information about the various printer states. To see the Printer State view, type the following path:
http://<ComputerName>/WebViewer/GetView.asp?View=PrinterStatus_xml.

Downloads

The **Downloads** page enables you to access the *Spire* CXP50 color server **Utilities** folder and download available tools and files for *Windows* and *Macintosh* client workstations—for example, the *Spire* CXP50 color server PPD file.

Links

The **Links** page enables you to link to related vendors or products.

Using Hot Folders

For every published *Spire* CXP50 color server network printer that you define on a client workstation, a corresponding hot folder is automatically created in the *Spire* CXP50 color server **D:\Hot Folders** folder. The *Spire* CXP50 color server has three default hot folders, **HF_ProcessPrint**, **HF_ProcessStore**, and **HF_SpoolStore.** These hot folders correspond to the three default printers.

Each hot folder carries the virtual printer's name `HF_printer's name`.

When you connect from a client workstation to the *Spire* CXP50 color server over the network, you can use the hot folder to submit PDL jobs to the *Spire* CXP50 color server. When you establish a connection, drag your jobs onto the desired hot folder (according to the selected workflow).

Tip: You can also drag the hot folder icon to your desktop to create a short cut to the folder for future usage.

Jobs that reside in the hot folder will automatically be submitted to the *Spire* CXP50 color server through the corresponding virtual printer. Consequently, all of the virtual printer job parameters, inclusive of the workflow, will be applied to the job.

As soon as the job has been spooled to the *Spire* CXP50 color server, it disappears from the hot folder and enters the *Spire* CXP50 color server process queue or Storage window, according to the selected workflow.

Note: If you send files for printing through a hot folder while the *Spire* CXP50 color server software is down, when the software restarts, the files that reside in hot folders will immediately be imported to the system.

Hot Folder File Formats

Hot folders can contain all PDL formats that are supported by the *Spire* CXP50 color server, PS, PDF, EPS, PRN, VPS, VIPP, PPML, TIF, JPG and GAP.

Files of unsupported formats that are moved to a hot folder are not imported to the *Spire* CXP50 color server and remain in the hot folder.

Hot Folders and Brisque or Prinergy jobs (GAP Formats)

When you use hot folders to print GAP jobs, the process is automated and the job is converted to a PDF, which is displayed in the *Spire* CXP50 color server queues. The PDF files can then be programmed and printed as any other PDF file.

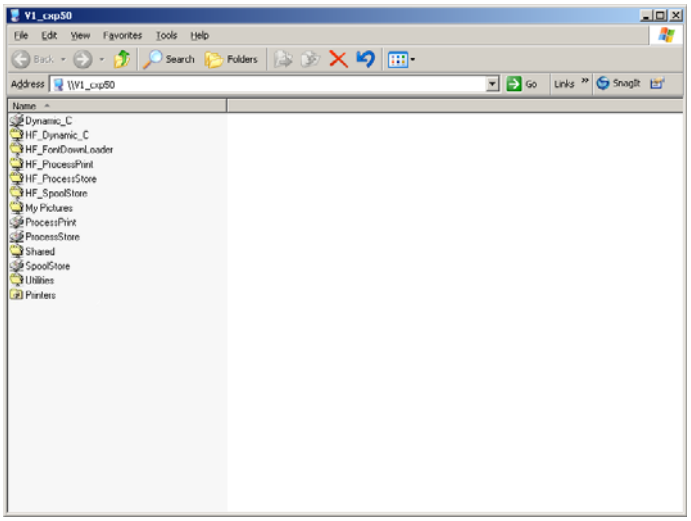
Using Hot Folders from Client Workstations

You can use hot folders to process and print files from any client workstation. The following procedures explain how to print using hot folders from *Windows* and Mac OS X.

To print a job using a hot folder from Windows:

1. On your *Windows* desktop, double-click the **Network Neighborhood** icon.
2. Locate your *Spire* CXP50 color server.
3. Double-click the *Spire* CXP50 color server.

   A list of all the shared folders, hot folders, and virtual printers appears.



4. Double-click the desired hot folder—for example, **HF_ProcessPrint.**

Tip: You can also drag the hot folder icon to your desktop to create and use a shortcut to the folder in the future.

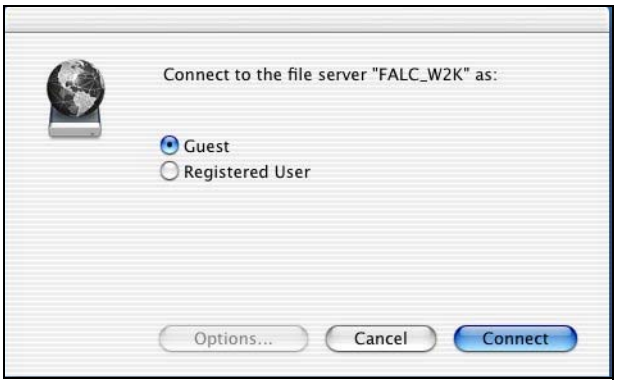
You can now drag the desired files to the hot folder. All the files are processed and printed automatically to the printer, according to the hot folder workflow.

To print a job using a hot folder from a Mac OS X:

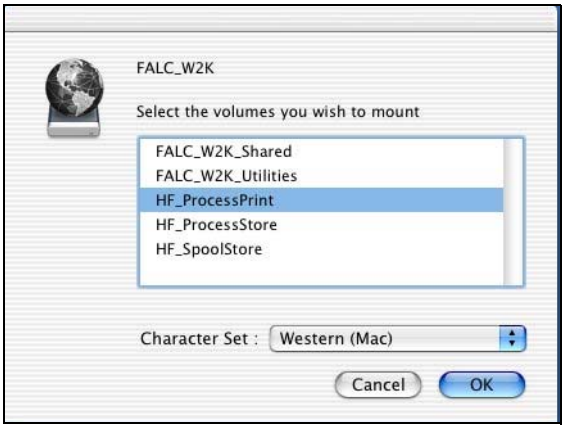
1. On your *Macintosh* desktop, from the **Finder** menu bar, select **Go** > **Connect to Server**.

The Connect to Server window appears.

2. Locate your *Spire* CXP50 color server on the network, and click **Connect**.



3. Select **Guest**, and then click **Connect**.



4. From the list, select the desired hot folder—for example, **HF_ProcessPrint**  —and then click **OK**.

   The hot folder icon appears on your desktop. You can now drag the desired files to the hot folder icon. All the files are processed and printed automatically to the printer, according to the hot folder workflow.

5

Production Printing

Imposition Workflow

Imposition is part of the process of producing finished documents. Imposition refers to the placement of the job pages on a sheet for printing. In addition to pages, you can add various marks to the sheet to aid the production process, for example—fold, trim, or crop marks. The content of an individual page is not affected by imposition.

In the *Spire* CXP50 color server, imposition parameters are set in the **Imposition** tab. Whenever possible, you should define imposition settings in your job before RIPing.

For more information, see "The Imposition Tab" on page 231, and "Setting Exceptions for Imposed Jobs" on page 94.

For imposition workflows using the same settings, you can use a virtual printer to predefine your imposition settings and streamline the print process.

For information on virtual printers, see "Managing Virtual Printers" on page 53.

Imposition Templates

The Resource Center **Imposition Template** area enables you to import and manage user-defined imposition templates that were created in stand-alone software—for example, Ultimate *in*Spire.

To import a user-defined imposition template:

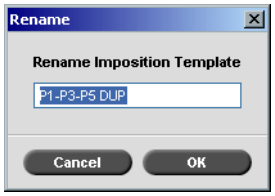
1. On the toolbar, click the **Resource Center** button  .
2. In the **Resource** list, select **Imposition Templates**.
3. Click the **Import** button  .
4. In the Open dialog box, locate the user-defined that template you want to import.
5. If you want to lock the template, select the **lock job ticket** check box.

Note: Locking a template means that you cannot set or change imposition parameters in the Job Parameters window.

6. Click **Import.**

To rename a user-defined imposition template:

1. On the toolbar, click the **Resource Center** button .
2. In the **Resource** list, select **Imposition Templates**.
3. From the list, select a user-defined imposition template and click the **Rename** button .



4. Type a new name for the user-defined imposition template.
5. Click **OK**.

   The new name of the user-defined imposition template appears in the imposition template list.

To delete a user-defined imposition template:

1. On the toolbar, click the **Resource Center** button .
2. In the **Resource** list, select **Imposition Templates**.
3. From the list, select a user-defined imposition template and click the **Remove** button .

High-Resolution Workflow

Working with high-resolution files during the design and page layout process can often be long and inefficient. Processing and manipulating large files and graphics can be time consuming. To speed production, it is recommended that you work with low-resolution files until the RIPing stage.

The *Spire* CXP50 color server with the Professional Kit includes the *Creo* APR (Automatic Picture Replacement) feature and supports Open Prepress Interface (OPI)workflows for replacing low-resolution files with high-resolution files during RIPing.

High-resolution image file, 5.23 MB

Low-resolution image file, 306 KB

Creo APR

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

Creo APR is an image replacement method for *PostScript* files.

When you send your *PostScript* file to be processed, the *Spire* CXP50 color server checks it for *Creo* APR instructions. The instructions specify how an external high-resolution image is placed in a *PostScript* file as it goes to RIP. It then searches for the external high-resolution file, performs the specified image replacement and RIPs the *PostScript* file.

A standardized set of file instructions The instructions specify the type, size, position, rotation, cropping and location of the high-resolution images themselves.

For more information on setting the APR settings, see "The Services Tab" on page 238.

OPI

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

Like *Creo* APR, OPI is a standardized set of file instructions that specify how an external high-resolution image is placed in a *PostScript* file as it goes to RIP. The instructions specify the type, size, position, rotation, cropping and location of the high-resolution images themselves.

When you send your *PostScript* file to be processed, the *Spire* CXP50 color server checks it for OPI instructions. It then searches for the external high-resolution file, performs the specified image replacement, and RIPs the *PostScript* file.

Many OPI systems use remote storage of high-resolution files. The *Spire* CXP50 color server supports the storage and replacement of high-resolution OPI files internally.

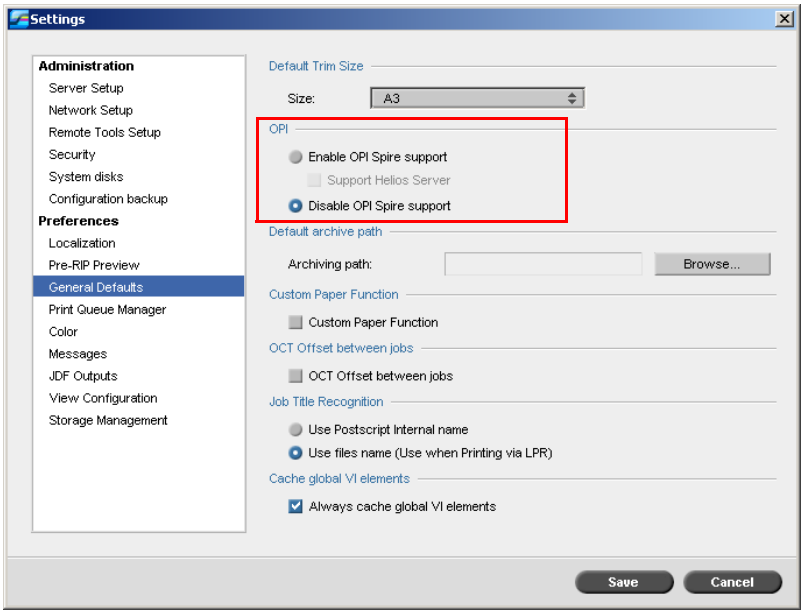
Note: PDL files from some DTP software (such as *QuarkXPress*) may contain these instructions ("comments") by default, even though the high-resolution files are unavailable because they have been embedded in the job. In this case, the job is not processed and an error message appears. To ensure continuous printing, the *Spire* CXP50 color server OPI image replacement is then unavailable by default.

To select OPI support:

1. From the **Tools** menu, select **Settings**.

   The Settings window appears.

2. Under **Preferences**, select **General Defaults**.



3. In the **OPI** area, select **Enable OPI Spire Support**.

Note: When the **Enable OPI Spire Support** option is selected, the **Support Helios Server** check box is automatically selected by default. If you do not want Helios server support, clear this check box.

Creo APR and OPI File Formats

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

Creo APR and OPI function identically on the *Spire* CXP50 color server. *Creo* APR low-resolution files have an *.eps extension in *Windows* and an *.e extension on the *Macintosh*, while OPI low-resolution files have a *.lay extension. The *Creo* APR and OPI workflows support *Creo* Continuous Tone, EPSF, Jpeg, PDF, DCS1, DCS2 and TIFF high-resolution file formats. You can use either the *Creo* APR or OPI workflow, depending on your high-resolution file type.

Preparing to Print Using Creo APR or OPI

1. Create low-resolution files from high-resolution files.

Note: You can use the PS Image Exporter Plug-In in *Adobe Photoshop* to create *Photoshop* Image (APR low-resolution) files. You can install the PS Image Exporter Plug-In from the *Spire* CXP50 color server *Documentation and Utilities* CD-ROM.

2. Export each image file as a low-resolution *.e file—for example, a file called duck is exported as duck.e.
OPI images can be created in other software or can be provided by a print service bureau. Make sure that you have created or obtained the desired image files.

Notes:

- A *PostScript* image (*.e) file is a low-resolution preview of the original high-resolution file. It contains preview information saved at 72dpi in black and white or color. Also, it contains pointers to the location of the high-resolution Image.
- APR low-resolution files have a. "*.e" extension on the *Macintosh* and an "*.eps" extension in *Windows*. OPI low-resolution files have a "*.lay" extension.

3. When you design the document in DTP software, use low-resolution files.

4. Perform detailed graphic work on the original high-resolution file. Only use the low-resolution file for positioning, rotating, scaling and cropping.

Note: Once you create the low-resolution file, do not change the name of the high-resolution file. This is the file name for which the *Spire* CXP50 color server searches.

5. Place the high-resolution files in a defined path on the *Spire* CXP50 color server. The *Spire* CXP50 color server looks for this path when it RIPs your jobs. Define the high-resolution path through the Job Parameters window for each job.

Notes:

- The *Spire* CXP50 color server default HiRes folder used for APR and OPI is **D:\Shared\HiRes**.
- Paths other than the default path are defined on a per-job basis. You can define the APR path to any connected server or disk.

Printing with Creo APR or OPI

If your high-resolution files are located in the *Spire* CXP50 color server default folder (**D:\Shared\HighRes**), you can print APR or OPI jobs without adjusting APR settings.

Important: OPI support is unavailable by default. If you would like to select the *Spire* OPI support, see "To select OPI support:" on page 86.

Perform the following steps:

1. Print, download, or import the job from the client workstation to the *Spire* CXP50 color server Storage window.

   The job is processed according to the settings of the selected virtual printer using APR or OPI high-resolution files.

Note: If your high-resolution files are not located in the *Spire* CXP50 color server default folder, specify the APR path(s), see "Setting a High-Resolution Path" on page 240.

2. Double-click the job in the *Spire* CXP50 color server workspace.
3. Select the **Print Quality** tab in the Job Parameters window.
4. Adjust the job parameters.

5. Set other high-resolution job parameters as desired.

Note: If the masking data in the PS Image file defines a completely different part of an image than the masking data in the high-resolution file, no masking data is used.

6. Click **Submit**.

   The job is processed on the *Spire* CXP50 color server and sent to the *Xerox* DocuColor 5000 digital press for printing.

PDF Workflow

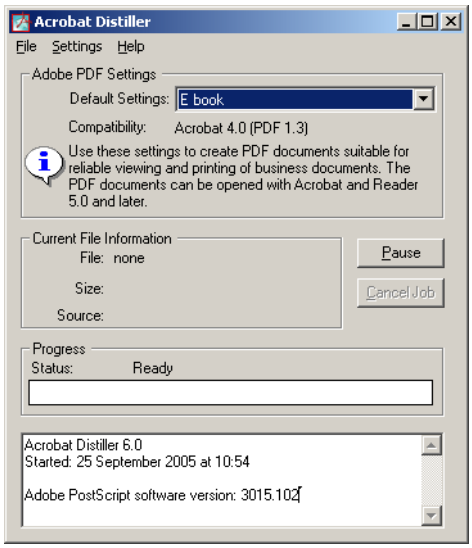
When you print PDF jobs with repeated elements, you can decrease processing time significantly if you apply the PDF workflow.

The PDF workflow caches the repeated elements in the PDF once, and reuses them as needed without repeated processing.

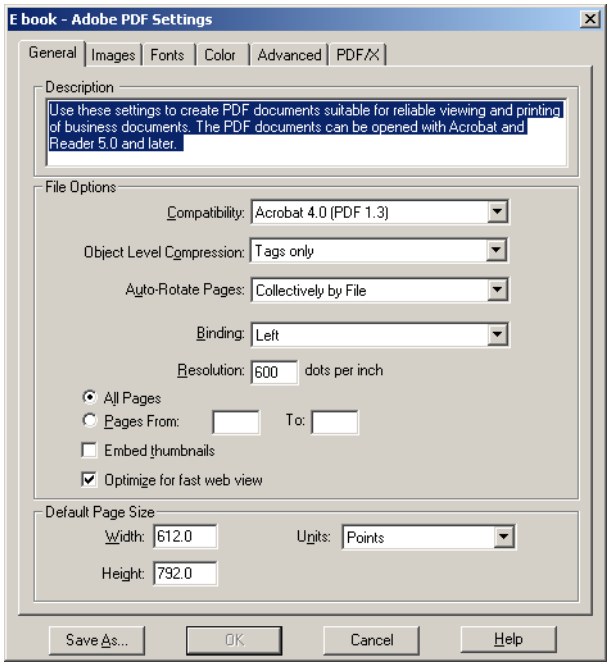
For more information on PDF optimization, see "The Services Tab" on page 238.

To distill a PostScript file on the *Spire* CXP50 color server:

1. In your client workstation, copy the desired *PostScript* file.
2. Locate the *Spire* CXP50 color server on the network, and paste the file to **D:\Shared**.
3. On the *Spire* CXP50 color server station, click the **Start** button and select **Programs** > **Acrobat Distiller.**



4. From the **Settings** menu, select **Edit Adobe PDF Settings**.



5. In the **General** tab, verify that **Optimize for fast web view** is selected and click **Cancel**. If this option is not selected, select the **Optimize for fast web view** check box, and click **OK.**
6. From the **File** menu, select **Open**.

   The Acrobat Distiller - Open PostScript file dialog box appears.
7. Locate the desired *PostScript* file, and then click **Open**.

   The Acrobat Distiller - Specify PDF File Name dialog box appears.
8. The default name is the *PostScript* file name. You can change it in the **File name** box.
9. Verify that the file is saved in **D:\Shared.**
10. Click **Save**.

    Your file is distilled and a PDF file is created.
11. In the *Spire* CXP50 color server software, from the **Job** menu, select **Import**.

    You can import the PDF file for printing.

Tip: You can create a shortcut to the *Acrobat Distiller* on the *Spire* CXP50 color server desktop. This shortcut can be used to drag files onto the *Acrobat Distiller* for quick distilling. To create a shortcut, click the **Start** button on your *Windows* desktop, and follow the path **Programs** > **Acrobat Distiller**. Right-click **Acrobat Distiller** and follow the path **Send To** > **Desktop (create shortcut).**

Export as PDF2Go

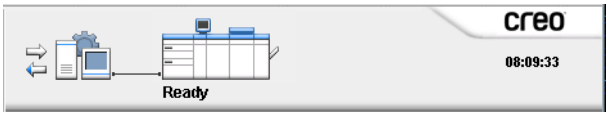
PDF2Go is a port through which you can export RTP files, and convert them to a PDF file during export.

The *Spire* CXP50 color server is capable of exporting jobs that are standard PDF files after processing. For an exported RTP job, the PDF file includes the rasterized data of the job.

The operation converts the RTP information to raster files that can be encapsulated in a PDF format. This process ensures that the file can be processed and printed on any PDF printer.

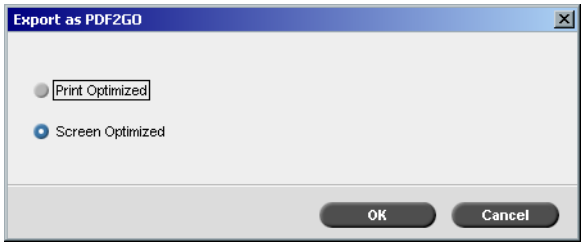
Note: Except for RTP jobs that were originally VI jobs, you can export every type of file.

While exporting as PDF2Go, a running bullet starts to move from right to left in the bottom arrow adjacent to the server-printer animation.



To export as PDF2Go:

1. Right-click a file in the Storage window, and from the menu select **Export as PDF2Go**.

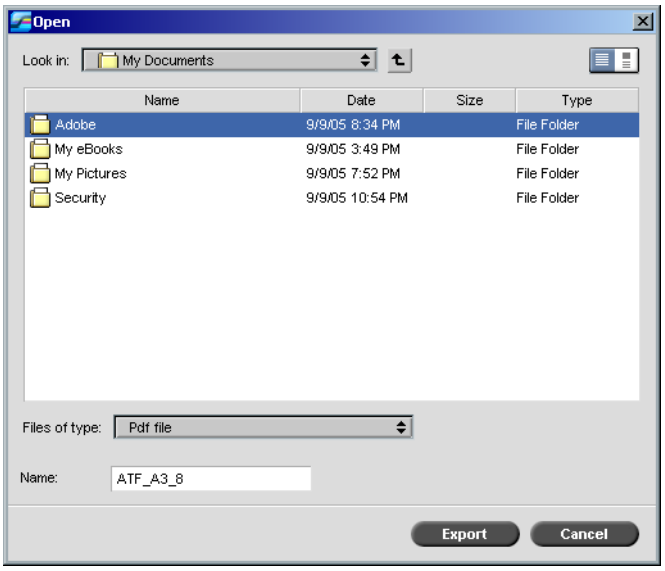


2. Select the **Print Optimized** option to generate a high-resolution PDF file in 300dpi.

   The **Screen Optimized** option (default) generates a low-resolution PDF file in 72 dpi.

Tip: Use the **Screen Optimized** option when you want to generate a light PDF file—for example, a file that you can send as a proof by e-mail.

3. Click **OK**.



4. Locate the folder in which to save the file, and then click **Export**.

   The file is saved as a PDF file under the job's name in the selected location.

Note: When you export PDL files as PDF, the file is converted to PDF using the *Acrobat Distiller*.

Page Exceptions

Page exceptions are used when you want to use different paper sets for special exceptions within a job or add inserts (interleaves). This feature uses the following terminology:

- Exceptions are special pages within a job for which you want to assign different paper stock. For example, you can choose to assign a different paper stock for each chapter within a book.

For more information in setting page exceptions, see "The Exceptions Tab" on page 249.

- Inserts are blank pages of a selected paper stock that are assigned to a job after a specified number of pages. For example, you can choose to add blank pages between sections within a brochure.

For more information about paper sets, see "Managing Paper Sets" on page 57.

Setting Exceptions for Imposed Jobs

You can set different paper sets for special exceptions within a job and also add inserts (interleaves) in imposed jobs. You set these exceptions and inserts in the **Exceptions** tab.

If the selected imposition method is **Saddle Stitch** or **Perfect Bound**, the exceptions are handled in the imposed sheet level (and not on a page level).

Notes:

- For the **Step & Repeat** imposition method, exceptions are handled on a page level (same as for non-imposed jobs).
- An imposed sheet contains the multiple images that are all printed on the same physical sheet.

You cannot set exceptions or inserts if the selected imposition method is **Step & Repeat** and its sub-option **Cut & Stack**.

Dynamic Page Exceptions

Note: Dynamic page exceptions are available only for the *Spire* CXP50 color server with the Professional Kit.

Standard *PostScript* setpagedevice commands that specify different paper types are embedded into the incoming files and enable you to print complex jobs of varying paper size, stocks, and paperweight. These commands indicate that the printer must switch media during the printing of a job. When a job is RIPed, the *Spire* CXP50 color server identifies the dynamic page exception commands and maps them to the selected paper sets. The printer then prints the job in order, automatically printing on the defined paper sets as the job requires.

Typically, you use the dynamic page exceptions workflow for VI jobs or a very large *PostScript* files that include page exceptions or inserts.

The *Spire* CXP50 color server supports dynamic page exceptions for the following file formats:

- *PostScript*
- Variable Print Specification
- VIPP
- PDF

Setting the Spire CXP50 Color Server for Dynamic Page Exceptions

To set up the job flow for dynamic page exceptions you need to:

1. Create a file with embedded setpagedevice commands on your client workstation.
2. Select Resource Center > **Paper Sets** and create the paper sets that you need to print your file.
3. Create a dedicated virtual printer that supports dynamic page exception commands, and then map specific paper sets in the **Exceptions** tab.

For more information about adding a new virtual printer and mapping specific paper sets, see "Managing Virtual Printers" on page 53.

4. Import the file into the *Spire* CXP50 color server via the dedicated virtual printer, and submit the job for printing.

   When the job is RIPed, the dynamic page exception commands are identified and mapped to the selected paper sets. The desired paper sets are used when the job is printed.

Notes:

- If a job is printed using a dynamic page exceptions virtual printer, the **Imposition** tab in the Job Parameters window is unavailable.
- If you have the *Spire* CXP50 color server Professional Kit, once you import your file via the dedicated virtual printer, you can perform a preflight check before the job is sent to print, see "Preflight Check" on page 105.

Tips and Limitations

The following list describes tips and limitations for the dynamic page exceptions workflow:

- Define all pages in the original file using the dynamic page exceptions commands.
- To add inserts, use a dynamic page exceptions command in the file that requires a paper stock but will not print anything on it. If a job is duplex, make sure that you use the command twice.
- Virtual printers that support dynamic page exceptions should not be used for other jobs.
- Virtual printers that support dynamic page exceptions do not support page exceptions and imposition. In addition, the paper stock selection is limited to the assigned stocks and not the entire database.
- When you create the dedicated virtual printer, you should define the paper feed direction for the paper sets in the job. All paper sets that are used in a dynamic page exceptions job must be in the same paper feed direction. Make sure you do not select the **Best Fit** option.

For information about defining the paper feed direction, see "The Paper Stock Tab" on page 219.

Fonts

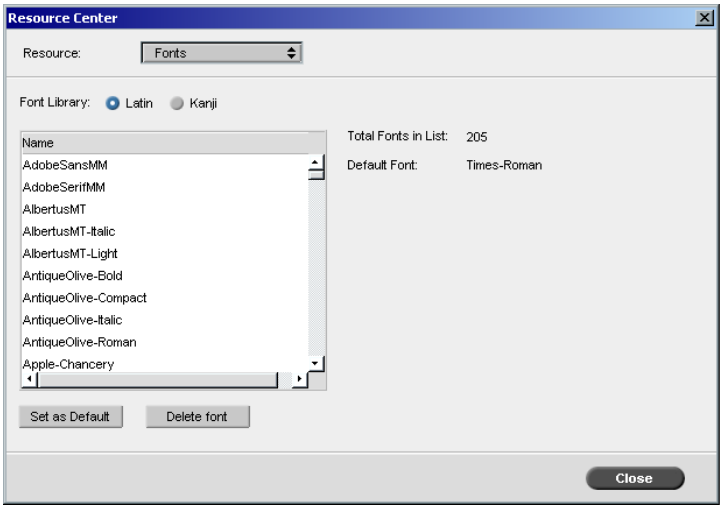
This section lists all the fonts available on the *Spire* CXP50 color server, and explains how to work in the **Fonts** area of the Resource Center.

A step-by-step procedure explains how to use the FontDownLoader driver to download fonts from a *Macintosh* client workstation.

In addition, you can download *Windows* fonts from a client workstation to the *Spire* CXP50 color server. This is done by dragging the fonts to the **HF_Fontdownloader** hot folder.

Managing Fonts

1. On the toolbar, click the **Resource Center** button .
2. In the **Resource** list, select **Fonts.**



3. Choose a **Font Library** option. The default option is **Latin.**
4. To set the default font, select a font from the list, and click **Set as Default.**
5. To delete a font, select the font, and click **Delete font.**

Notes:

- To add new fonts to the *Spire* CXP50 color server, copy the new fonts to the **C:\CXP50\General\RIP\Font folder**.
- You can substitute fonts. For more information, see "Substituting Fonts" on page 239.

Downloading Fonts

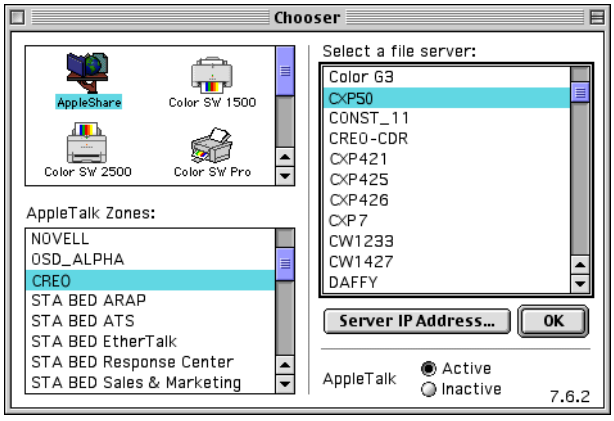
Using the Fontdownloader for Macintosh Networks

The Fontdownloader is a driver provided for *Macintosh* networks and enables you to download fonts from a *Macintosh* client workstation. The Fontdownloader functions as a communications port and sends messages between the Fontdownloader software and the *Spire* CXP50 color server. You cannot send files through the Fontdownloader, only fonts.

To download fonts using the Fontdownloader driver (Mac OS 9.x):

Note: Mac OS X users that want to download fonts need to use a previous Mac OS version—for example, Mac OS 9.x. It is recommended that you embed the fonts in the file.

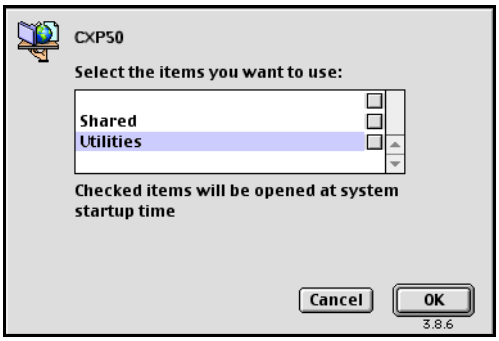
1. From the **Apple** menu, select **Chooser**.
2. Select **AppleShare** and browse the network to where the *Spire* CXP50 color server is configured.
3. Select the *Spire* CXP50 color server—for example, **CXP50**—and then click **OK**.



The Login dialog box appears.

4. Log in as **Guest** and click the **Connect** button.

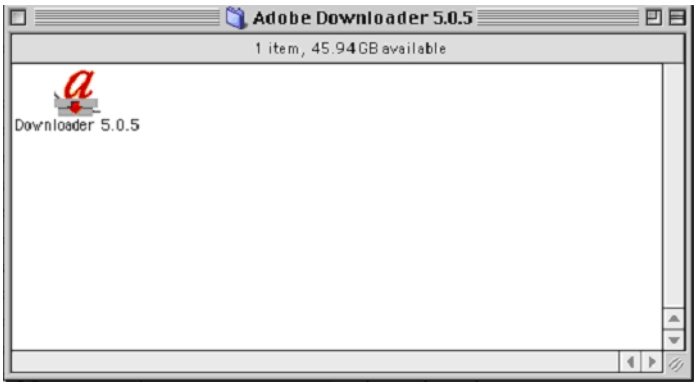
   The corresponding *Spire* CXP50 color server window appears.



5. Select the **Utilities** folder, and then click **OK**.

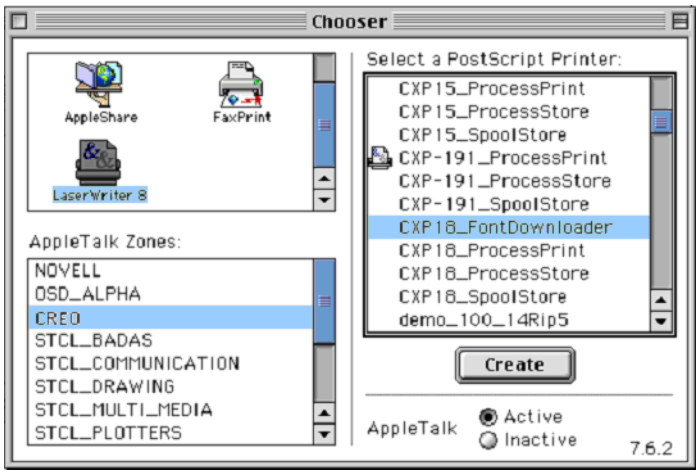
Note: Do not select the check box, otherwise it will mount with every restart.

6. Double-click the **Adobe Downloader 5.0.5** folder.

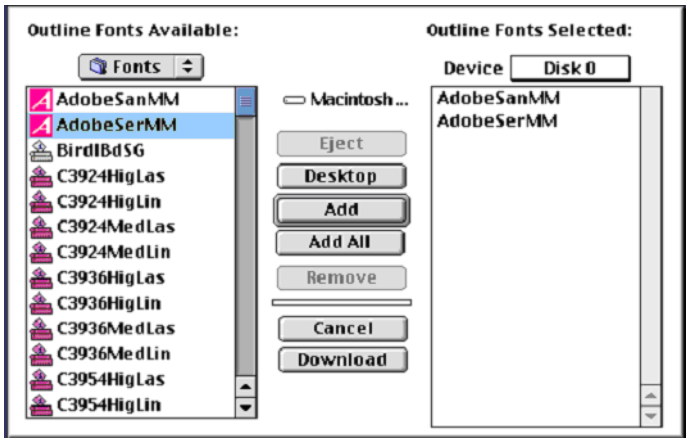


7. Copy the **Adobe Downloader 5.0.5** to your desktop.
8. From the **Apple** menu, select Chooser.

   The Chooser window appears.

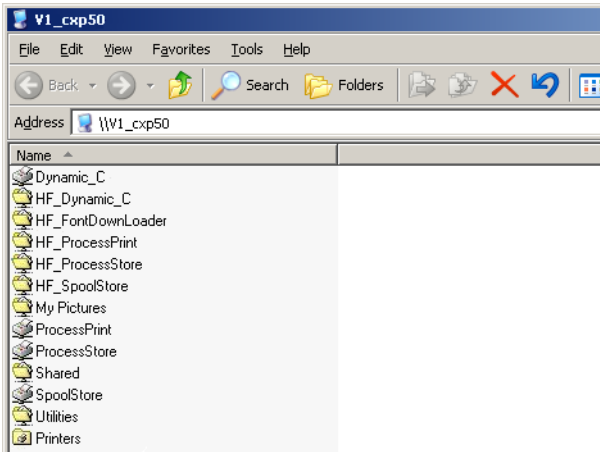


9. Select LaserWriter (8.x) and select the desired fontdownloader.
10. Click **Create**.
11. Double-click the **Downloader 5.05** on your desktop.
12. On the **File** menu, select **Download Fonts**.



13. In the font area, select the desired font directory.
14. Verify that **Disk 0** is the selected device.
15. Add all the desired *PostScript* fonts and click the **Download** button.

Using the Fontdownloader Hot Folder for Windows



You can use the **HF_Fontdownloader** hot folder to install new or missing fonts to the *Spire* CXP50 color server fonts dictionary. The hot folder is located with the other hot folders on your client workstation and can be used with the following operating systems:

- *Windows* 2000
- *Windows* NT
- *Windows* XP

For more information about hot folders, see "Using Hot Folders" on page 76.

Graphic Arts Workflow

This section describes the workflow for printing Graphic Art Port (GAP) files.

The GAP is a port through which you can import various file formats used in the graphic arts industry. GAP files are already rasterized. The *Spire* CXP50 color server only needs to prepare the files for printing, which means adjusting the file resolution and rotation.

Importing GAP Files

To print a specific page, import the assigned file for the specific page. To print a specific job, import the assigned file for the specific job.

Note: When the assigned job file is imported, it is converted to a PDF file and appears in the *Spire* CXP50 color server queues. The PDF file can be configured and printed as any other PDF file.

Supporting GAP Files

The *Spire* CXP50 color server can import and convert the following file types:

- *Brisque* jobs
- TIFF
- TIFF/IT
- CT / LW

Note: The *Spire* CXP50 color server supports the following GAP file formats: pre-separated and composite.

The system converts these file types to “pre-rasterized” PDF files. GAP PDF files behave the same as any other PDF file and have the same job parameters.

GAP File Structure

TIFF/IT

A TIFF/IT file has 3 components:

- CT.TIF
- LW.TIF
- FP (final page) file, which combines CT.TIF and LW.TIF

To import a TIFF/IT file to the *Spire* CXP50 color server, first import the FP file. During import, the file is converted to a PDF file, and appears in the *Spire* CXP50 color server queues. The PDF file can be configured and printed as any other PDF file.

Note: Make sure that in the *Spire* CXP50 color server Import window, **Gap files** is selected in the **Files of type** box.

CT, LW, TIFF

Brisque jobs and TIFF/IT files include CT, LW and TIFF files that can be imported and printed separately to the *Spire* CXP50 color server.

Rasterized Brisque Jobs

All rasterized *Brisque* jobs share a common structure. Each job contains an assigned file with one or more pages (in case of a multiple job). Also, every page contains its own assigned file, which combines LW and CT.

- To import a Brisque job to the *Spire* CXP50 color server, import the assigned file of the job.
- To print a specific page, import the assigned file of the specific page.

Preflight

Note: Preflight features are available only for the *Spire* CXP50 color server with the Professional Kit.

The following preflight features are available:

- PDF analyzer
- Preflight check
- Preflight report

Analyzing a PDF Job

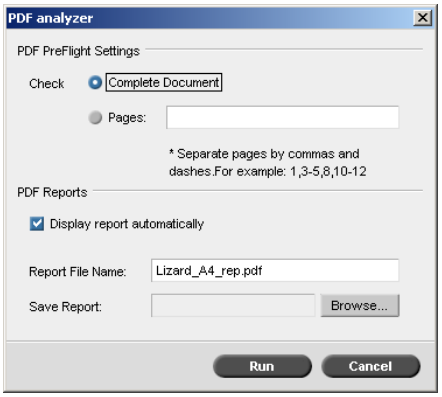
Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

You can use the PDF analyzer to check imported PDF files for problems that may affect processing. The PDF analyzer checks the following elements:

- Document: identifies incompatibilities of *Acrobat* software with compression, encryption, security, and other properties
- Pages: detects empty pages and identifies the page size, annotations, and other properties
- Fonts: determines whether specific fonts are in the PDF file and whether they are embedded
- Colors: detects color space information, spot colors, rendering information, and color management settings
- Images: identifies image resolution, whether images are skewed or flipped, and whether images are compressed
- OPI: detects whether OPI is used. If so, the PDF analyzer detects the OPI version and determines whether any high-resolution images in the OPI path are missing
- Text and line art: identifies the size of text, the width of the lines, white text, and objects and flatness tolerance
- PDF/X: determines whether the file conforms to PDF/X-1a or to PDF/X-3 and whether the file contains *PostScript* fragments

To run the PDF analyzer:

1. In the Storage folder, right-click the PDF file, and select **PDF analyzer**.

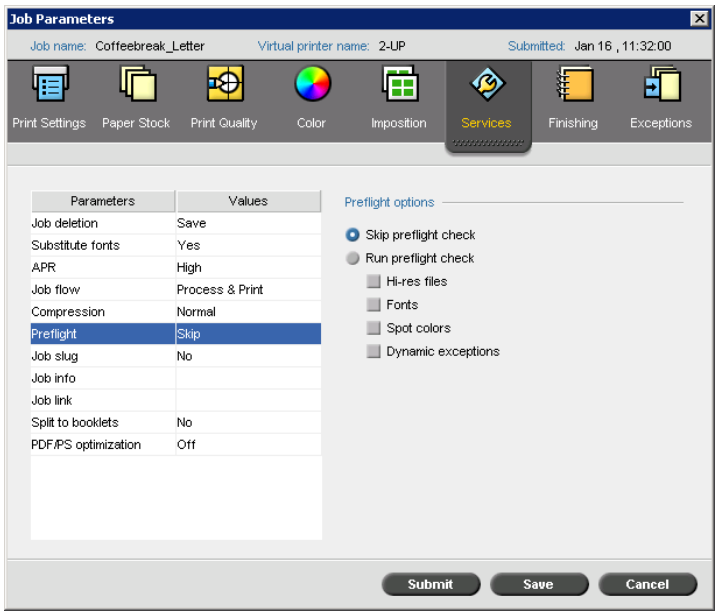


2. In the **PDF PreFlight Settings** area, do one of the following actions:
   - To check the entire PDF file, select **Complete Document**.
   - To check specific pages, select **Pages** and enter the desired page range.
3. If you do not want the report to automatically open when it is generated, clear **Display report automatically**.
4. If desired, change the report file name. By default, the report file name consists of the original file name with the suffix **_rep**—for example, if the file to be checked is **sample.pdf**, the report file is named **sample_rep.pdf**.
5. If you want to save the report to a specific location, click **Browse** and navigate to the desired location.
6. Click **Run**.

   The PDF report is generated and opens automatically.

Preflight Check

Note: This parameter is available only if you have the *Spire* CXP50 color server with the Professional Kit.



The **Preflight** parameter enables you to check the status of key job components before the job is sent for printing.

Note: You can select the preflight options before the job is processed, but you can only view the preflight report after the job is processed.

During the preflight check, your job is RIPed and the missing components are identified. The preflight check detects the status of the following key job components:

- High-resolution images or the wrong links to the high-resolution images folder
- Missing fonts
- Spot colors that are not defined in the *Spire* CXP50 color server spot color dictionary
- Dynamic exception commands for a file that was submitted via a dynamic page exceptions virtual printer

Note: If a job component is missing, the job fails before it is RIPed (an alert message appears) and information about missing components appears in the Job History window.

The results of the preflight check are displayed in a **Preflight Report**. By default, a preflight report is not issued for each job. To issue this report, you must run a preflight check for the job using the **Preflight** job parameter.

To run a preflight check:

➢ In the **Preflight options** area, select **Run Preflight check**.

All four check boxes of the key job components are active, but you can clear any check box that you don't want to include in the preflight check.

Note: If one of the selected elements in the list is missing, the job status at the end of the preflight check is "Failed" and the job is transferred to the Storage window.

Preflight Report

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

The preflight report is a job-related report that provides information about the status (missing or found) of key job components prior to printing and enables you to correct your files accordingly.

It is especially useful to run the preflight check before you print a complex job with a large quantity of pages or copies. The preflight check detects the missing job components and displays them in the Preflight Report dialog box. You can review the report and resolve the missing components and thus save processing time without error or failed messages constantly appearing.

If you run a preflight check and all key components are found, the job is processed and printed according to the job flow that you selected. If the test fails (missing key elements are detected), the job is returned to the Storage window with the preflight report available for inspection.

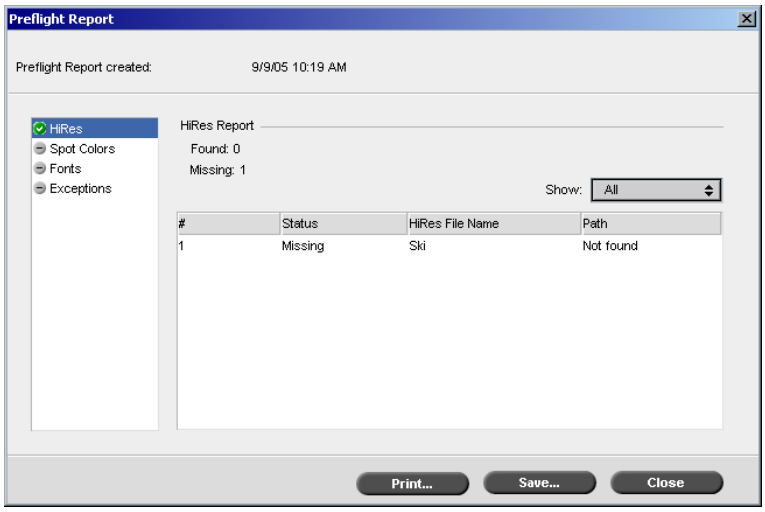
The preflight report always reflects the last preflight run. If more than one preflight check is run on a job, the latest preflight report overrides the previous. When a preflight report is produced, the date and time of the preflight check are indicated in the Jobs History window.

Note: Since the Preflight Report dialog box lists all key job components (missing and found), you can use this report to view the existing (found) key job components—for example, the list of the existing fonts in a job, and their corresponding paths.

To view the preflight report:

1. Right-click the job in the Storage window, and from the menu select **Preflight Report**.

   The Preflight Report dialog box appears. If you selected the **HiRes files** option in the **Preflight Options** area, the **HiRes Report** appears first.



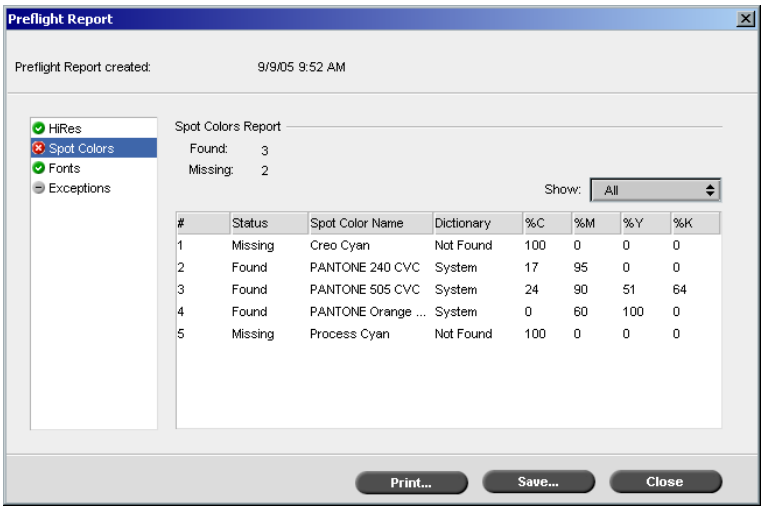
If there are key components in the job not found, this will be indicated by the **missing** indicator next to the **HiRes**, **Spot Colors**, and **Fonts** report options.

If you did not select a preflight option for the preflight check, the **not preflighted** indicator appears next to the report option.

If all of the files are found for a preflight option, the **found** indicator appears next to the report option.

2. From the **Show** list, select one of the following options:
   - To display all files, select **All**.
   - To display only files that were found, select **Found Only**.
   - To display only the missing files, select **Missing Only**.

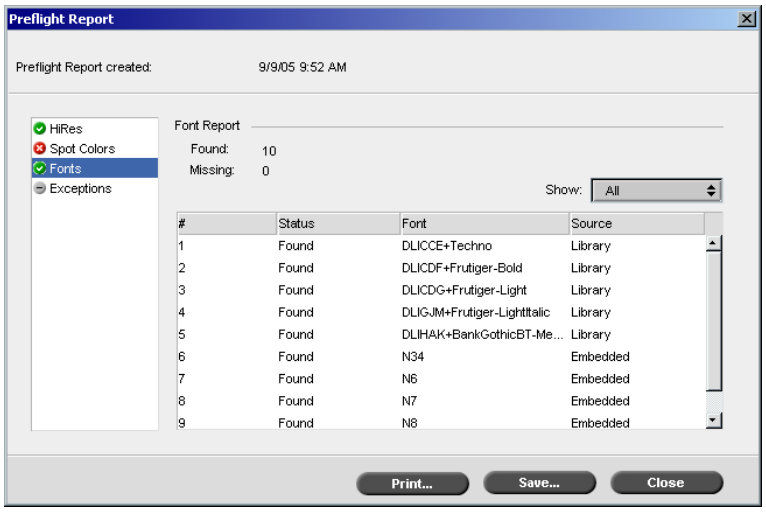
3. Select the **Spot Colors** report option.



The **Spot Colors Report** area displays the missing spot color names (spot colors which were not found in the spot color dictionary) and the found spot color names (spot colors which were found in the spot color dictionary). The **C**,**M**,**Y**,**K** columns display the spot color CMYK equivalences:

- If the status is **missing**, the *Spire* CXP50 color server uses the original CMYK values that are embedded in the PS file to emulate the desired spot color.
- If the status is **found**, the *Spire* CXP50 color server uses the CMYK values that are in the spot color dictionary.

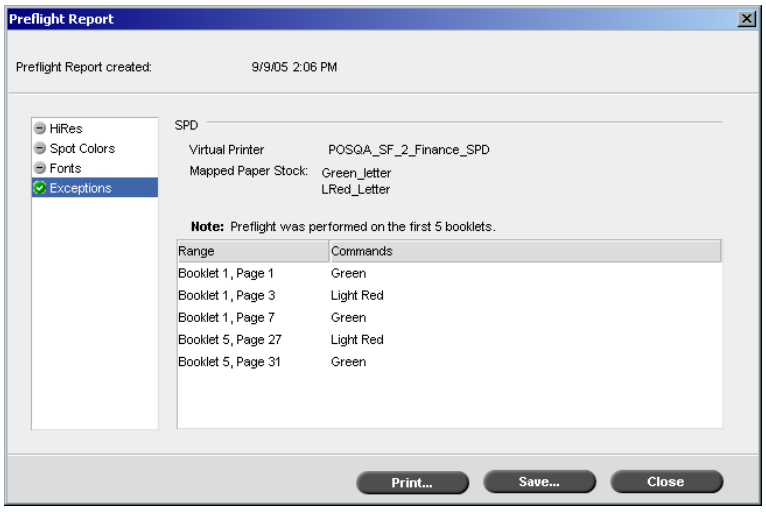
4. Click the **Fonts** report option.



The **Font Report** area displays the name of the missing fonts that are not embedded in the file and that do not exist in the **Font Library**, as well as the found fonts.

The **Source** column indicates whether the font is embedded in the file or was found in the **Font Library**.

5. Click the **Dynamic Exceptions** report option.



The **Dynamic Exceptions** area displays the dynamic page exception commands found in the file.

For more information about dynamic page exceptions, see "Dynamic Page Exceptions" on page 94.

6. To save the preflight report, click **Save** and browse to the desired location.

Tip: If more than one preflight check is run on a job, the latest preflight report overrides the previous. You can save the report for future use.

7. To print the report, click **Print**.

Export as Creo Synapse InSite Job

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

Creo Synapse *InSite* provides an internet-based communication between you and your customers and enables you to proof jobs and receive approvals remotely.

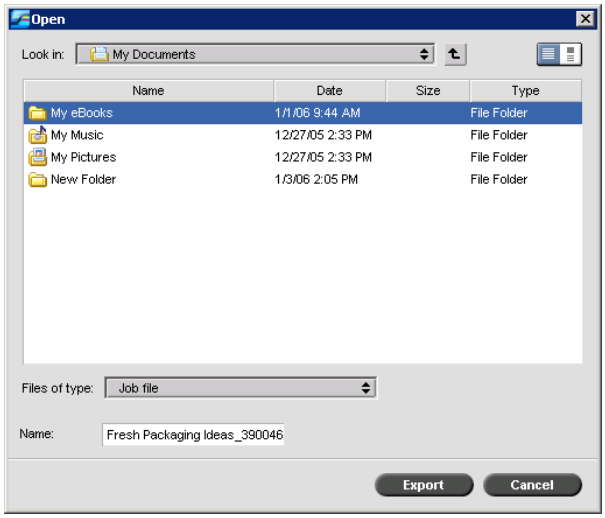
If your site includes a *Creo* Synapse *InSite* server, exporting your job as an *InSite* job from the *Spire* CXP50 color server allows you and your customers to proof online with geographically dispersed users simultaneously, append annotations or comments, and approve or reject pages over the World Wide Web using a standard browser.

After the RTP job is created on the *Spire* CXP50 color server, it can be exported as an *InSite* job from the Storage window. When the customer logs on (using their unique user name and password), they see the status of their jobs, view a thumbnail of all pages in each job, and quickly identify which pages require further corrections. The customer can measure color density, make annotated comments, and approve pages. The online proofing cycle is shortened and accurate, and consequently, the need for reprints is reduced.

To export as InSite:

1. Select the desired job in the *Spire* CXP50 color server Storage window.
2. Right-click the job, and from the menu select **Export as InSite Job**.

   The Open window appears.



3. Locate the file in which you want to export the job, and then click **Export**.

   A *Brisque* job is created in the selected location. You can now register the files on the *InSite* server and start the approval cycle.

6 Color Workflow

Calibration

One of the most important issues in obtaining satisfactory print quality is steady toner density. Toner density is affected by many factors such as heat, humidity and service settings. You should perform a daily calibration to compensate for these factors.

The calibration process corrects the printer colors by measuring their density and creating calibration look-up tables. The *Spire* CXP50 color server uses the data in these tables to compensate for the differences between the actual, measured density level and the target level, the target density.

You should perform calibration in the following instances:

- When you use a new paper stock
- When you use a different screening method
- At least once every eight hour shift for every combination of paper stock and screening method used
- When prints show "color casts"
- After machine maintenance or hardware changes—for example, replacing a "Charge Coroton"
- On drastic ambient changes (temperature and humidity)

Important: Perform a different calibration for every combination of media and screen type you are going to use for printing. When calibrating, always use the same media that you intend to use for printing.

Tip: You can set a reminder to remind you to calibrate the *Xerox* DocuColor 5000 digital press. For more information, see "Calibration Reminder" on page 195.

Guidelines for Successful Calibration

To ensure your calibration is as accurate as possible, check the following guidelines before you calibrate:

- Ensure that your *X-Rite* DTP34 QuickCal densitometer is connected properly

- Ensure that your *X-Rite* DTP34 QuickCal densitometer is calibrated. You should calibrate the device at least once a week, or whenever the power to the device is interrupted. Use the manufacturer calibration chart supplied with the device. After you finish calibrating the device, make sure you store the chart in the designated envelope.
- To warm up the printer, use any media to print at least 25 duplex sheets of any four color test job.
- Print a reference job and use the same media and screen type on which you will print the final job.
- Prepare the calibration pad to measure the calibration charts. If a calibration pad is not available, set a white media, at least 200 gsm, or two sheets of lighter paper, on the surface. Read the calibration chart on this surface.
- Set the *Spire* CXP50 color server emulation method to the method you will use to print the customer job (CSA or Device Link).

The Calibration Process

The calibration process consists of the following steps:

1. Calibrate the *X-Rite* DTP34 QuickCal densitometer, see "Calibrating the X-Rite DTP34 QuickCal Densitometer" on page 116.
2. Set the calibration method, see "Setting the Color Calibration Method" on page 120.
3. Load the paper set you are going to use for printing in the *Xerox* DocuColor 5000 digital press.
4. In the *Spire* CXP50 color server, from the **Tools** menu, select **Calibration**, see "Calibrating the Spire CXP50 Color Server" on page 120.
5. Click **Calibrate** to run the Color Calibration Wizard, and to create a calibration table.
6. Follow the Color Calibration Wizard steps.

Note: Make sure you set the screen type to the one you are going to use to print the job—for example, 200 dot.

7. When you measure the calibration chart, place it on the surface you prepared—for example, on top of the white paper.
8. When the calibration is complete, print the job using the calibration table, see "Printing the Job with the Calibration Table" on page 135.

Tip: It is strongly recommended that you include the specific paper name and screen method in the calibration table file name. This helps you select the correct calibration table in the job setup.

Calibrating the X-Rite DTP34 QuickCal Densitometer

The *X-Rite* DTP34 QuickCal densitometer is a color measurement instrument that reports densitometer and dot data.

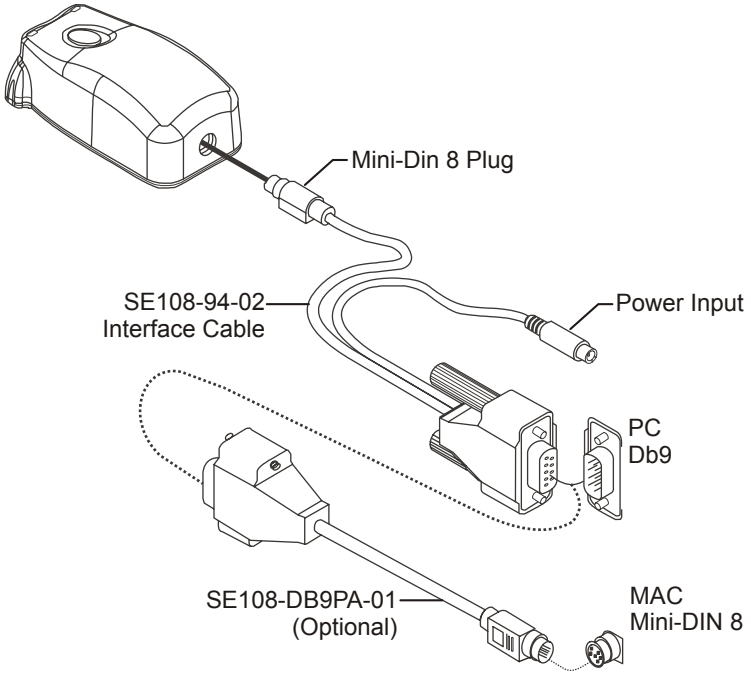
Perform the following steps before first time use of the densitometer:

- Familiarize yourself with the *X-Rite DTP34 QuickCal Densitometer Operator's Manual*.

You can also use the DTP34 Tutorial to learn how to use the densitometer correctly. Access the tutorial from **Tools** > **Calibration**, and then click **Calibrate**. In Step 1 of the Color Calibration wizard, click **Densitometer Tutorial - Click & Learn**.

- Connect the *X-Rite* DTP34 QuickCal densitometer
- Calibrate the *X-Rite* DTP34 QuickCal densitometer

Connecting the X-Rite DTP34 QuickCal Densitometer to the Spire CXP50 Color Server



Note: Verify that the Mini-Din 8 Plug is firmly seated, and that you hear a click sound. The connector is spring loaded and must be properly seated.

Before calibrating the *X-Rite* DTP34 QuickCal densitometer, make sure that you perform the following steps:

- Interface the *X-Rite* DTP34 QuickCal densitometer directly with one of the computer's serial ports
- Quit all programs and shut down the computer before you install interface cabling

Plug the power supply into an AC wall outlet and connect to the *X-Rite* DTP34 QuickCal densitometer communication cable. The LED indicates a variety of instrument operation conditions, such as calibration mode and operation.

For a complete list of all conditions reported by the LED, see the *X-Rite DTP34 QuickCal Densitometer Operations Manual*.

Calibrating the X-Rite DTP34 QuickCal Densitometer

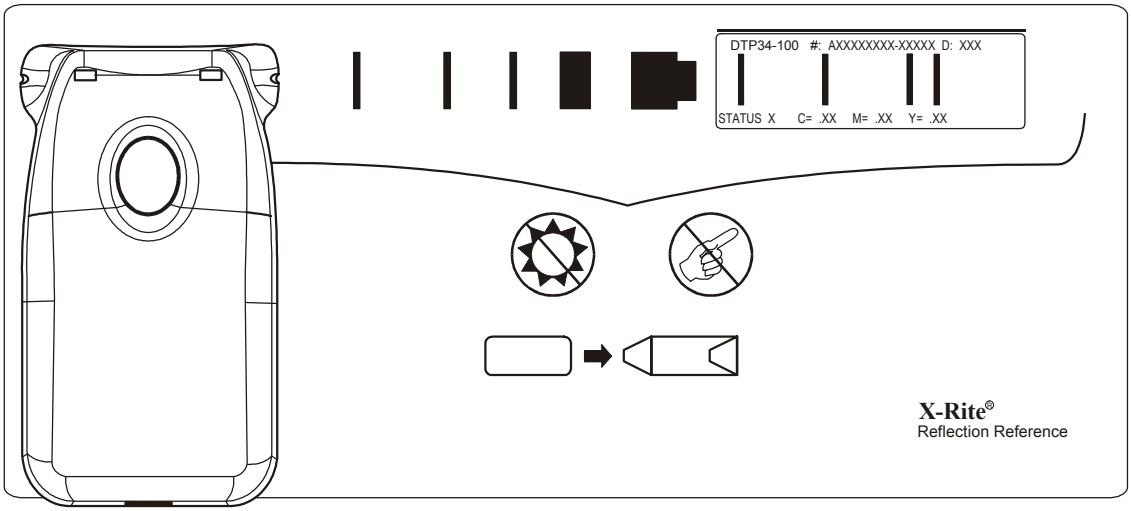
Frequency of Calibration

Your *X-Rite* DTP34 QuickCal densitometer should have a quick calibration at least once a day. A full calibration should be performed annually, during heavy usage to provide accurate measurements, or if the quick calibration consistently fails. Typically, the host computer prompts for an instrument calibration (amber LED) when required, but the process can be invoked manually at any time. See the following procedure for information about the calibration process.

Handling the Reflection Reference

Handle the reflection reference by the edges. Make sure that the reflection reference is free of dust, dirt, and smudge marks. To obtain the most accurate calibration, hold the instrument with consistent and nominal pressure during the calibration process.

Position the instrument on the designated location of the reflection reference (indicated by a dotted outline of the instrument). Do not move the instrument more than 0.25" (6.35mm) before reading the strip.



Quick Calibration

You can perform a quick calibration at any time. The only required action is to scan the reflection reference as you would with any other strip. You should only perform a quick calibration after a full calibration has been done. New densitometers are fully calibrated before leaving the factory.

1. Position the *X-Rite* DTP34 QuickCal densitometer on the reference as previously mentioned.
2. Press and click the button and scan the reference to the opposite end. Release the button. The LED should indicate green if the calibration was successful. If calibration fails (fast flashing amber LED), verify that the strip is clean and re-read.
3. Place the reflection reference in its protective envelope, and store the envelope away from light and heat.

Full Calibration

Note: If the host computer initiated calibration (amber LED), skip to step 2.

1. To manually invoke the calibration mode, press and hold the **Instrument** button for a minimum of three seconds. The LED slowly flashes amber when calibration is initiated.
2. Press and hold the button (if not previously held) and scan the reference to the opposite end. Release the button. The LED should indicate green if the calibration was successful. If calibration fails, (fast flashing amber LED), verify the strip is clean and re-read.
3. Place the reflection reference in its protective envelope, and store the envelope away from light and heat.

Calibrating the Spire CXP50 Color Server

Setting the Color Calibration Method

The *Spire* CXP50 color server provides you with two color calibration methods:

- **Target Calibration**
  This calibration method enables you to calibrate the *Xerox* DocuColor 5000 digital press according to the following fixed, predefined density values:

  Table 10: Fixed density values for uncoated paper

Toner	Density value
Cyan	1.85
Magenta	1.584
Yellow	1.104
Black	1.75

  Table 11: Fixed density values for coated paper

Toner	Density value
Cyan	2
Magenta	1.723
Yellow	1.162
Black	1.9

  The target calibration method ensures that the density values of the printed output do not exceed the predefined density values. The purpose of this color calibration method is to ensure consistency over time.

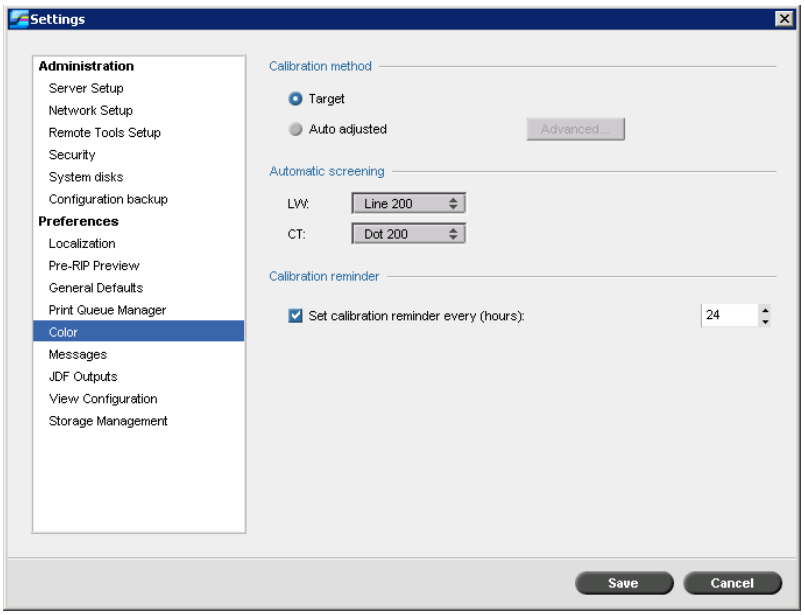
- **Auto Adjusted Calibration**
  This calibration method enables you to calibrate the *Xerox* DocuColor 5000 digital press according to the printer's performance capabilities. With this method, you can set the maximum density of the printed output by selecting the desired percentage level. The higher the

percentage, the greater the density of the printed color.
The purpose of this method is to achieve optimal color intensity for a specific printer at a certain point in time.

The default setting for the color calibration method of the *Spire* CXP50 color server is target calibration. You can change the setting, if necessary, before calibrating the *Spire* CXP50 color server.

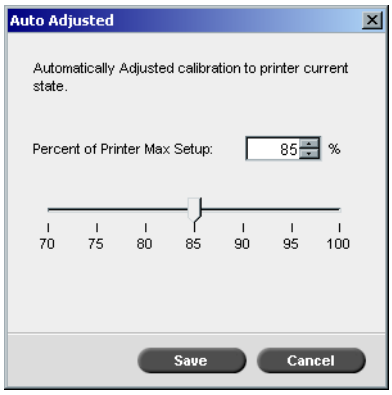
To specify the calibration method:

1. In the Settings window, select **Preferences > Color**.



2. In the **Calibration Method** area, select the desired calibration method, **Target** or **Auto Adjusted**.
3. If you selected **Auto Adjusted** and you would like to change the default settings, click **Advanced**.

The Auto Adjusted window appears.



4. Change the **Percent of Printer Max Setup** density if desired, by moving the slider, or by typing a percentage value in the corresponding box.

Note: The default percentage value is 85%.

5. Click **Save.**

Important: Changes to the calibration method during RIP will not take effect.

The Calibration Window

The Calibration window enables you to create and edit calibration tables. You can use the Color Calibration Wizard to create a calibration table, or edit an existing calibration table.

The Color Calibration Wizard analyzes the measurements and creates calibration tables. Using these tables, the *Spire* CXP50 color server compensates for the difference between the printer's performance and the required values.

The following calibration look-up tables are provided:

- **None:** Applies no calibration table to the job.
- **SpireNormal:** Applies the factory default calibration table. Since this is a default look-up table, it cannot be overwritten.

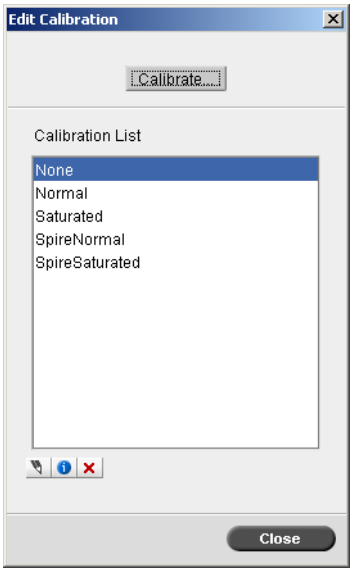
- **SpireSaturated:** Applies the factory default saturated calibration table. This look-up table applies a darker calibration table in comparison to the **SpireNormal** look-up table. Since this look-up table is a default table, it cannot be overwritten.
- **Normal:** Initially the **Normal** look-up table is identical to the **SpireNormal** look-up table. This resemblance changes as soon as you calibrate your *Spire* CXP50 color server and, at the end of the calibration process, save your calibration table as default. Your calibration table is saved as the **Normal** look-up table.
- **Saturated:** Initially the **Saturated** look-up table is identical to the **SpireSaturated** look-up table. This resemblance changes as soon as you calibrate your *Spire* CXP50 color server and, at the end of the calibration process, save your calibration table as default. Your calibration table is saved as the **Saturated** look-up table.

Note: Each time you save a calibration table as default, it is saved twice, once as Normal look-up table, and once as the Saturated look-up table.

To open the Calibration window:

1. From the **Tools** menu, select **Calibration**.

   The Calibration window appears.



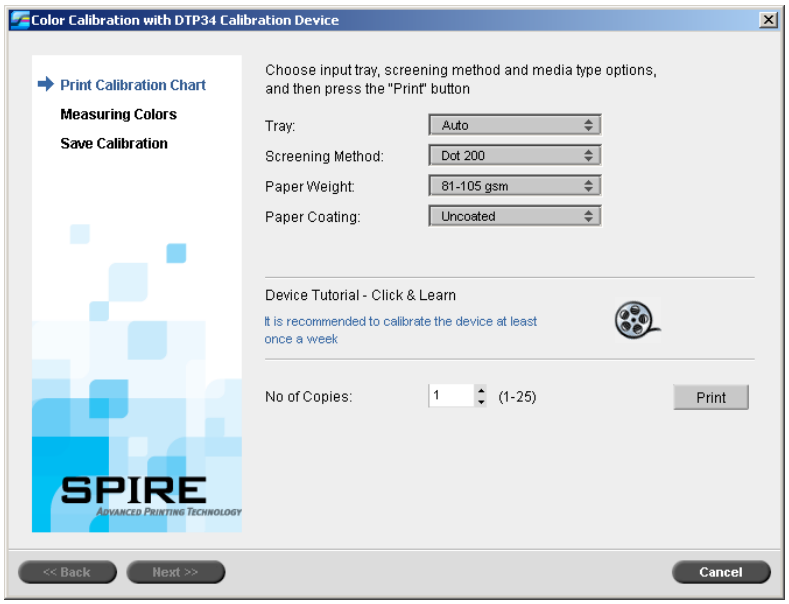
The following options are available:

- Click **Calibrate** to run the Color Calibration Wizard. This wizard guides you in the use of the densitometer to create calibration tables, see "Creating a Calibration Table", below.
- Select a calibration table from the **Calibration Name** list and select one of the following options:
  - Click **Edit** to edit the calibration table. See "Editing Calibration Tables" on page 129.
  - Click **Delete** to delete the calibration table.
  - Click **Info** for the Density Graph. See "Reading Color Density Data" on page 133.
  - Click **Close** to end a test job and close the Calibration window.

Creating a Calibration Table

1. In the *Spire* CXP50 color server application, from the **Tools** menu, select **Calibration**.
2. In the Calibration window, click **Calibrate**.

   The Calibration Wizard window appears.



The first step in the wizard is **Print Calibration Chart**. This step enables you to detect the point where you start to see toner on the paper.

Tip: Click the **Densitometer Tutorial - Click & Learn** icon to display an animation of the measurement process and to learn how to use the densitometer correctly.

3. In the **Tray** list, select the desired input tray.

   The default tray setting is **Auto**. When this option is selected, the wizard looks for a tray that contains **Letter LEF** or **A4 LEF** paper. If the wizard does not find a tray with either of these sizes, an alert appears.

   You can print calibration charts on any size paper. Ensure that the desired paper is in one of the trays, and then select that tray in the wizard.

4. In the **Screening Method** list, select the desired screening method.

Note: Make sure you set the screening method to the one you are going to use to print the job.

5. In the **Paper Weight** list, select the desired paper weight.
6. In the **Paper Coating** list, select the desired paper coating.
7. Set the number of copies you need by typing the number or using the arrows next to the box to select the number.

Note: Since the performance of the *Xerox* DocuColor 5000 Digital Press is best after several pages have been printed, it is recommended that you print at least 10 copies of the first calibration chart and use one of the last copies printed.

8. Click **Print**.

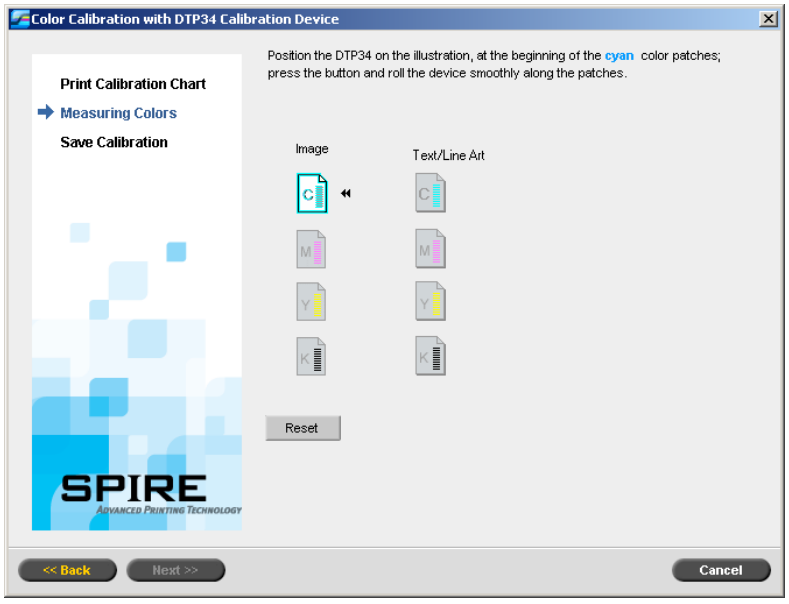
   The Start Point Density calibration is printed.

Note: If you selected **Automatic** as the **Screening Method** in Step 1 of the wizard, the *Xerox* DocuColor 5000 Digital Press prints two charts, an **Image Density Calibration Chart** and a **Text/Line Art Chart**.

9. Collect the chart(s) from the printer.

   Step 2 of the Color Calibration Wizard appears. In this step you scan the start point chart so that the wizard can measure each separation and find the point at which the toner appears on the paper.

If you selected **Automatic** as the **Screening Method** in Step 1 of the wizard, you need to calibrate the *Spire* CXP50 color server using two charts. Step 2 of the Calibration Wizard appears as follows:



10. While pressing down the button on the *X-Rite* DTP34 QuickCal densitometer, align the head with the cyan arrow's tip. The arrow is to the left of the cyan column on the Image Density Calibration Curve. Its tip intersects the semi-dotted line.
11. Sweep the *X-Rite* DTP34 QuickCal densitometer over the cyan column.

    A beep sounds and a green light blinks when the scan is complete. A check mark appears over the cyan icon and instructions appear for the next sweep, this time for the magenta column.
12. After each color sweep, wait for the check mark to appear next to the appropriate icon and follow the instructions as listed.

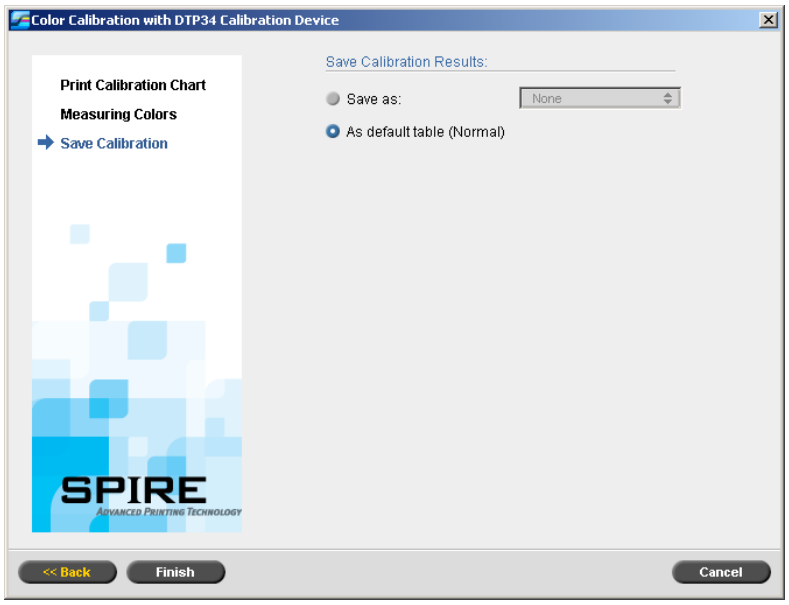
Note: Ensure that the separation columns on the chart are scanned in the order they appear in the icons: **Cyan** > **Magenta** > **Yellow** > **Black**.

When all of the separation columns have been successfully scanned, a check mark appears next to all icons.

Notes:

- If at any stage the scanning has not been completed properly, click **Reset** and scan again.
- If an error occurs while you are scanning the chart, an alert message appears. Click **OK** and re-scan the charts.
- If you selected **Automatic** as the **Screening Method** in Step 1 of the wizard, repeat steps 10-12 for the Text/Line Art chart.

Step 3 of the Color Calibration Wizard appears.



13. Select **Save as** and select the desired name for the calibration table. Type your own or select one from the list.
    Or:
    Select **As default table (Normal)** to save the calibration table as **Normal**.

Note: Each time you save a calibration table as default, it is saved twice, once as the normal look up table, and once as the saturated look up table. The *Spire* CXP50 color server automatically overwrites the existing **Normal** and **Saturated** calibration tables.

Tip: It is strongly recommended that you include the specific paper name and screen method in the calibration table file name. This helps you select the correct calibration table in the job setup.

14. Click **Finish**.

    Regardless of the option you chose, two calibration tables are saved:

    - **Normal:** A table that maintains the gray balance throughout the range of colors in the print job file
    - **Saturated:** A table that is the same as the normal table for 80% of the color range but from that point on, each color has a greater density. You can use this table when you need dark colors that are more intense than in the normal table.

    For example, if you name your **Normal** calibration table **Tuesday23**, the **Saturated** table is automatically named **Tuesday23sat**.

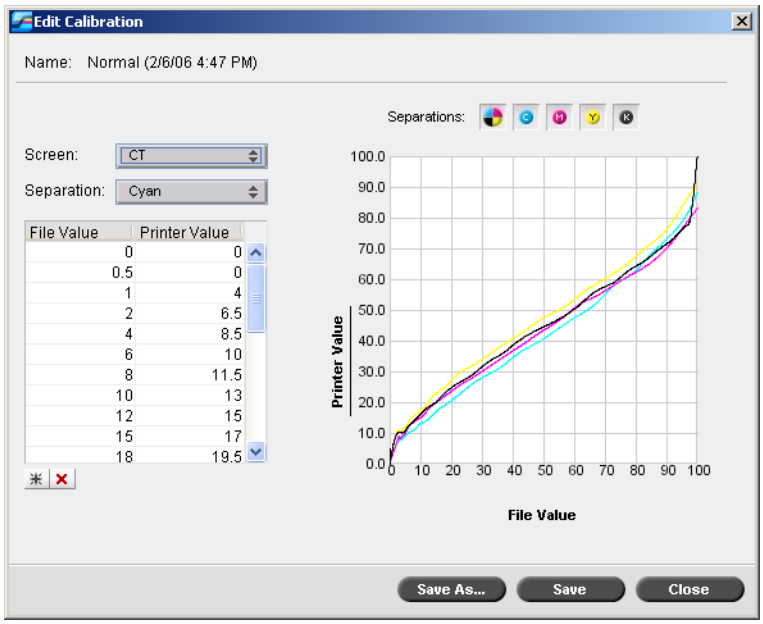
Editing Calibration Tables

You can review a calibration table to make sure that the curves are relatively smooth and continuous. If you are not satisfied with the results, the **Edit** option enables you to adjust the values of the image in the value table.

To edit a calibration table:

1. From the Tools menu, select **Calibration**.
2. In the **Calibration Name** box, select a calibration table, and then click **Edit**  .

The Edit Calibration window appears.



The Edit Calibration window includes the following:

- **Screen**—If you selected **Automatic** as the screening method, you can view two calibration tables, **CT** or **LW**. In the **Screen** list, select the table you want to view.
- **Separation**—The graph displays cyan, magenta, yellow, and black separations. You can see information about each separation by selecting it from the list.
- **Calibration Graph**—The graph shows the values from your calibration table.

  The horizontal axis represents the dot percentage values of the RTP file. The vertical axis represents the dot percentage values of the final output data (after applying the calibration table) that is sent to the printer.

  During printing, the *Spire* CXP50 color server automatically replaces the CMYK values in the RTP file with new values that compensate for the printer's current performance level.

The graph displays cyan, magenta, yellow, and black separations. You can view detailed information about each separation by clicking its button. To view the information for all the separations together, click the button that shows all four colors  .

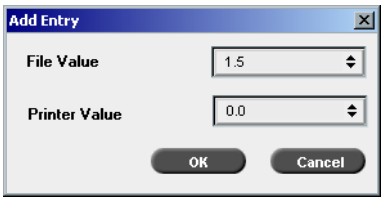
- **Value Table**

  You can change the separation values by adjusting the **File Value** and **Printer Value** settings. The table displays some of the dot percentage values shown in the graph. You can add, edit, or delete entries in the table. Your changes will be displayed immediately in the calibration graph.

To add an entry to the value table:

1. Highlight a row in the value table. The new entry row will appear below this row.
2. Click **Add Entry**  .

   The Add Entry dialog box appears.



3. Select the desired values from the **File Value** and **Printer Value** lists.
4. Click **OK**.

   The value table is updated and the calibration graph is adjusted.

To delete an entry from the value table:

1. In the value table, highlight the entry to be deleted.
2. Click **Delete Entry**  .

   The entry is removed.

Organizing Calibration Tables

You can use the **Save** and **Save As** functions to organize your calibration tables.

To save an existing calibration table:

1. In the Edit Calibration dialog box, adjust calibration table values and parameters as desired.
2. Click **Save**.

   The edited calibration table is saved with its original name.

Note: When you click **Save**, new calibration settings override previous calibration table settings.

To save a new calibration table:

1. In the Edit Calibration dialog box, adjust calibration table values and parameters as desired.
2. Click **Save As**.

   The Save As dialog box appears.

3. In the **File Name** box, type the new calibration table name.

Note: You can't overwrite the default calibration tables, **Spire Normal** and **Spire Saturated**.

4. Click **OK**.

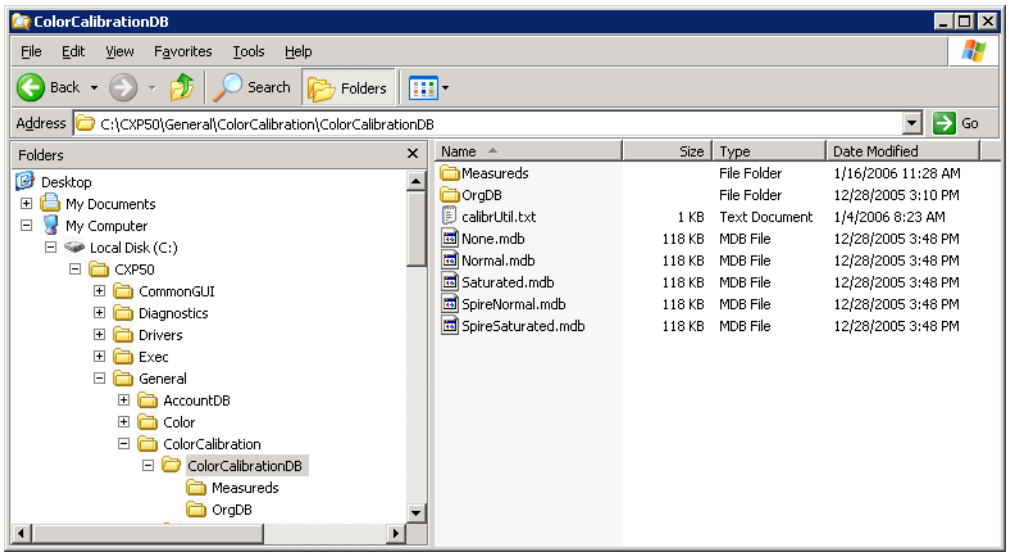
   The calibration table is saved with the new name.

Note: To edit a calibration table, select **Tools > Calibration > Edit.** To view information about a calibration table, select **Tools > Calibration > Info**.

5. Click **Close** to exit the Edit Calibration dialog box.

Backing Up Calibration Tables

1. Locate the **ColorCalibrationDB** folder, following the path **C:\CXP50\General\ColorCalibration\ColorCalibrationDB**.



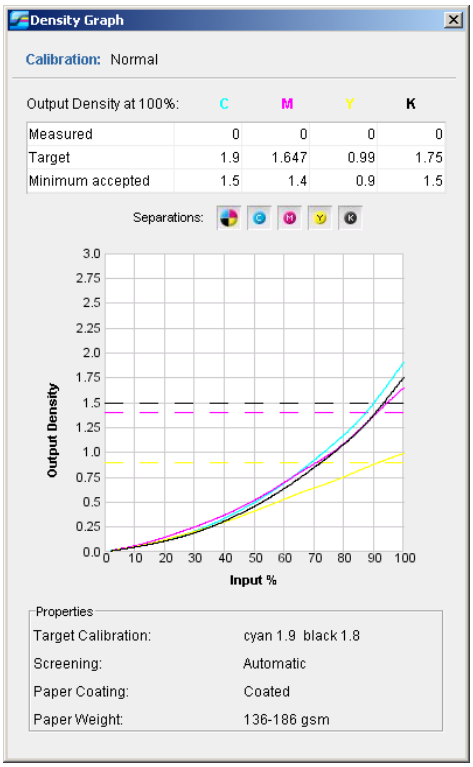
2. Open the **ColorCalibrationDB** folder.
3. Copy the desired calibration table files to your backup location.

Reading Color Density Data

To view the Density Graph:

1. In the Calibration window, from the **Calibration Name** list, select the table for which you want to receive detailed color information.
2. Click **Info** .

   The Density Graph appears. The Density Graph gives you detailed information about the saved calibration tables.



The Density Graph contains the following data:

- Calibration name
- Measured D-Max values for each separation
- Target D-Max values for each separation
- Minimum accepted density values for each separation (*Xerox* values)
- View options: filtering by color - select which colors are shown/hidden
- Calibration curves (target and measured) for each separation
  - ❒ Target is displayed as bold lines
  - ❒ Measured is displayed as thin lines
- Index - emphasizes the difference between target lines and measured lines

- Properties: paperweight, screening, paper coating

Note: When the density of the *Xerox* DocuColor 5000 digital press is lower than 80% of the target density, the following message appears:
"Attention: Below standard D-Max value(s) measured for <cyan, magenta, yellow, black>. Standard (Minimum): <C - 1.5>, <M - 1.4>, <Y - 0.9>, <K - 1.5>
Measured: <C - >, <M - >, <Y - >, <K - >".

Printing the Job with the Calibration Table

Now that you have calibrated using the paper you are going to use for printing, you can select the calibration table to print any job on the same paper stock using the same screen type. You can print the reference job you printed before with the new calibration table to evaluate the calibration results.

To print the reference job:

1. In the *Spire* CXP50 color server workspace, suspend the **Process Queue**.
2. Import the job.
3. Double-click the job to open the Job Parameters window.
4. In the **Paper Stock** tab, select the desired paper stock.
5. On the **Color** tab, select the calibration you created for the particular stock from which you printed.

For more information about the Color tab, see "Default Color Flow" on page 136.

6. In the **Color** tab, select the screening method you used for the selected calibration.
7. Set all other desired parameters, and then click **Save** to close the Job Parameters window.
8. Activate the process and print queues, and inspect the printed job.

If you see that the print out has any color imperfection, review the job parameter settings and make changes if necessary. If there are still color imperfections, perform machine maintenance and repeat the calibration process.

Default Color Flow

Job color parameters are located in the Job Parameters window > **Color** tab. The **Color** tab provides you with tone compression tools such as brightness, contrast, and gradation, as well as color tools, including rendering intent, ink saving, and RGB and CMYK Workflow. In addition, you can select various screening methods for your job.

The tone compression tools and screening methods—**Gradation**, **Brightness**, **Contrast**, and **Calibration**—can be applied to your RTP jobs without requiring the *Spire* CXP50 color server to re-RIP the jobs. The color tools—**Destination**, **Rendering Intent**, **Emulation**, **RGB Workflow**, and **Spot Color Editor**—should be applied prior to initial RIPing or your job will need to be re-RIPed.

The *Spire* CXP50 color server supports the following color formats:

- RGB
- CMYK
- L*a*b* color space
- Spot color
- Grayscale
- Duotone

To submit jobs for color adjustment on the *Spire* CXP50 color server:

1. Import the job to the *Spire* CXP50 color server workspace.
2. Double-click the job in the Storage window.
3. Select the **Color** tab in the Job Parameters window.

   The **Color** tab enables you to apply last-minute color corrections, or to set the output job to align with other output devices.
4. Adjust the desired color parameters. See the relevant parameter in the **Color** tab.

5. Click **Submit** to send your job to print.

   The job is processed on the *Spire* CXP50 color server and sent to the *Xerox* DocuColor 5000 digital press for printing.

Note: You can also use a virtual printer to adjust job parameters.

For more information about submitting jobs to the *Spire* CXP50 color server, see "Importing and Printing a Job" on page 28.

Color Tools

Profile Manager

The Profile Manager enables you to import and delete source and destination ICC profiles, and map destination profiles to specific paper colors.

Source profiles are used to emulate other devices, or color spaces. You can import source CMYK or RGB profiles. To use a profile in a job, in the Job Parameters window, select **Color** > **RGB workflow** or **Color** > **CMYK workflow** > **Emulation**, depending on the profile you imported.

Custom source RGB profiles are not available in the CSA emulation mode.

For more information about selecting a source profile in a job, see "RGB Workflow" on page 226 and "CMYK Workflow" on page 226.

Destination profiles define the color space of your printer and are based on the combinations of paper and toner that you are using. For different paper stocks, you need different destination profiles. Each custom destination profile will be used with coated and uncoated paper. To use a different destination profile in a job, in the Job Parameters window, select **Color** > **Destination profile.**

For more information about selecting a destination profile in a job, see "Destination Profile" on page 228.

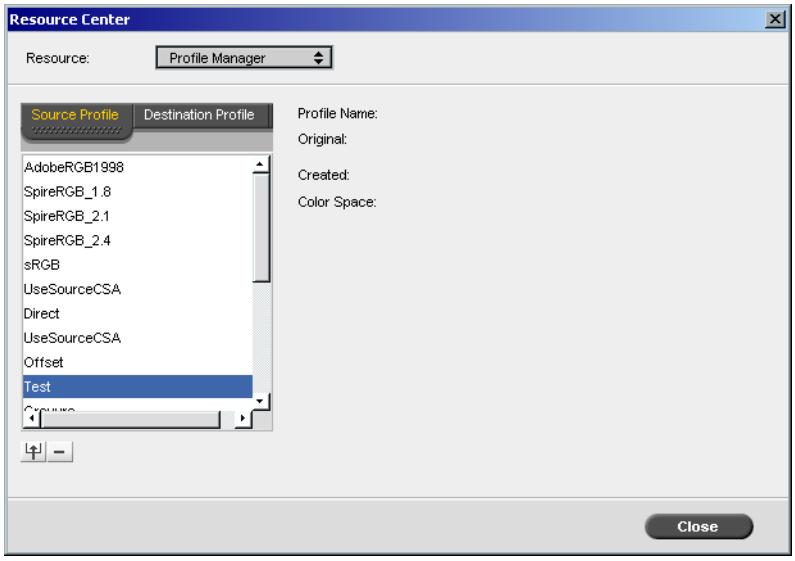
After you import a destination profile, you can use the Media Color Mapping dialog box to map the profile to a paper color. The profile is linked to the paper color and the *Spire* CXP50 color server will automatically select the correct profile for your job. This is useful—for example, in jobs that have mixed paper types. Select Linked from **Color** > **Destination profile**.

To import a source ICC profile:

1. On the toolbar, click the **Resource Center** button  .

   The Resource Center opens.

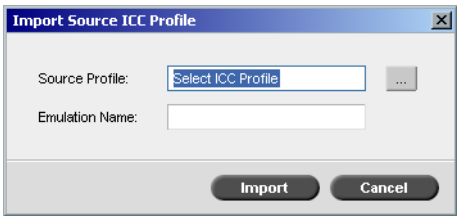
2. In the **Resource** list, select **Profile Manager**.



   The **Source Profile** tab appears and the predefined source ICC profiles are displayed.

3. Click the **Import** button  .

   The Import Source ICC Profile dialog box appears.



4. In the **Source profile** area, click the **browse** button ... . Locate and select the desired source profile, and then click **Open**.

   The new emulation name is displayed in the **Emulation name** box; you can change the name if you want.

5. Click **Import**.

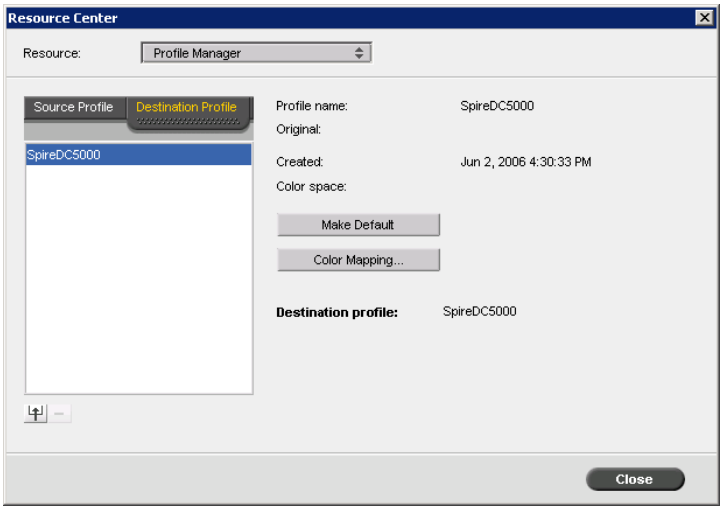
   The new source ICC profile is added to the **Emulation (Device Link)** list in the Job Parameters window, to either the **CMYK Workflow** parameter or the **RGB workflow** parameter.

To import a destination ICC profile:

For more information on destination profiles, see "Destination Profile" on page 228.

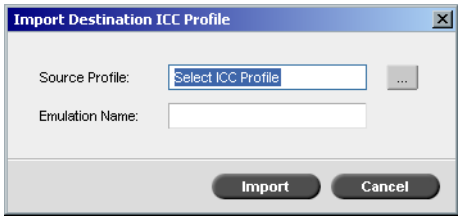
1. In the **Resource Center > Profile Manager**, select the **Destination Profile** tab.

   The predefined ICC profile is displayed.



2. Click the **Import** button .

   The Import Destination ICC Profile dialog box appears.



3. In the **Destination profile** area, click the **browse** button . Locate the desired source profile, and then click **Open**.

   The new emulation name is displayed in the **Emulation name** box; if you would like to change the name you may do so.

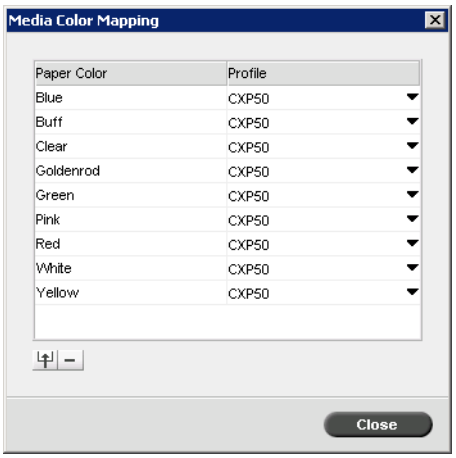
4. Click **Import**.

5. If you would like to set the imported destination as your default, select it and click **Make Default**.

6. To map ICC profiles to specific paper colors:

   a. Click **Color Mapping**.

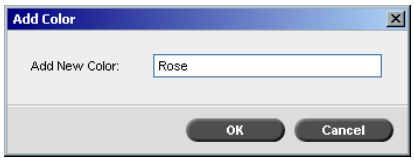
      The Media Color Mapping window appears.



   b. In the **Profile** column, select the desired profile for each paper color.

c. To add a new paper color, click the **Import** button .

Note: If you don't map a destination profile to a paper color, the *Spire* CXP50 color server uses the default profile, which is for white paper.



d. In the **Add New Color** box, type the name of the new color and click **OK**.

e. To delete a paper color, select the desired paper color and click the **delete** button .

f. In the message that appears, click **OK**.

g. In the Media Color Mapping dialog box, click **Close**.

To delete an ICC Profile:

1. In the **Resource Center > Profile Manager**, select the profile you would like to delete.

Note: You cannot delete predefined ICC profiles.

2. Click the **delete** button .

The profile is deleted from the profile list.

Spot Color Editor

You can use the Spot Color Editor to edit colors in the spot color dictionary, and to define specific RGB, grayscale, or CYMK colors that you want to protect.

Editing the Spot Color Dictionary

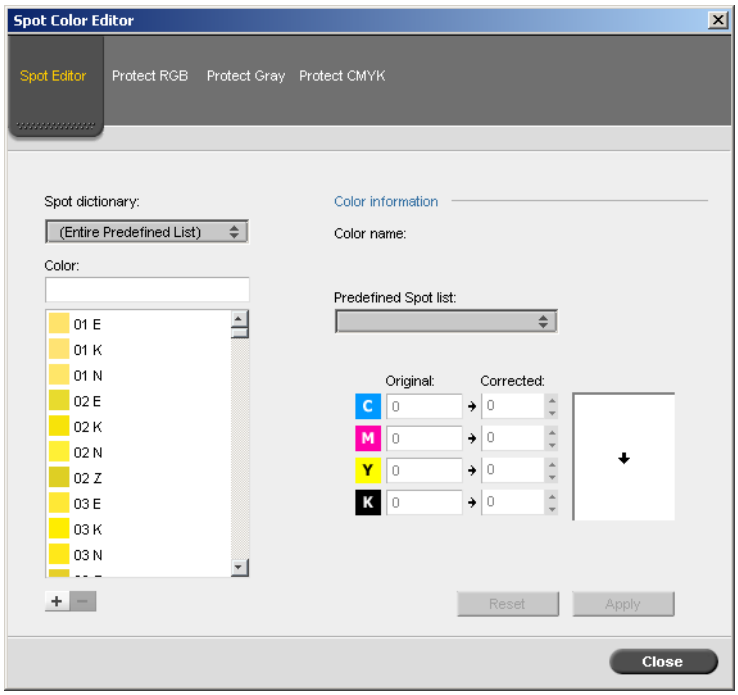
Individual job pages can contain continuous tone (CT), line work (LW), and spot color elements. The *Spire* CXP50 color server Spot Color Editor enables you to edit the CMYK values of every spot color in the spot dictionary without affecting the CT or LW page elements. The Spot Color Editor also enables you to create custom spot colors and to define fixed CMYK values for those spot colors. The *Spire* CXP50 color server supports HKS and *PANTONE* 2000 spot colors.

Note: Spot colors—for example *PANTONE* spot colors—are not affected by CMYK emulation. A spot color has the same appearance with any selected CMYK emulation.

To edit a PANTONE color:

1. From the **Tools** menu, select **Spot Color Editor.**

   The Spot Color Editor window opens on the **Spot Editor** tab, with the *Spire* CXP50 color server's entire collection of colors listed.



2. Under **Color**, search for a particular color.

Note: When you are searching for a color, you can type the first letter of the first word in the search. For example, if you are searching for Cool Gray 4 and type `cool`, the mouse pointer locates the first color in the list that begins with the letter *c*.

3. Alternatively, from the **Spot dictionary** list, select the color dictionary that contains the color you want to edit.

Note: Use the *PANTONE* CV dictionary if you are working in *QuarkXPress* software.

4. Select the desired spot color.

   The CMYK values for that spot color and a color preview appear on the right-hand side of the Spot Color Editor window.

5. Change the CMYK values as desired.

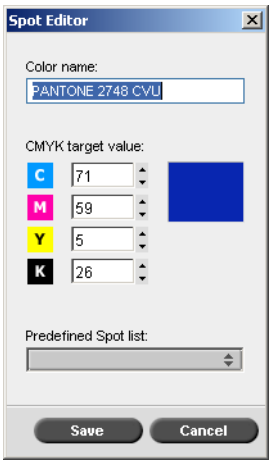
6. Click **Apply**.

   The new spot color is added to the custom color dictionary.

To create a new spot color:

1. In the Spot Color Editor window, click the **add** button.

   The Spot Color Editor dialog box appears.



2. Type the new spot color name as it appears in the *PostScript* file.

Note: Spot color names are case sensitive. Ensure that the new name is identical to the name that appears in the DTP software.

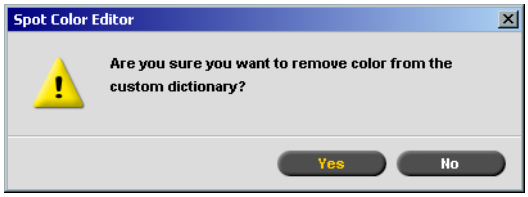
3. Adjust the CMYK values as desired.
4. Click **OK**.

   The new spot color is added to the custom dictionary.

To delete a spot color (from the custom dictionary only):

1. From the **Spot dictionary** list, select **Custom Dictionary**.
2. From the list of custom colors, select the spot color that you want to delete.
3. Click **Delete**.

   The following message appears.



4. Click **Yes** to delete the spot color.

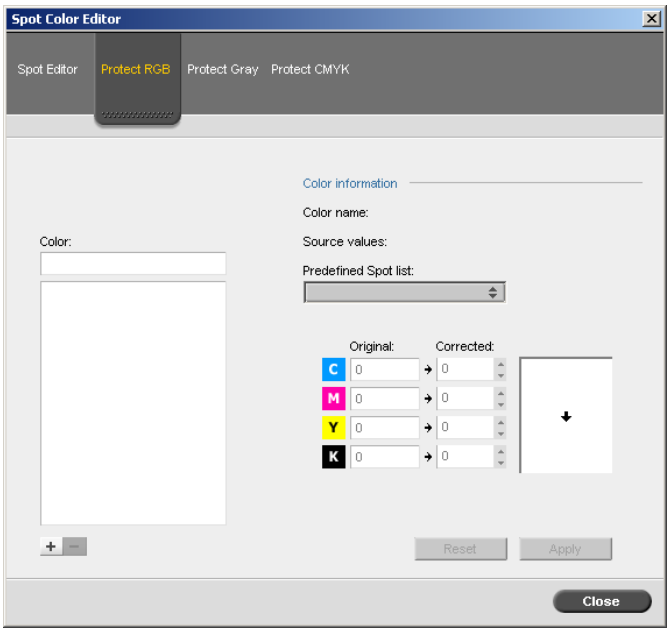
Protecting Specific Colors

Using the Spot Color Editor, you can protect specific colors—for example, official logos or company colors—to help produce color fidelity and color consistency between devices. When you define a specific color as an RGB, gray, or CMYK spot color, and enter a fixed CMYK target for it or align it to a predefined spot color, the *Spire* CXP50 color server treats it as a spot color, protecting it accordingly.

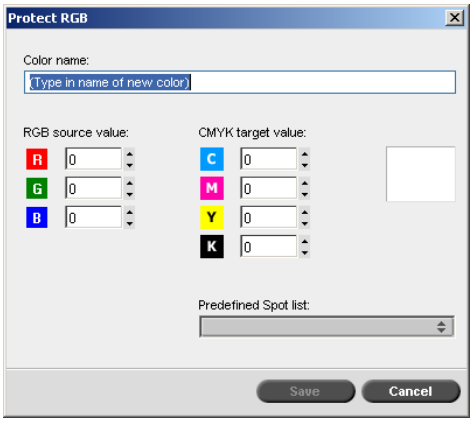
To define an RGB color as a spot color:

Note: The RGB spot workflow applies only to LW elements.

1. In the Spot Color Editor window, click the **Protect RGB** tab.



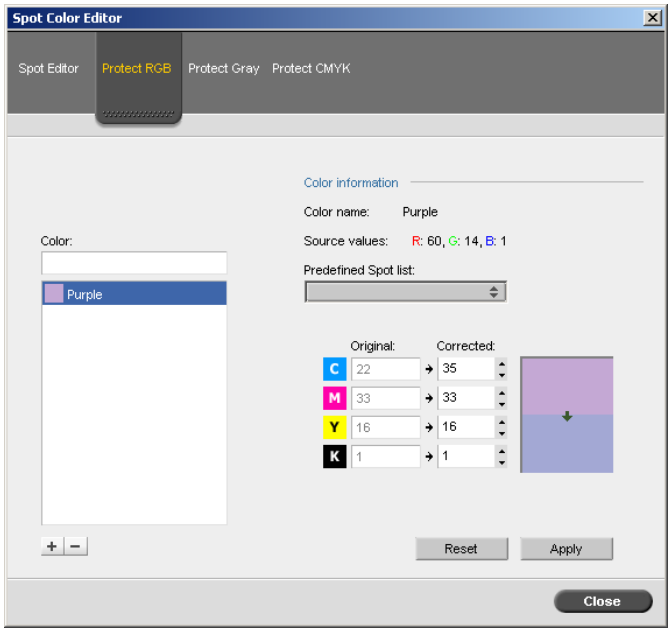
2. Click the **add** button.



3. In the **Color name** box, type a name for your color.
4. Type the RGB source values and the CMYK target values, or select a spot color from the list.
5. Click **Save**.

6. On the **Protect RGB** tab, select the color.

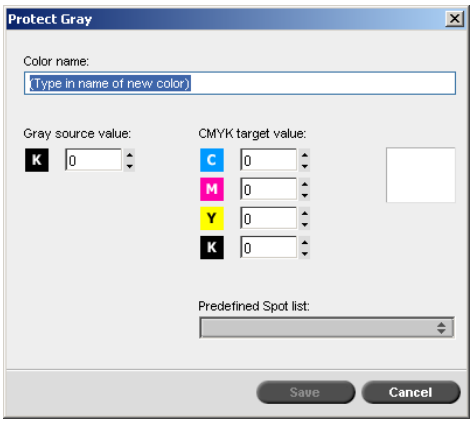
   The color information appears.



7. If necessary, in the **Corrected** column adjust the CMYK values.
8. Click **Apply**.

To define a grayscale color as a spot color:

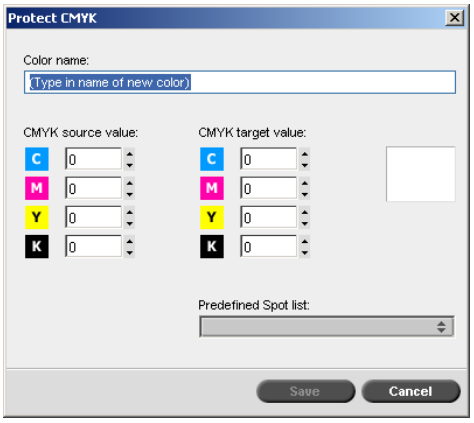
1. In the Spot Color Editor window, click the **Protect Gray** tab, and follow the procedure for defining RGB colors as spot colors.
2. In the Protect Gray dialog box, enter the gray source value.



3. Continue to follow the procedure for defining RGB colors as spot colors.

To define a CMYK color as a spot color:

1. In the Spot Color Editor window, click the **Protect CMYK** tab, and follow the procedure for defining RGB colors as spot colors.
2. In the Protect CMYK dialog box, enter the CMYK source value.



3. Continue to follow the procedure for defining RGB colors as spot colors.

Gradation Tool

Sometimes you need to perform tone corrections when printing a job. Gradation changes can include brightness, contrast, and color balance adjustments throughout the tone range of an entire image, or in specific tone ranges.

The Gradation tables that you create using the Gradation tool are added to the gradations list in the **Color** tab, and may be applied to print jobs. The *Spire* CXP50 color server also enables you to visually check the effect of different gradation adjustments on RTP jobs prior to printing.

Using the *Spire* CXP50 color server Gradation tool, you can apply the default gradation table or another pre-configured gradation table to a job. You can also edit an existing table and save your changes. Gradation is an interactive function and changes are automatically applied to the displayed image.

Note: You can edit an existing gradation table, but you cannot overwrite the default gradation table, **DefaultGradTable**.

The Gradation tool is used to create and edit gradation tables and to check the effect of different gradation adjustments on specific RTP jobs. These tables can then be applied to your jobs during job processing for tailored gradations.

To open the Gradation tool:

➢ From the **Tools** menu, select **Gradation**.

The Gradation dialog box appears.

Preview

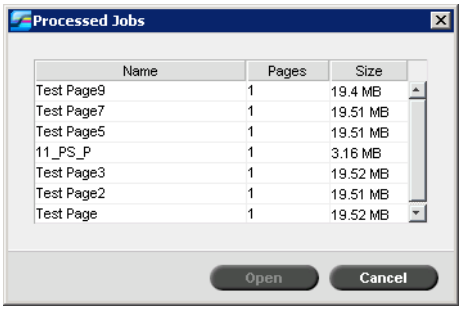
Notes:

- Gradation is an interactive function. Gradation changes are automatically applied to the displayed image.
- The gradation table created is not automatically applied to the previewed job. You must use job parameters to assign a gradation table to a job.

To preview a job:

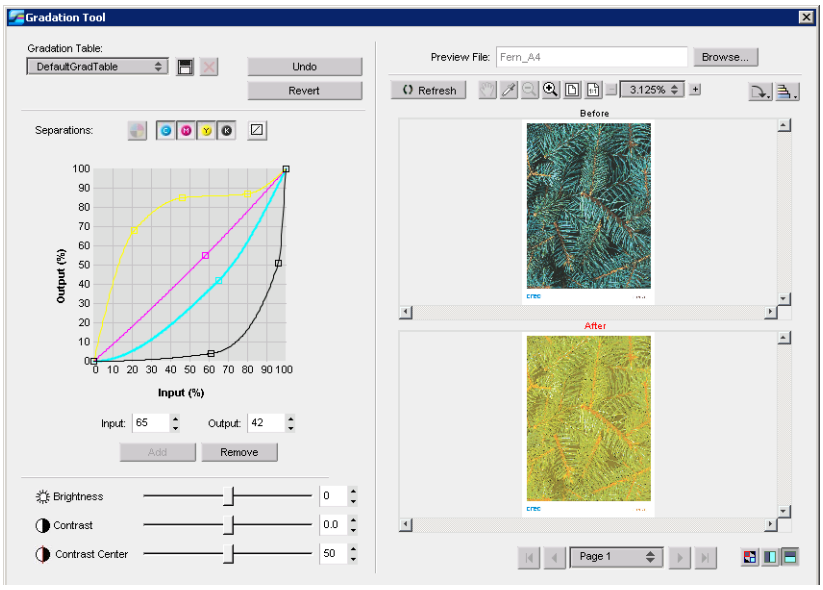
1. Click **Browse** to select a job for display in the Preview window.

   The Processed Jobs window appears. The jobs that are displayed are the RTP jobs listed in the Storage window.



2. Select the job you wish to preview, and then click **Open**.

   The job appears in the Gradation dialog box.



Editing Gradation Tables

When you open the Gradation Tool window, the default gradation table, **DefaultTable**, is selected in the Gradation Table list, and is displayed in the graph. This table serves as a baseline and consists of a 45° gradation curve, with Brightness and Contrast set to **0**, and Contrast Center set to **50**. All of the color separations are selected.

Gradation tables that you create also appear in the **Gradation Table** list. When you select a gradation table for a job (see "Gradation" on page 230), the predefined settings are immediately applied to the processed job that you are working with.

The separations buttons enable you to select one, all, or any combination of separations to edit for a specific gradation table. Selecting a specific separation enables you to change the color balance for a specific tonal range.

When you open the Gradations Tool window, all of the separations are selected.

1. Do one of the following:
   - Click the **All Colors** button  to edit all the separations simultaneously.
   - Click the individual separations you wish to edit—for example, select the cyan separation only.
2. Click the curve in the graph to add a point, and then drag the point to modify the separation. When you select a point, its value appears in the **Input** or **Output** boxes. You can add multiple points to the curve in the same way. Drag the point(s) to the desired location(s).

   The **Input** axis represents the tone values of the image before gradation changes. The **Output** axis represents the tone values of the image after gradation changes.
3. To view gradation changes in your job, click **Refresh**. Changes are automatically applied to the displayed image in the **After** view.
4. To remove a point on the curve, select the point and then click **Remove**.

5. To reset the gradation curve to a 45° curve, click the individual separation and click the **Reset** button .
6. To revert to the original gradation settings, click **Revert**.
7. To remove the last change you made to the gradation graph, click **Undo**.

Creating a New Gradation Table

1. In the Gradation Tool window, modify your gradation table as desired.
2. Click the **Save** button .

3. In the **Table name** box, type the desired name for the new gradation table, and click **OK**.

   The gradation table is saved and added to the Gradation Table list and to the Color Modes tab in the Job Parameters window.

Deleting a Gradation Table

1. Select the gradation table in the **Gradation Table** list, and then click the **Remove** button .

Note: You cannot delete the predefined gradation table.

2. In the confirmation message, click **Yes**.

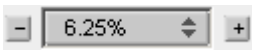
Navigation Buttons

The navigation buttons enable you to select a specific booklet or page to view, and to browse the pages of the current job.

Using the Preview Tools

The preview buttons enable you to switch the display mode in the original and edited views.

Table 12: Preview Buttons

This button:	Enables you to:
 **Pan**	View a different area of the image
 **Eye Dropper**	Find out the CMYK values of a specific area on the page. To find the values, first click the **Eye dropper** button. Then move the pointer to the point on the page where you want to measure the color values and click. The CMYK values appear as a tool tip.
 **Zoom In**	Magnify the selected area of the page
 **Zoom Out**	Reduce the size of the selected area by 50%
 **One to One Zoom**	View the actual size of the page one to one (1:1)
 **Fit to Screen**	Scale the page to fit the available screen space
	View the image at different preset levels of magnification by selecting a percentage in the list
 **Rotate View**	Rotate the page by 90°, 180° and 270°
 **Show/Hide Separation**	Turn on or off one or more separations

This button:	Enables you to:
 **Before/After view**	Toggle between the **Before** and **After** views
 **Before/After view**	View the **Before** and **After** views in portrait
 **Before/After view**	View the **Before** and **After** views in landscape

Brightness and Contrast Slider Controls

The **Brightness** and **Contrast** slider controls are active only when all of the separations are selected.

Brightness

Brightness increases or decreases the luminance of the image. Increasing brightness brightens the image and results in a concave curve. Decreasing brightness darkens the image and results in a convex curve.

➢ Move the **Brightness** slider to the right to increase brightness or to the left to decrease brightness.

Contrast

Contrast increases the image contrast by making the highlights lighter and the shadows darker. It can also be used to decreases the contrast.

➢ Move the **Contrast** slider to the right to increase contrast (S shaped curve), or to the left to decrease contrast (inverted S shaped curve).

Contrast Center

Contrast increases the image contrast mainly in the midtones. Using Contrast Center, you can adjust where the contrast is increased. To enhance contrast in highlights, the Contrast Center is shifted toward the highlights. To enhance contrast in shadows, the Contrast Center is shifted toward the shadows.

- Set the image contrast, by adjusting the **Contrast** slider.

  Your change affects the gradation graph by moving the point where the curve changes from convex to concave.

Note: Contrast Center only affects the image if Contrast has also been adjusted.

Organizing Gradation Tables

The Gradation window provides a number of options for organizing gradation tables, including **Reset**, **Save**, **Delete**, and **Save As**.

If you work only with the default gradation table, the **Reset** and **Save As** options are activated. These options enable you to use the default gradation table as a base on which to build and save new gradation tables. When you work on gradation tables other than the default table, the **Save** and **Delete** options are also active.

- To reset all Gradation window settings, click **Reset**.

  The gradation curve is reset to a 45° line.

- To delete the selected gradation table, click **Delete**.

Note: You can not delete the **DefaultGradTable.**

- To save the specified gradation settings, click **Save**.
- To create new gradation tables by saving existing gradation tables with new names, click **Save As**.

Note: You can only save the default gradation table under a new name.

7

VI Workflow

VI Overview

Variable information (VI) jobs are jobs in which the printed materials are individualized for specific recipients or purposes. These materials can include bills, targeted advertising, and direct mailings.

VI jobs are composed of booklets, which are personalized copies of a document. A booklet can consist of one or more pages, with the entire document targeted at a specific individual or address. For example, a booklet can be either a single-page gas bill or a multi-page personalized document.

Each page in the booklet is constructed as a collection of individually RIPed elements that may differ from booklet to booklet, including text, graphics, pictures, and page backgrounds. These elements are self-contained graphical entities that may be line art, text, RIPed images, or a combination of these. There are two types of elements in VI jobs:

- Unique elements that are used only once for a specific individual or purpose. For example, an individual's name.
- Reusable VI elements can be used more than once in different pages, booklets, or jobs. A company logo is an example of a reusable element.

On the *Spire* CXP50 color server, each element, text, graphic, picture, or page background is RIPed only once, whether the element is used once, several times, or on every page of the VI job. Elements that are used more than once are cached for further use. If you have the *Spire* CXP50 color server with the Professional Kit, you can manage these elements in the Resource Center **Cached VI Elements** area. Each set of elements associated with a particular job is assigned a unique name. Inline variable elements that are used only once, usually text, are not cached.

For more information about cached VI elements, see "Managing VI Elements" on page 164.

Pages are assembled from the pre-RIPed reusable elements and the RIPed unique elements just before printing. Then the job is printed in the same way as all other jobs in RTP format.

Whenever a VI or PS job is imported to the *Spire* CXP50 color server, its page size is automatically recognized. The page size is displayed in the *Spire* CXP50 color server Job Parameters window.

VI Document Formats

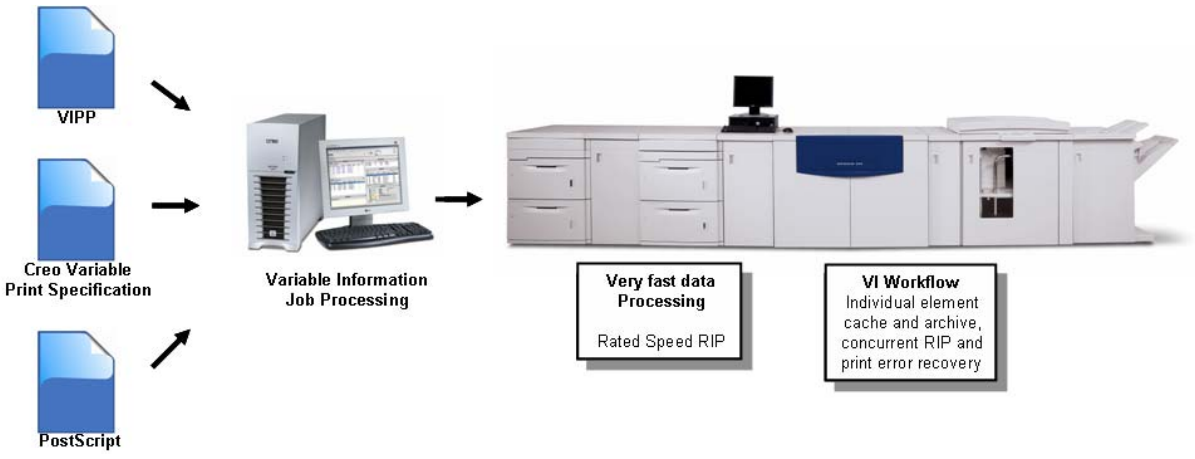
VI jobs are created using VI authoring software that support Variable Print Specification and VIPP formats. Most VI authoring software can convert VI files to conventional PS files, which can also be processed by the *Spire* CXP50 color server, although less efficiently than Variable Print Specification and VIPP files. Each authoring software creates VI code that instructs the RIP where to place the VI elements and each authoring software does so in a slightly different manner.

The format you choose can be a stand-alone format that covers all aspects of document design, data management and text capture or it can be an extension of an existing software that enables the creation of VI documents and VI jobs.

The *Spire* CXP50 color server can process VI jobs that are in one of the following file formats:

- *Creo* Variable Print Specification
- *Xerox* Variable data Intelligent *Postscript* Printware (VIPP)
- Personal Print Markup Language (PPML)
- *PostScript*

Note: Variable Print Specification, VIPP, and PPML elements are displayed in the Resource Center under the **Cached VI Elements** area (only).



Creo Variable Print Specification

Creo Variable Print Specification is the *Creo* developed formal language designed for effective production of VI documents.

Creo Variable Print Specification is comprehensive and can specify a complete range of VI documents. It also provides the means for efficient implementation—fast and efficient data processing, and storage prior to printing.

A Variable Print Specification job consists of the following components:

- **Booklet**
  A personalized copy of a document within a single print run where pages and/or elements within a page may vary from booklet to booklet.
- **Sub-job**
  All copies of a particular document—for example, book, brochure, or flyer—within a single print run. On the *Spire* CXP50 color server, sub-jobs can be deleted, archived, or reprinted at any time. However, you can still maintain reusable elements for future runs. Reusable elements are cached elsewhere, so only the unique data, which is embedded in the job, is deleted.
- **Reusable Elements**
  Self-contained graphical entities that can be line art, text, raster images or a combination of these types. Reusable elements are represented in *PostScript* and can be stored as EPS files when appropriate. Reusable elements include clipping and scaling instructions as well as the image data.

  Note: Grayscale TIFF and EPS images that are created in CMYK applications (such as *Adobe Photoshop*) are counted correctly as **B&W** instead of **Color** in both the *Spire* CXP50 color server and the *Xerox* DocuColor 5000 digital press billing meters.

  Reusable elements can be used repeatedly in different pages, booklets and jobs. On the *Spire* CXP50 color server, all reusable elements are processed once and cached as RTP elements for further use. They can be reused either within the sub-job itself, or in additional runs of sub-jobs.
- **Inline Elements**
  Unique information is drawn from a database and is embedded in the sub-job. This data prints only once for individual booklets.

VIPP

VIPP is a *PostScript*-based format that merges the VI pages during the processing stage. VIPP is mostly used with financial software, using the dynamic graph-charting capability of VIPP for bank statements, telephone bills, electric bills, and so on.

Note: To use VIPP files on your *Spire* CXP50 color server, first install the VIPP software on your system. This installation should be done by a service engineer. Contact your service provider for more information.

Whenever a VI job is imported to the *Spire* CXP50 color server, the file type and number of pages per booklet are automatically recognized and shown.

VIPP jobs are composed of the following four files:

Table 13: VIPP files

File Name	File Description
File.PS	The *PostScript* Master Form, which contains all of the fixed elements from the original document.
File.JDT	The Job Descriptor Ticket, which contains header and setup information for the job.
File.DBM	The Database Master, which contains the VIPP coding.
File.DBF	The Database File, which contains all the ASCII data to be merged. It should include database information taken from the range of database records that were specified in the DataMerge dialog.

VIPP software creates xgf and xgfc folders on your system. Within the xgfc folder, a number of sub-folders are created. Table 14 lists in which sub-folders you should store VIPP job files.

Table 14: VIPP sub-folders

File Name	Store in VIPP Sub-folder
File.PS	formlib
File.JDT	jdtlib
File.DBM	formlib
File.DBF	mislib
Variable Image Files	imglib

To print a VIPP job:

➢ Import the ***.DBF** file to the *Spire* CXP50 color server.

The VIPP job is processed and printed.

VIPP 2001 and PPML

The PPML format is a new XML-based industry standard that print-technology manufacturers developed for the high-speed production of reusable page content.

The *Spire* CXP50 color server supports VIPP 2001 and PPML formats. Some of the features that are included enable you to:

- Process VIPP 2001 and PPML jobs efficiently
- Manage VIPP 2001 and PPML reusable elements
- Import jobs in various VI formats to the *Spire* CXP50 color server
- Import VI elements to the *Spire* CXP50 color server and submit them for pre-cache
- View VI elements in their structural hierarchy

Both PPML and VIPP 2001 have a hierarchical structure. Document components are separated from their submission file and can be organized and stored in different levels of the hierarchical structure.

In PPML, you can store different jobs in one PPML file. Thus, the display in the navigation pane varies from the way Variable Print Specification and VIPP appears.

You can print a booklet range within a PPML file.

PostScript Files

PostScript files are suitable for simple, very short run jobs. All page elements are re-RIPed for each page. These jobs do not use a VI authoring tool. Instead, they use a mailmerge function in a *Microsoft* Word document or a *Microsoft Excel* spreadsheet.

Using Creo Variable Print Specification to Print a VI Job

The *Spire* CXP50 color server first searches for high-resolution files in the input folder that contains the PDL file, and then in the predefined APR path—**D:\Shared\High Res**. The *Spire* CXP50 color server will look for VI images in these locations when it RIPs the job.

Note: You can also define a custom path to any connected server or disk. For more information about adding an APR path, see "High-Resolution Workflow" on page 84.

To print a VI job:

1. Copy VI graphic elements to one of the defined APR folders on the *Spire* CXP50 color server.
2. Submit your job to the *Spire* CXP50 color server.

For more information about how to import files, see "Importing and Printing a Job" on page 28.

Reusable elements are identified, processed, and placed in the Resource Center **Cached VI Elements** area (this area is available only for users with the *Spire* CXP50 color server with the Professional Kit). They are ready for rapid assembly into pages and for reuse during the printing stage.

Your VI job is processed and printed on the *Spire* CXP50 color server. The *Xerox* DocuColor 5000 digital press prints RTP booklets at full engine speed working uninterrupted from the printer disk. Booklets are compiled concurrently while the printer prints. As pages are sent to the print engine, they are assembled from the various inline and reusable elements on-the-fly.

After the job is completed, an RTP job is placed in the Storage window. This RTP job contains the complete variable job including all booklets, variable images, and unique elements.

Notes:

- If an element is to be used more than once but with different clipping or scaling parameters, it is treated as a new page element and processed again.
- The cache is kept intact until the job is completed. This enables you to reuse RIPed elements anywhere in the job. Elements may remain in the cache for subsequent jobs. You can also archive job elements.
- Deleting a job does not delete the cached job sub-folder. This must be done manually in the Resource Center.

Useful VI Print Options

Gallop

The **Gallop** parameter on the **Print Settings** tab enables the *Spire* CXP50 color server to RIP and print VI jobs concurrently. Large jobs do not have to be RIPed entirely to disk before printing. You can predefine the number of pages to be processed before the engine starts to print. As soon as these pages are processed, printing starts while the rest of the job is streamlined through the *Spire* CXP50 color server. The *Xerox* DocuColor 5000 digital press continues printing at its rated speed without interruption or slowing down until the job is finished.

For more information about setting the **Gallop** option, see "Gallop" on page 218.

Job Deletion

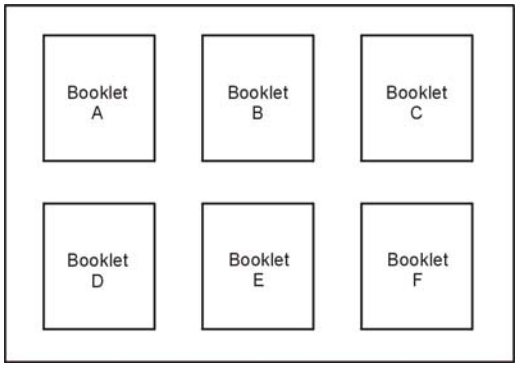
When you are printing a large VI job that takes up a substantial amount of the *Spire* CXP50 color server disk space, it is recommended that you use the **Job Deletion** parameter.

For more information about setting the **Job Deletion** option, see "Job Deletion" on page 238.

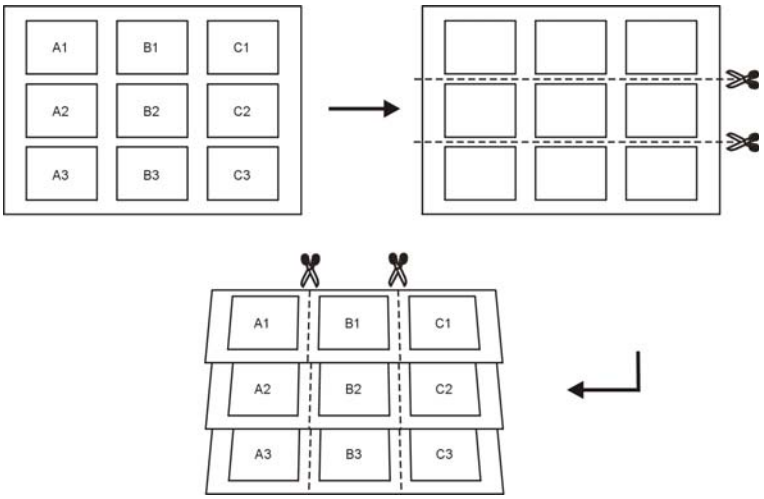
Imposition

When you impose VI jobs:

- Every booklet must have the same number of pages
- When you use the **Step & Repeat** method to print a single page booklet, the VI job does not print the same image repeatedly. Several booklets are printed on the same sheet and each record is printed on the sheet once.



For a booklet with several pages, the pages are printed in order along the length of the sheet. The next booklet is printed beside the first. After the sheets are cut, the booklets are aligned with their pages in the proper order.



Note: The above example uses the step and repeat method. There are no special considerations for VI jobs using saddle stitch and perfect bound methods.

For more information about setting Imposition parameters, see "The Imposition Tab" on page 231.

Managing VI Elements

Note: You can only manage VI elements if you have the *Spire* CXP50 color server with the Professional Kit.

When the *Spire* CXP50 color server processes your VI job, it stores the reusable VI elements in a specific location. When the job is printed, the RIP engine looks for the VI elements in that location and reuses the elements when necessary. The VI elements can also be reused in future jobs.

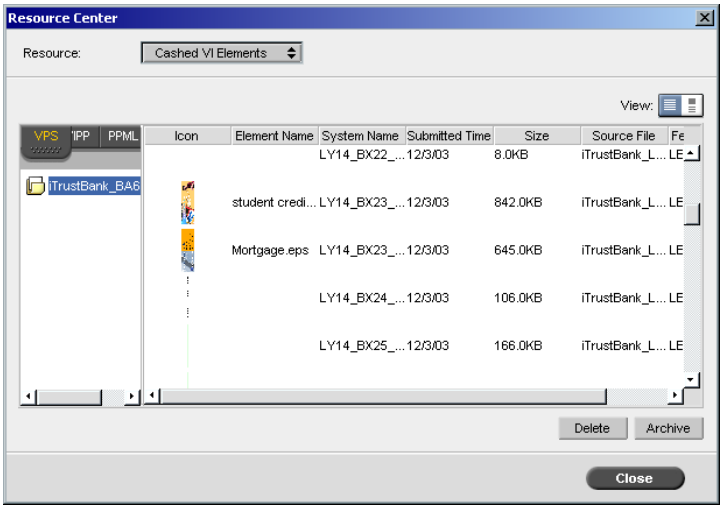
In the Resource Center, use the **Cached VI Elements** area to manage the VI elements on your system and to perform the following tasks:

- Delete VI elements
- Archive VI elements
- Retrieve VI elements

Deleting VI Elements

VI elements that are no longer in use take up valuable disk space on the *Spire* CXP50 color server. To free up disk space, you can delete the VI elements you no longer need.

1. On the toolbar, click Resource Center .
2. In the **Resource** list, select **Cached VI Elements**.



Your VI jobs are listed in the left pane. In the right pane, you can see all of the VI elements that are associated with your job. In addition, a thumbnail viewer lets you check elements visually.

3. Select the element that you want to delete, and then click **Delete**.

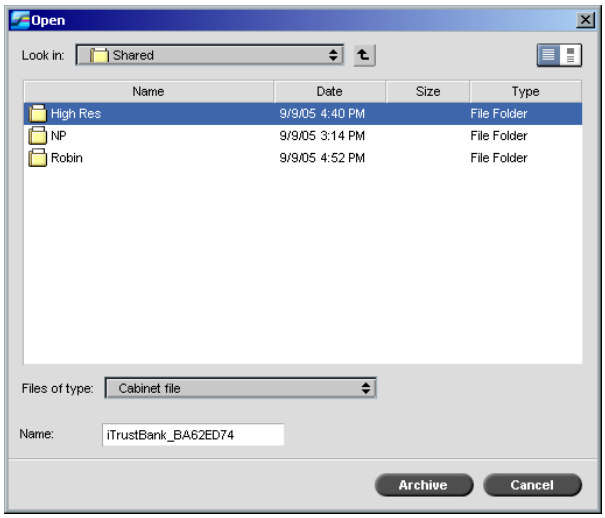
Note: You can also delete the entire folder.

Archiving VI Elements

If you have finished printing a large VI job and you know that you will need to reprint it in the future, it is a good idea to archive the VI elements and retrieve them when needed. You can archive your VI job folder in a location that you specify.

1. On the toolbar, click Resource Center .
2. In the **Resource** list, select **Cached VI Elements**.
3. Select the VI folder in which to archive, and then click **Archive**.

   The Open dialog box appears.



4. Find the location in which to archive your VI elements, and then click **Archive**.

Retrieving VI Elements

When you need to reprint your job, you can retrieve the VI elements from the archive.

1. From the **Job** menu, select **Retrieve from Archive**.

   The Open dialog box appears.

2. Select the folder in which your VI elements are archived.

3. Select the desired file and then click the **add** button  .

Note: Use SHIFT or CTRL to select several files or CTRL+A to select all the files.

4. Click **Retrieve**.

   The *Spire* CXP50 color server retrieves the archived VI elements and displays them at the end of the file list in the Cached VI elements dialog box.

8 System Administration

Setting Up and Configuring the Spire CXP50 Color Server

Basic system configuration and settings are defined in the *Spire* CXP50 color server Settings window. The Settings window contains items that enable you to manage your system.

To open the Settings window:

➢ From the **Tools** menu, select **Settings**.

The Settings window appears. The settings are divided into two lists: **Administration** and **Preferences**.

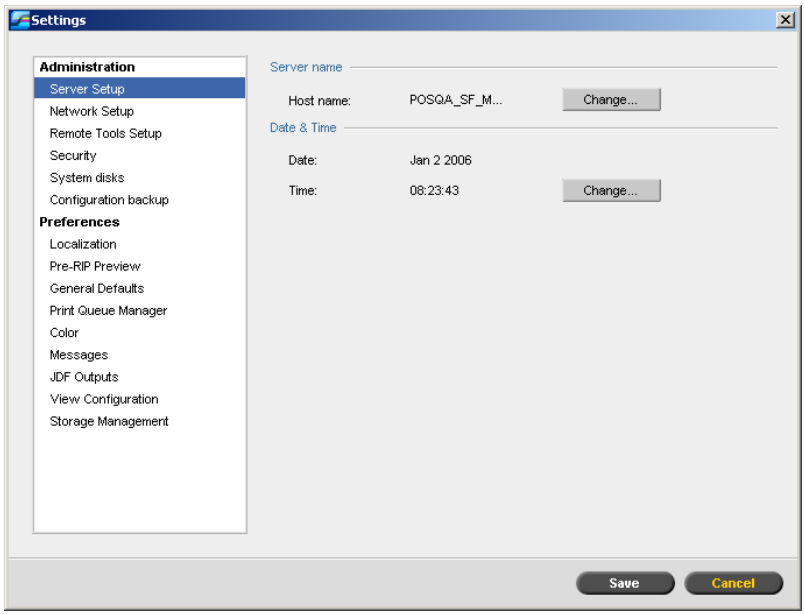
- **Administration:** All users can view these settings, but only an administrator can configure the settings.
- **Preferences:** All users can view these settings, but only users of Administrator and Operator user levels can configure the settings.

Note: If you log on to the *Spire* CXP50 color server as a guest, the Settings window is unavailable.

To save changes in the Settings window:

➢ In the Settings window, click **Save**.

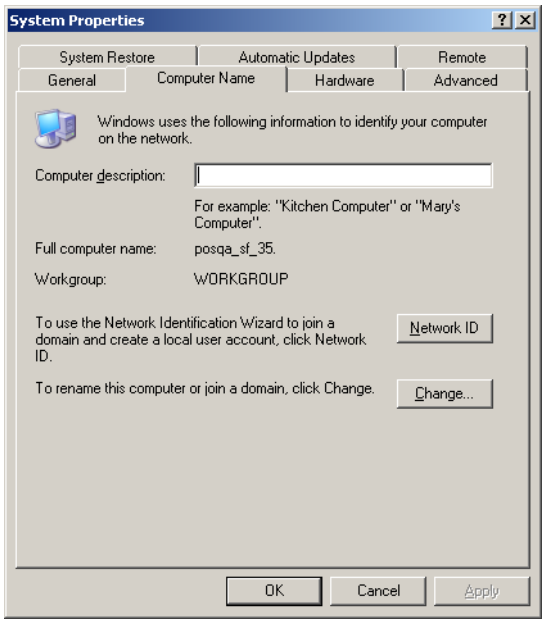
Server Setup



Changing the Server Name

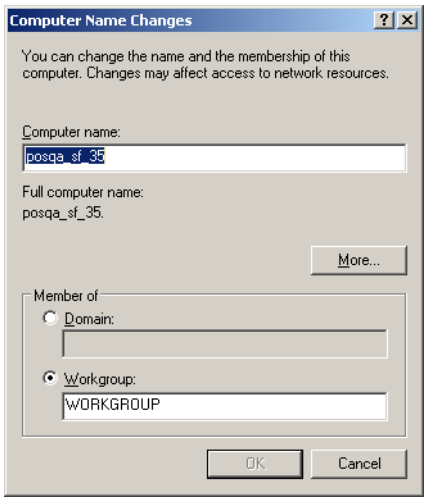
1. In the Settings window, select **Server Setup**.
2. In the **Server Name** area, click **Change**.

   The System Properties dialog box appears.



3. On the **Computer Name** tab, click **Change**.

   The Computer Name Changes dialog box appears.



4. In the **Computer name** box, type a new name for the computer.

5. If you want to change the **Workgroup** or the **Domain** in which your computer appears, select the desired option and type a new name in the corresponding box.

Note: Do not change the workgroup or domain unless you are instructed to do so.

Important: If you want to change the domain, you are required to type the password for the domain account. If the password is unavailable, the computer is locked.

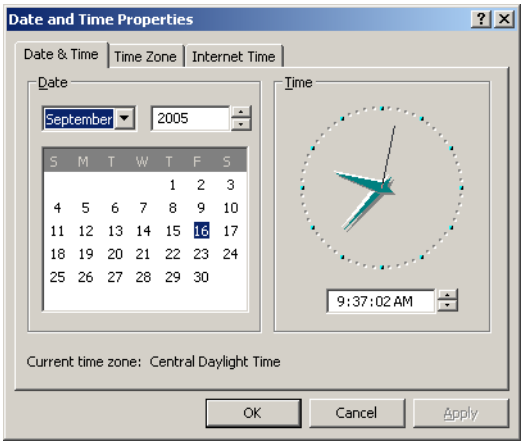
6. Click **OK**.
7. Click **OK** in the System Properties window.

   The system prompts you to restart your computer for the new settings to take effect.
8. Click **No** if you want to change other system parameters, or click **Yes** and restart your computer.

Changing the Date and Time

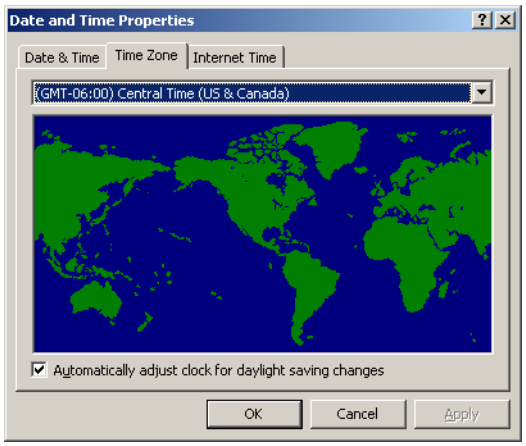
1. In Settings window, select **Server Setup**.
2. In the **Date & Time** area, click **Change**.

   The Date and Time Properties dialog box appears.



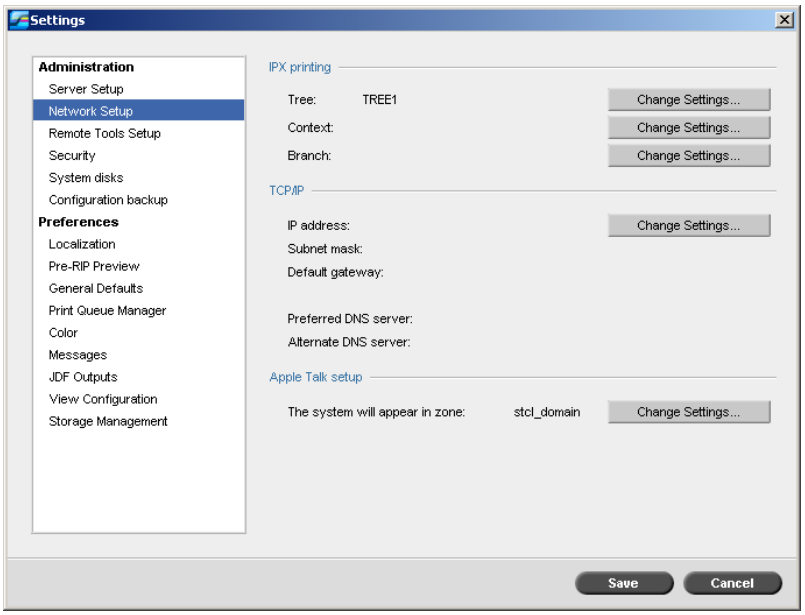
3. On the **Date & Time** tab, select your local time settings.

4. Select the **Time Zone** tab and set the correct time zone.



5. Click **OK**.

Network Setup



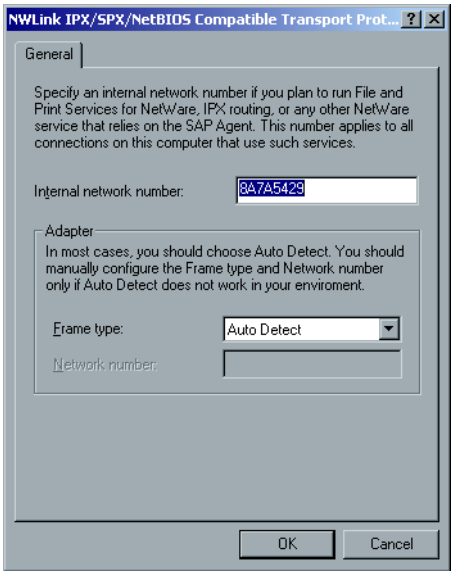
IPX Printing

IPX Printing enables the *Spire* CXP50 color server to act as a job server for the *Novell* queue. A job server checks each assigned queue at a specified interval, taking care of jobs on a first-in, first-out basis. Once a job is processed, its associated file is deleted from the queue directory.

To set the *Spire* CXP50 color server IPX parameter:

1. In the Settings window, select **Network Setup**.
2. In the **IPX Printing** area, click **Change Settings** next to the **Tree** parameter.

   The Local Area Connection Properties dialog box appears, followed by the NWLink IPX/SPX Properties dialog box.



3. To change the frame type, select a frame type from the **Frame type** list and click **OK**.
4. Click **OK** also in the Local Area Connection Properties window.

   You are prompted to restart your computer.
5. Click **No** if you need to make more changes, or **Yes** to restart.

Note: Using this procedure requires further setup by the network administrator.

TCP/IP Setup

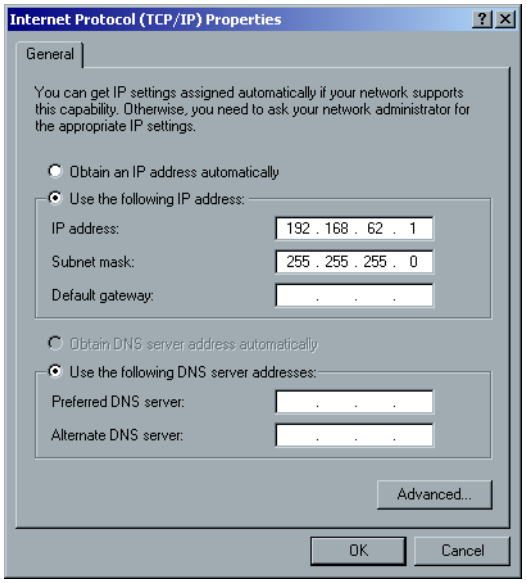
The *Spire* CXP50 color server is predefined with a default IP address. The TCP/IP option enables you to change this IP address and other TCP/IP settings.

Note: Before changing the network settings, consult your System Administrator.

To change the TCP/IP network settings:

1. In the Settings window, select **Network Setup.**
2. In the **TCP/IP** area, click **Change Settings** next to the **IP Address** parameter.

   The Local Area Connection Properties dialog box appears, followed by the Internet Protocol (TCP/IP) dialog box.



3. To change the IP Address, do one of the following:
   - Select **Obtain an IP address automatically.**
   - Select **Use the following IP address** and type the desired address—for example, **IP address:192.168.62.1** and **Subnet mask:255.255.255.0**, and enter the default gateway.
4. Click **OK.**

5. Click **OK** in the Local Area Connection Properties window.

   You are prompted to restart your computer.

6. Click **No** if you need to make more changes, or **Yes** to restart.

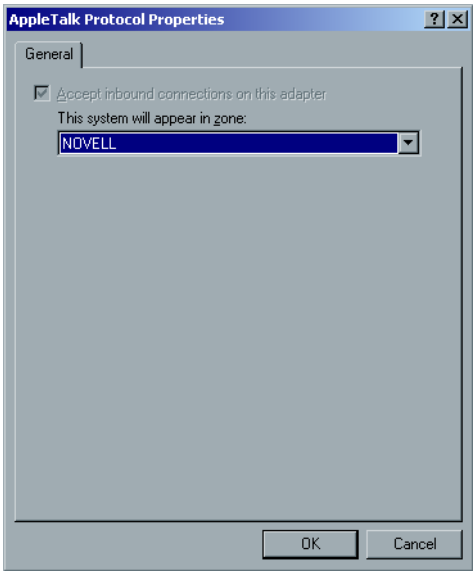
AppleTalk Setup

The **AppleTalk Setup** utility enables you to change the *AppleTalk* zone in which your *Spire* CXP50 color server is located.

To change the AppleTalk network settings:

1. In the Settings window, select **Network Setup**.
2. In the **Apple Talk Setup** area, click **Change Settings** next to the **The System will appear in zone** parameter.

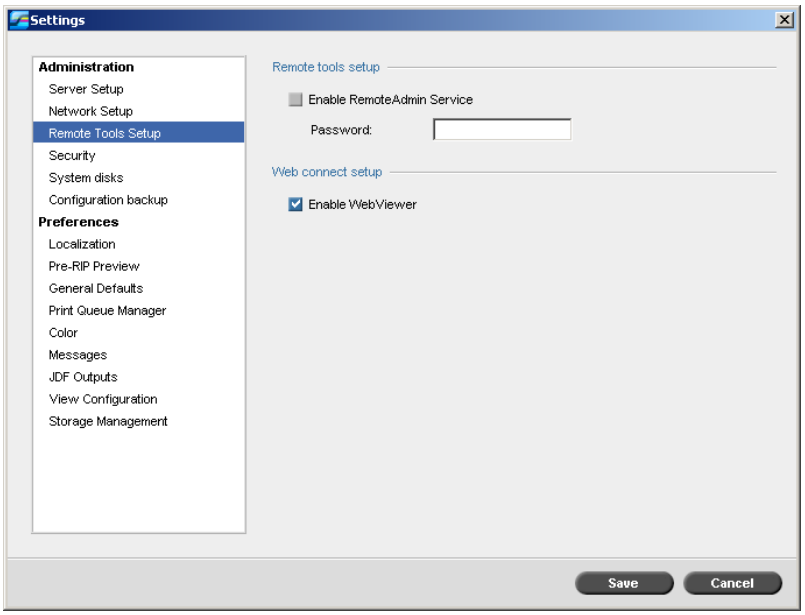
   The Local Area Connection Properties dialog box appears, followed by the AppleTalk Protocol Properties dialog box.



3. From the zone list, select the desired *AppleTalk* zone for your computer, and click **OK**.
4. In the Local Area window, click **OK**.

Remote Tools Setup

The **Remote Tools Setup** parameter includes setup for the **Remote Admin** tool and enables the connection of clients to the *Spire* CXP50 color server over the network using the *Spire* Web Center.



Remote Admin

The **Remote Admin** utility enables the system administrator to connect, view, operate and perform administration actions on the *Spire* CXP50 color server from a client workstation. While this remote connection and operation takes place, the regular operation of the *Spire* CXP50 color server is not affected. In fact, the only indication the *Spire* operator has that such connection takes place is in the **server** icon in the workspace status panel.

The following graphic shows the **server** and **printer** icons as they appear when the remote session is active (for administrator only).

To secure the remote connection, a password should be assigned by the system administrator.

Note: This tool is designed for the exclusive usage of the system administrator. Clients who would like to connect to the *Spire* CXP50 color server from their workstations may do so by using the **Spire Web Center**, which enables you to view and monitor your jobs in the *Spire* CXP50 color server queues.

For more information about viewing and monitoring your jobs from a client workstation, see "Spire Web Center" on page 73.

The remote admin setup process includes the following stages:

1. On the *Spire* CXP50 color server, the remote admin service is enabled and a password is assigned.
2. On the System Administrator's station, the client software is downloaded and launched.

To enable the remote admin service and set a password:

1. In the Settings window, select **Remote Tools Setup**.
2. In the **Remote Tools Setup** area, select **Enable RemoteAdmin Service**.
3. In the **Password** box, type a password.

Note: This password will be used later to connect to the Remote Admin software from the system administrator workstation.

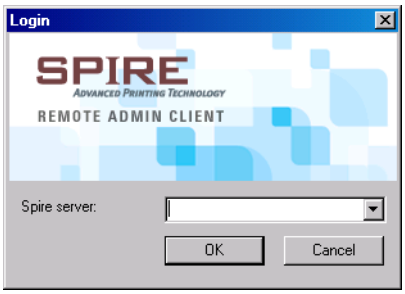
4. Click **Save**.

To download and launch the Remote Admin Client software:

1. From the system administrator workstation, connect to the desired *Spire* CXP50 color server. From the **Utilities** folder, in **PC Utilities**, double-click **SpireRemoteAdmin.exe**.

Tip: You can also download the software from the *Spire* Web Center.

When the installation is complete, the Login window appears.



2. From the **Spire Server** list, select the desired *Spire* CXP50 color server.
3. Click **OK**.

   The next Login window appears.
4. In the **Session password** box, type the password that you created in the Remote Tools Setup window.
5. Click **OK**.

   The *Spire* CXP50 color server workspace appears on your screen.

Web Connect Setup

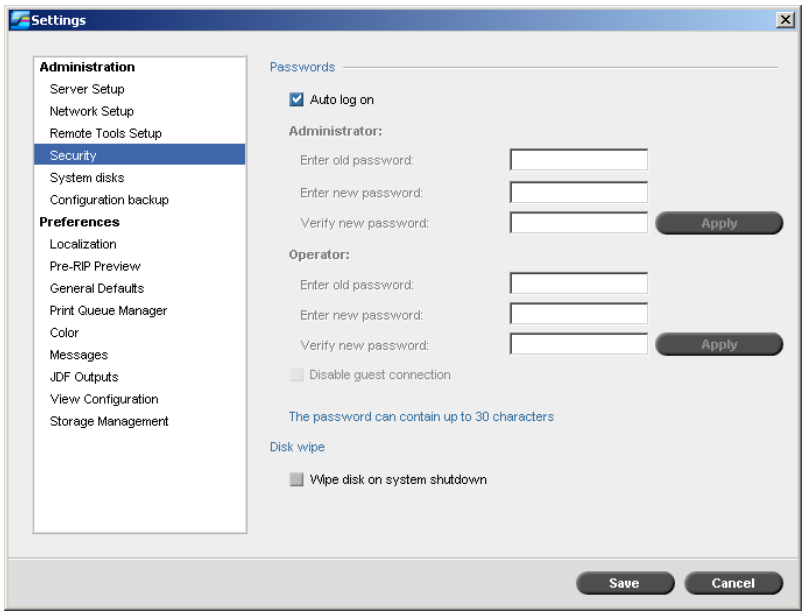
The **Web Connect Setup** enables clients to connect to the *Spire* CXP50 color server over the network by using the *Spire* Web Center. This option is disabled by default.

For more information about viewing and monitoring your jobs from a client workstation, see "Spire Web Center" on page 73.

To enable web connections:

1. In the Settings window, select **Remote Tools Setup.**
2. In the **Web Connect Setup** area, select **Enable Web Viewer.**

Security



User Passwords

The system administrator assigns each user an access level, as follows:

- **Operator (default):** Enables the user to operate the *Spire* CXP50 color server and configure the **Preferences** area in the Settings window
- **Administrator:** Enables the user to access all features and settings on the *Spire* CXP50 color server
- **Guest:** Enables the user to import a job through an existing virtual printer and view the workspace

To set Password settings:

1. In the Settings window, select **Security**.
2. Select **Auto Log On** to enable users to log on automatically.
3. Select **Disable Guest Connection** to prevent Guest users from accessing the *Spire* CXP50 color server.

Note: This option is not available if you selected the **Auto Log On** option.

To change Administrator/Operator passwords:

1. In the Settings window, select **Security**.
2. In the **Administrator/Operator** area, enter the old password.
3. Enter the new password.
4. In the **Verify new password** box, retype the new password.
5. Click **Apply** and **Save** in the Settings window.

   The password is changed and the Settings window closes.

Disk Wipe

Usually when you delete a file, the file's dictionary entry is removed but data still remains on the disk. The **Disk Wipe** utility enables you to clear previously deleted files. The utility eliminates the contents of your deleted files by scanning all of the empty sectors on the disk and replacing them with zeros. Non-empty sectors are left untouched. This feature enables you to work in a more secure environment. If there is a system shutdown, the disk wipe operation can begin immediately.

To operate the Spire Disk Wipe utility:

1. In the Settings window, select **Security**.

   Note: Ensure that the **Auto Log On** check box is not selected.

2. To enable the disk wipe feature, select **Wipe disk on system shutdown**.

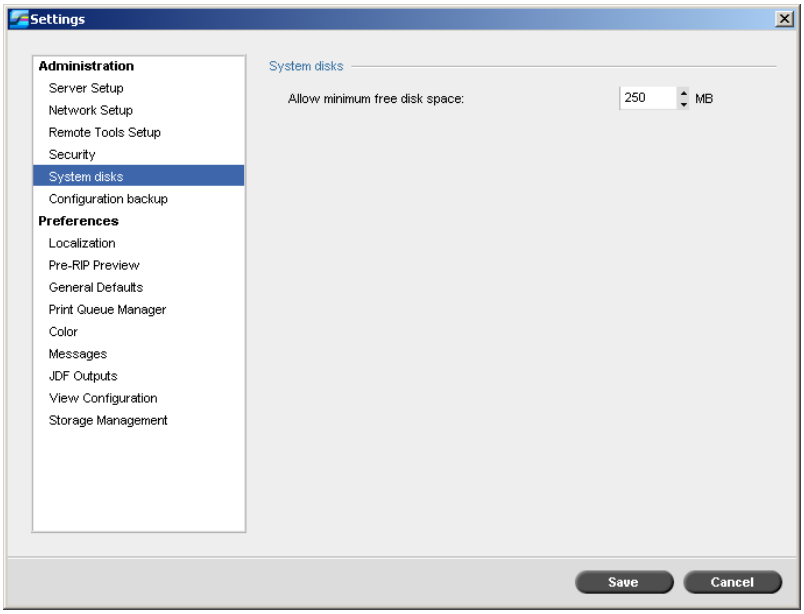
3. Quit the *Spire* color server software.

   The disk wipe operation permanently deletes files.

Notes:

- The disk wipe operation does not function well when the *Norton* Utilities software is installed. Before you activate the **Disk Wipe** utility, make sure that *Norton* Utilities is not installed on the *Spire* CXP50 color server.
- In rare cases, the process of deleting files from the Storage window is not completed—for example, the system shuts down before the deletion process is completed. In these cases, parts of the deleted files still reside in the **D\:Output** folder. Therefore, it is recommended that before you start the disk wipe operation, check the **D\:Output** folder to ensure that all the relevant files were deleted.
- The **Disk Wipe** utility affects the user disk and printer disk.
- Do not operate the **Disk Wipe** utility while other software is running.
- The supported language is English.

System Disks



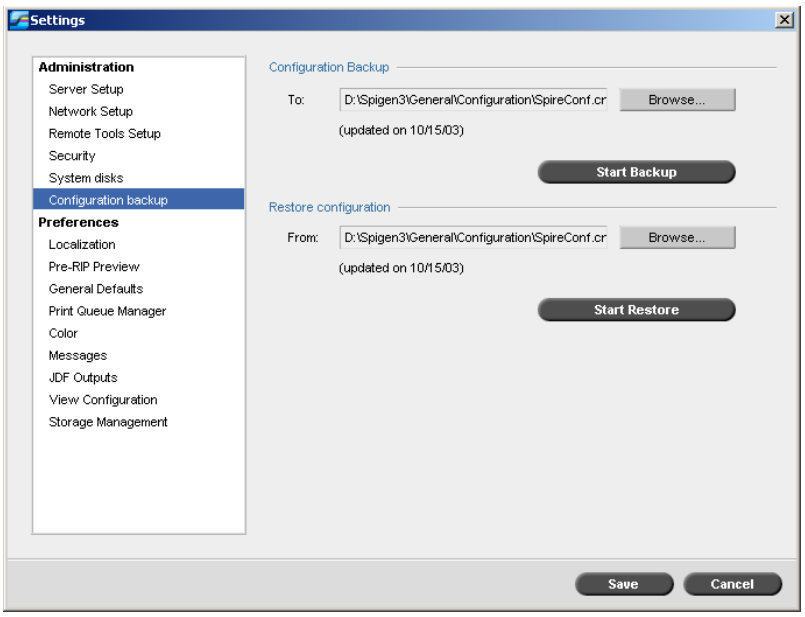
When the printer or user disks reach a pre-defined threshold of minimum available space (the default is 250 MB), RIP is suspended and a system warning message appears. The RIP resumes automatically only after disk space is available.

To set the system disk's threshold:

1. In the Settings window, select **System Disks**.
2. In the **System Disks** area, set the minimum free disk space desired for RIP.

Backing up the Configuration

The **Configuration Backup** item enables you to back up your *Spire* CXP50 color server configuration to a local hard disk, to a network drive or to an external media—for example, an external zip drive—connected to the *Spire* CXP50 color server.

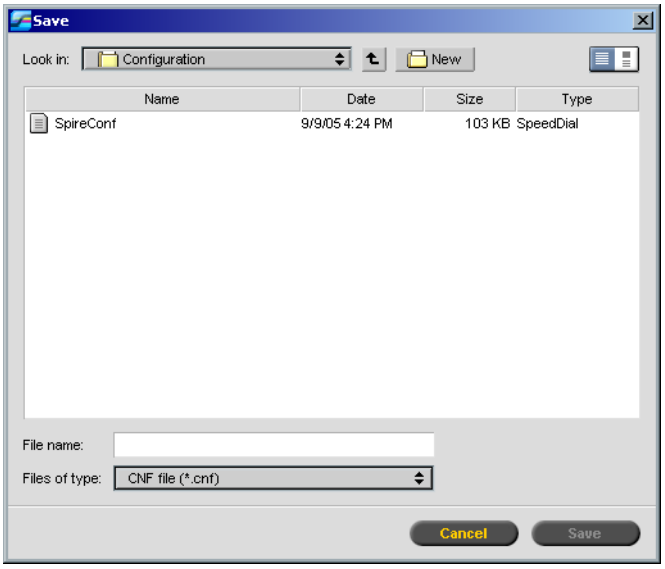


Configuration Backup

To back up the configuration of your *Spire* CXP50 color server:

1. In the Settings window, select **Configuration Backup**.
2. In the **Configuration Backup** area, click **Browse**.

   The Save window appears.



3. Browse to the desired directory path for the backup, and type a file name.

Note: You can also back up to an external media.

4. Click **Save**.
5. In the Settings window, click **Start Backup**.

Note: The last path will be saved and displayed to the path box. If the backup was made to an external media, the displayed path will be the default: **C:/CXP50/General/Configuration**.

Configuration Restore

To restore the configuration on your *Spire* CXP50 color server:

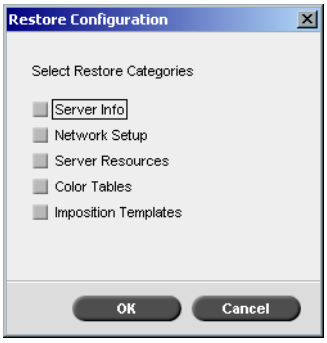
1. In the Settings window, select **Configuration Backup**.
2. In the **Restore Configuration** area, click **Browse** and locate a different directory path in which to restore the configuration.

Notes:

- The configuration file's name will always be: "SpireConf.Cab" (Cabinet file.)
- You may also restore the configuration from an external media.

3. Click **Start Restore**.

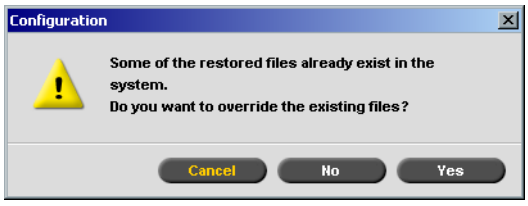
The Restore Configuration window appears.



4. Select the categories that you want to restore and click **OK**.

Note: When restoring the configuration all the custom tables/sets are added to the system (for example—imported user-defined imposition templates, new virtual printers, downloaded fonts, and so on.

The following message appears:

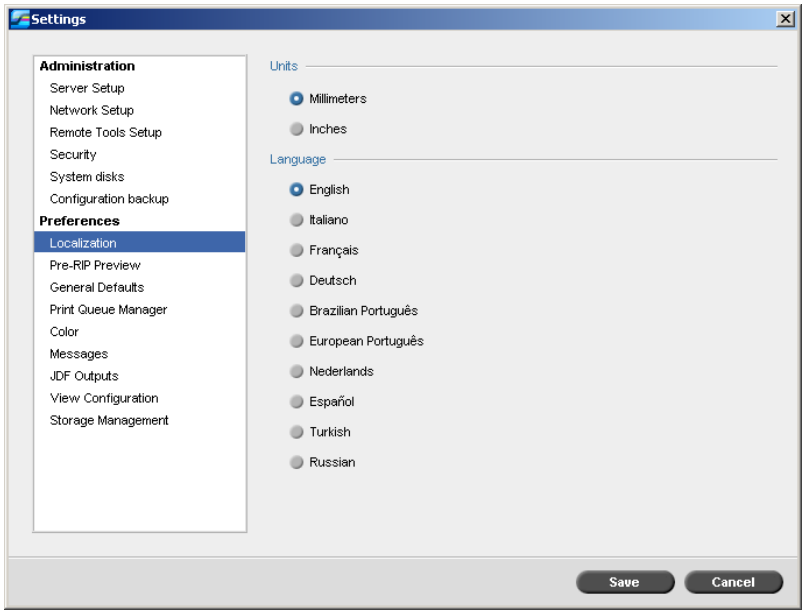


5. Do one of the following actions:
   - Click **Yes** if you would like the restored files to replace the current ones.
   - Click **No** if you do not want the restored files to replace the existing files.

Notes:

- The Restore Configuration date is updated in the Configuration Backup window.
- Restart the *Spire* CXP50 color server for changes to take effect.

Localization



Setting the Localization Measurement

1. In the Settings window, select **Localization**.
2. In the **Localization** area, select **Millimeters** or **Inches**, as desired.

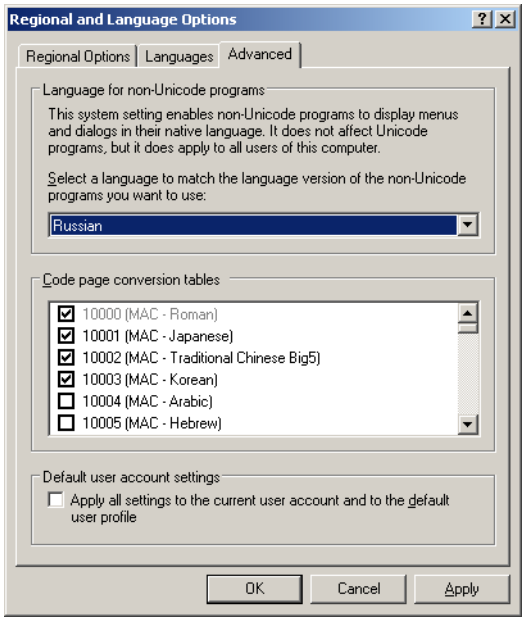
Setting the Language

1. In the Settings window, select **Localization**.
2. In the **Language** area, select the language, as desired.

Note: If you switch to another language, you need to restart the *Spire* CXP50 color server software.

When configuring the *Spire* CXP50 color server interface for Russian localization, several steps must be performed manually to define Russian as the default language.

1. Close the *Spire* CXP50 color server and turn off the *Xerox* DocuColor 5000 digital press**.**
2. On the desktop, go to **Start** > **Settings** > **Control Panel**.
3. Double-click **Regional and Language Options** and select the **Advanced** tab.

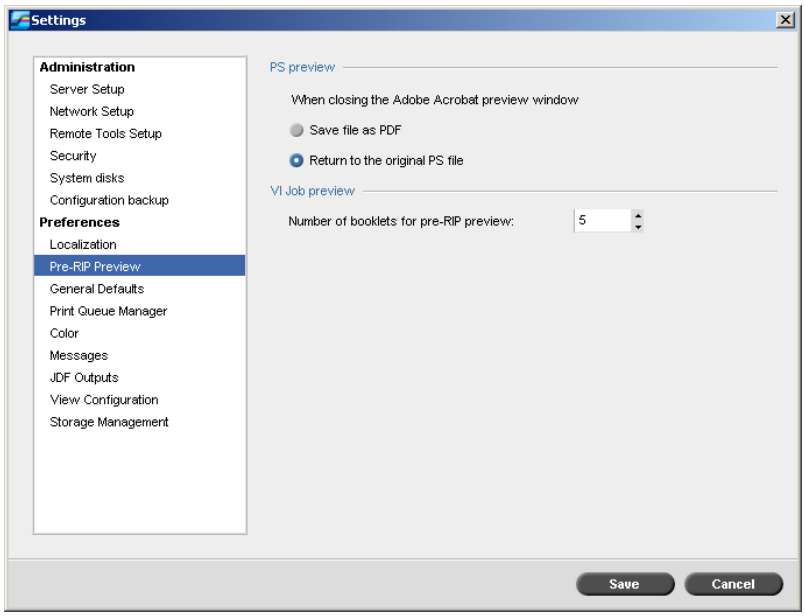


4. In the **Language for non-Unicode programs** area, select **Russian** from the list.
5. In the **Default user account settings** area, select the **Apply all settings to the current user account and to the default user profile** check box.

6. To confirm the new language setting, click **OK** in the popup window.
7. Click **OK** to close the Regional and Language Options window.
8. If the following window appears, click **Yes** to confirm using the required resources from the local hard disk.

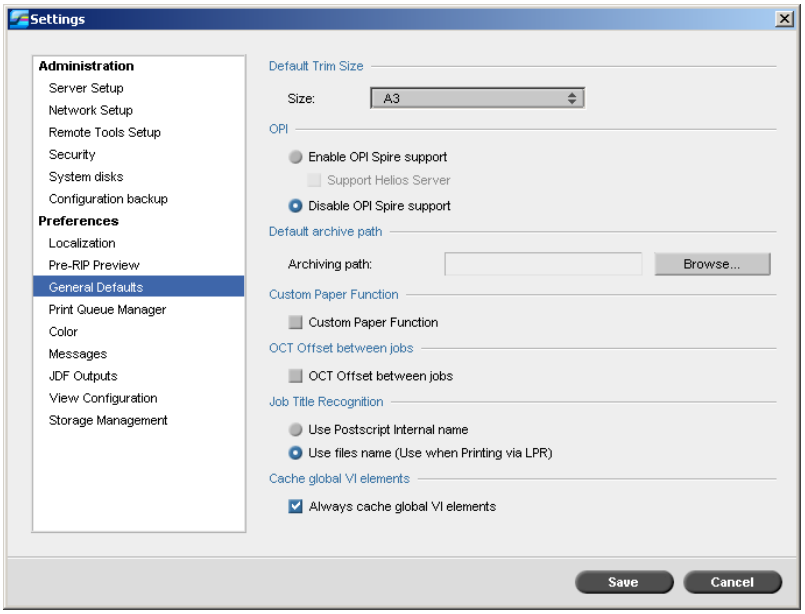
9. Restart the *Spire* CXP50 color server.
10. Wait until the *Spire* CXP50 color server workspace appears, and then turn on the *Xerox* DocuColor 5000 digital press.

Pre-RIP Preview



1. In the Settings window, select **Pre-RIP Preview**.
2. In the **PS Preview** area, select one of the following:
   - **Save as PDF** saves the file as a PDF file
   - **Return to original PS file** returns to the original PS file
3. In the **VI Job Preview** area, select the desired number of booklets for pre-RIP preview.

General Defaults



1. In the Settings window, select **General Defaults**.
2. In the **Default Image Size** area, select the **Size**.
3. In the **OPI** area, select the desired **OPI** setting.

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit. For more information about setting the OPI, see "OPI" on page 85.

4. In the **Default archive path** area, set the archiving path.

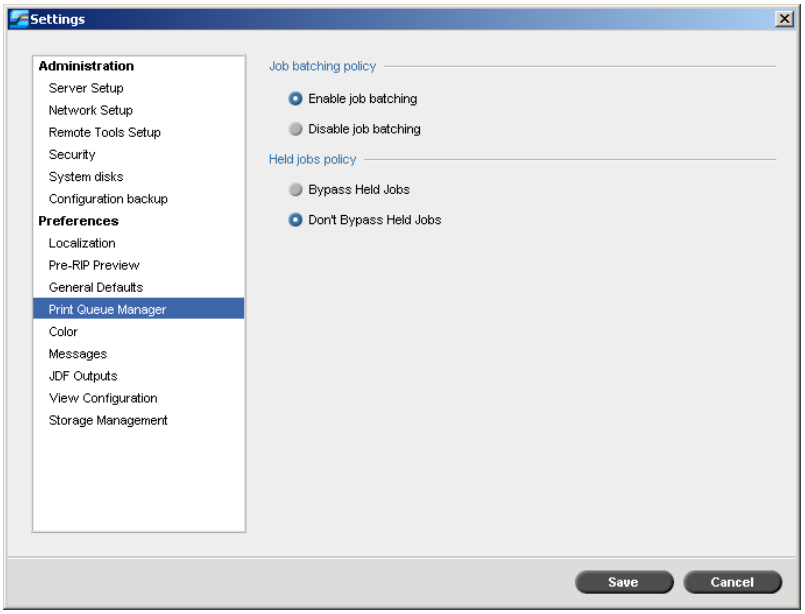
For more information on the default archive path, see "Archiving and Retrieving a Job" on page 39.

5. In the **Custom Paper Function** area, select the check box to enable custom profiles for paper sets.

For more information, see "Managing Paper Sets" on page 57.

6. In the **OCT Offset between jobs** area, the **OCT Offset between jobs** check box is selected by default, meaning offset is always done between jobs. Clear the check box if you do not require this option.
7. In the **Job Title Recognition** area, select one of the following options:
   - **Use PostScript Internal name**: select this option to use the internal file name as written inside the *PostScript* file by the print driver.
   - **Use files name (Use when Printing via LPR)**: select this option to use the job's given file name. Selecting this option ensures that the job appears in the *Spire* CXP50 color server with the name last given by the user.
8. In the **Cache global VI elements** area, select the check box to cache global VI elements for VPS format. When selected, VI elements are cached for further use (this feature is available only for the *Spire* CXP50 color server with the Professional Kit.).

Print Queue Manager



Job Batching

The Job Batching utility enables you to print several jobs with the same settings in a single batch, one after the other without cycling down, and subsequently save production time.

To set the desired job batching option:

1. In the Settings window, select **Print Queue Manager.**
2. In the **Job Batching Policy** area, select one of the following options:
   - **Enable Job Batching** to print jobs with the same page parameters, one after the other without the cycle down.
   - **Disable Job Batching** to disable the printing of jobs with the same page orientation one after the other, and enable cycle down.

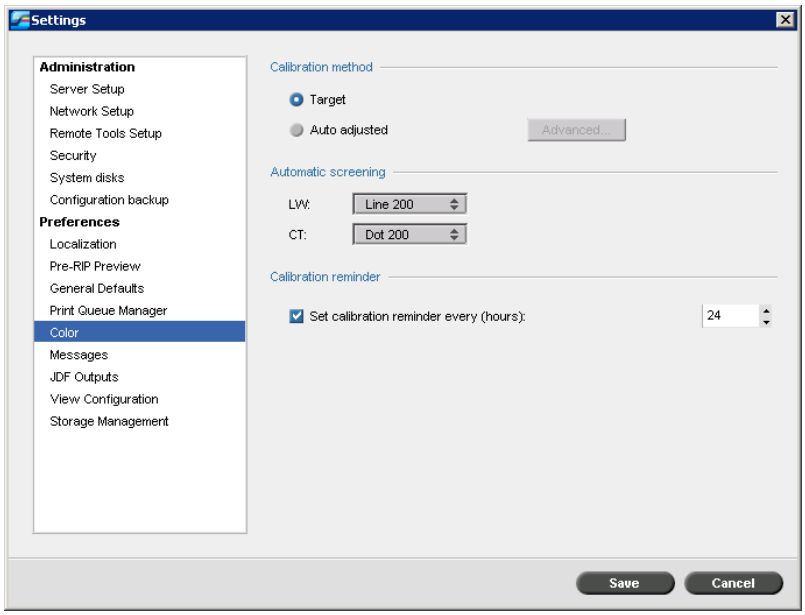
For more information about job batching, see “Batching Jobs” on page 32.

To set the desired held jobs option:

➢ In the **Held Jobs Policy** area, select one of the following options:

- ❒ **Bypass held jobs** to bypass frozen jobs in the **In Print** queue.
- ❒ **Don't Bypass held jobs** to stop the printing from the queue when a job is assigned a frozen status.

Color



Calibration

For more information on setting the calibration method, see "Setting the Color Calibration Method" on page 120.

Automatic Screening

The *Spire* CXP50 color server supports Dot and Stochastic screening. When you print a job from the *Spire* CXP50 color server, select the desired screening method or choose **Automatic** in the **Color** parameter of the Settings window. By default, **Automatic** applies two types of screening:

- **Text / line-art elements - LW (Line Work):**
  The system uses Line type screen of Line 200.
- **CT (Continuous Tone):**
  The system uses Dot type screen of Dot 200.

To change the values of the automatic screening method:

1. In the Settings window, select **Color**.
2. In the **Automatic Screening** area, select the desired auto screen settings for LW from the **LW** list.
3. Select the desired auto screen settings for CT from the **CT** list.

   You are prompted to restart the software for the new settings to take effect.

For more information, see "Screening" on page 228.

Color Conversion Tables

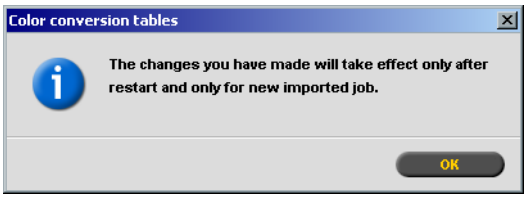
The **Color Conversion Tables** utility enables you to select the set of color conversion tables used for your jobs.

Important: The **Process** queue must be suspended while changing the color tables set.

To select the color conversion tables:

1. In the Settings window, select **Color**.
2. In the **Color conversion tables** area, select the conversion table to be used.

   By default the current version color tables are selected. To apply the previous version color tables, select **Previous version color tables**. The following message appears.



3. Click **OK**.

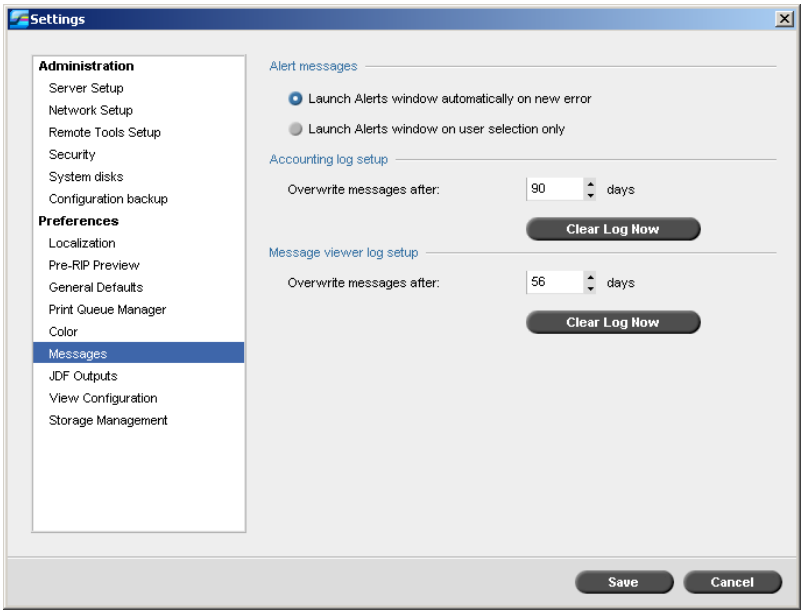
Calibration Reminder

Set the **Calibration Reminder** to remind you when to perform a calibration.

1. In the Settings window, select **Color**.
2. In the **Calibration Reminder** area, select the **Set calibration reminder every (Hours)** check box and select the number of hours in the list.

   The **calibration reminder** indicator  appears when it is time to calibrate.

Messages



Alert Messages

The **Alert Messages** utility enables you to select whether the Job Alert window will open automatically when an error occurs.

To set the Job Alert window settings:

1. In the Settings window, select **Messages**.
2. In the **Alert Messages** area, select **Launch Alerts window automatically on new error** (default).

   If you would like to open the Job Alert window upon selection only, select **Launch Alerts window on user selection only**.

Accounting Log Setup

By default, all the jobs that were handled during the past 90 days are listed in the *Spire* CXP50 color server Accounting window. This utility enables you to specify different values for how long information remains before being overwritten.

To setup the accounting log:

1. In the Settings window, select **Messages.**
2. In the **Accounting Log Setup** area, select the desired value to **Overwrite messages after.**
3. To remove all the existing information from the windows, whenever desired, click **Clear Log Now.**

Note: For more information about the Accounting window, see "Job Accounting" on page 206.

Message Viewer Log Setup

By default, all the jobs that were handled during the past 90 days are listed in the *Spire* CXP50 color server Message Viewer. This utility enables you to specify different values for how long information remains before being overwritten.

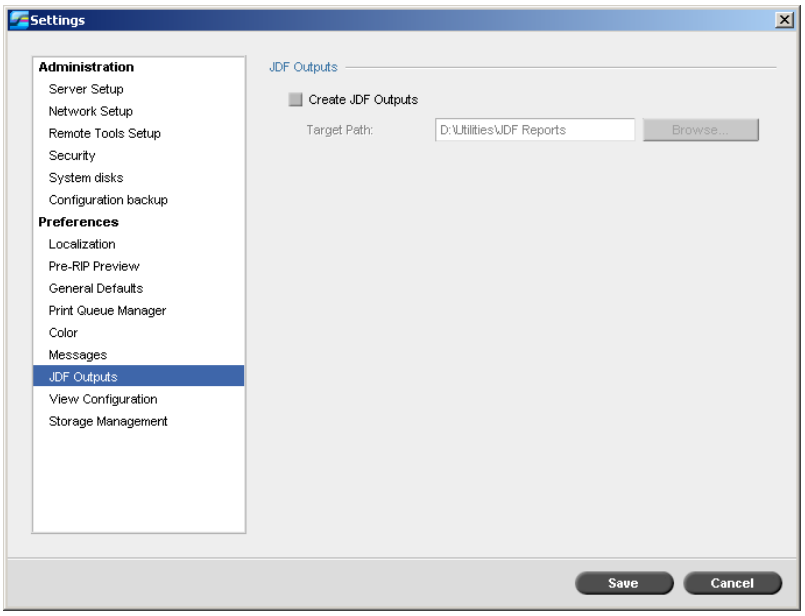
To setup the message viewer log:

1. In the Settings window, select **Messages.**
2. In the **Message Viewer Log Setup** area, select the desired value to **Overwrite messages after.**
3. To remove all the existing information from the windows, whenever desired, click **Clear Log Now.**

Note: For more information about the Message Viewer, see "Job Accounting" on page 206.

JDF Outputs

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

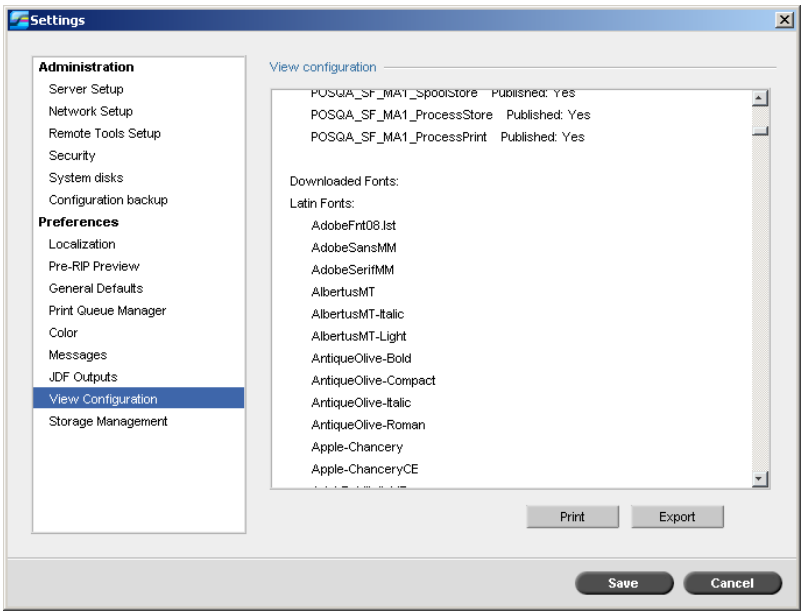


The *Spire* CXP50 color server receives the JDF job ticket via hot folders, returns JDF output with job accounting information, and submits JMF (Job Messaging Format) signals with the job's status.

If the JDF job has a target path specified in the job, JDF output is always created. For JDF jobs that don't have a specified target path, the JDF output is only created if this option is selected in the Settings window.

1. In the Settings window, select **JDF Outputs**.
2. Select **Create JDF Outputs** to create JDF output.
3. In the **Target Path** box, enter the target path, or click **Browse** to browse to the desired directory path for the JDF output.

View Configuration

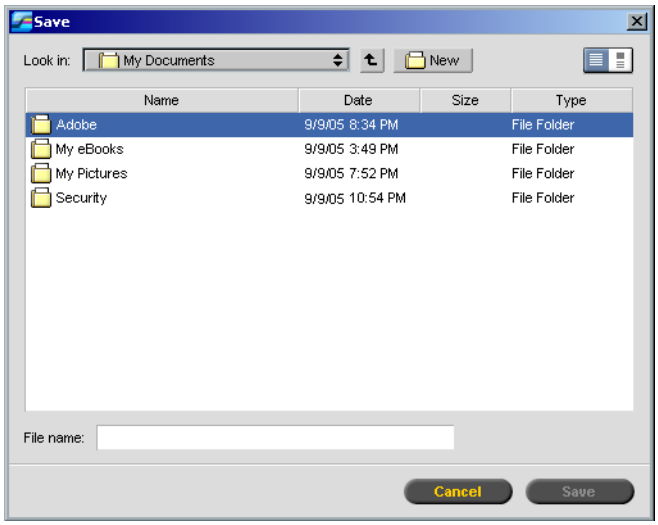


The **View Configuration** utility enables you to view the configuration of your *Spire* CXP50 color server and to print it to any printer on the network connected to your *Spire* CXP50 color server. In addition you can save the configuration in the network or export it to an external media as a text file.

1. In the Settings window, select **View Configuration**.
2. Click **Print** to print the configuration.

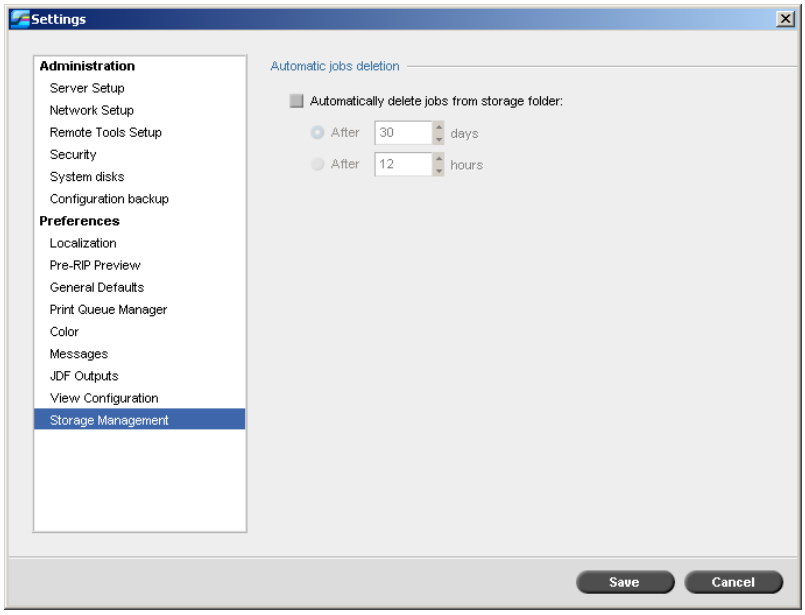
   The Print window appears.
3. From the **Printer** list, select one of the defined printers and click **OK**.
4. If you would like to save the configuration, click **Export**.

   The Save window appears.



5. Locate the desired folder, and click **Save**.

Storage Management



Use the **Storage Management** parameter to set a deletion policy for the Storage folder.

1. Select the **Automatically delete jobs from storage folder** check box.
2. Select the desired days or hours option, and enter the number of days or hours after which to delete jobs from the Storage folder.

System Messages

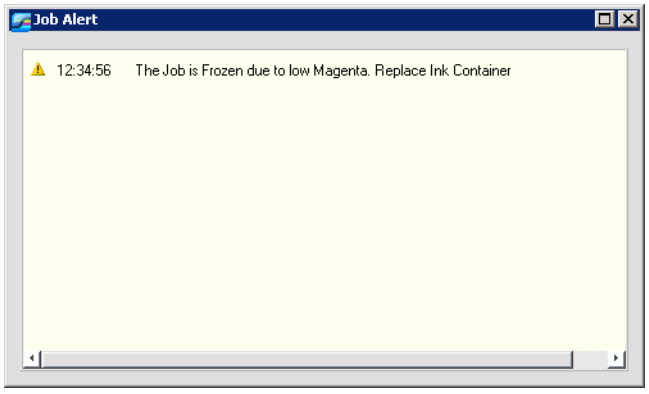
While jobs are being handled by the *Spire* CXP50 color server, various messages are emitted. You can view the messages of each job in the Job History window, of the entire session in the Message Viewer window, or just the error messages within the Job Alert window.

The Job Alert Window

By default, the Job Alert window is open in the *Spire* CXP50 color server workspace. Any time the system emits an error message, the message appears in the Job Alert window. The Job Alert window lists all error messages as they appear during the workflow.

Note: You can specify whether you would like the Job Alert window to launch automatically on a new error, or upon user selection only. To set the preferred option, see "Alert Messages" on page 196.

➢ From the **View** menu, select **Job Alert**.



System Disks Threshold Message

When the printer or user disks reach a pre-defined threshold of minimum available space (the default is 250 MB), RIP is suspended and a system warning message appears. The RIP resumes automatically only after disk space is available. If necessary, you can increase the System Disk threshold.

For more information about setting the system disk's threshold, see "System Disks" on page 183.

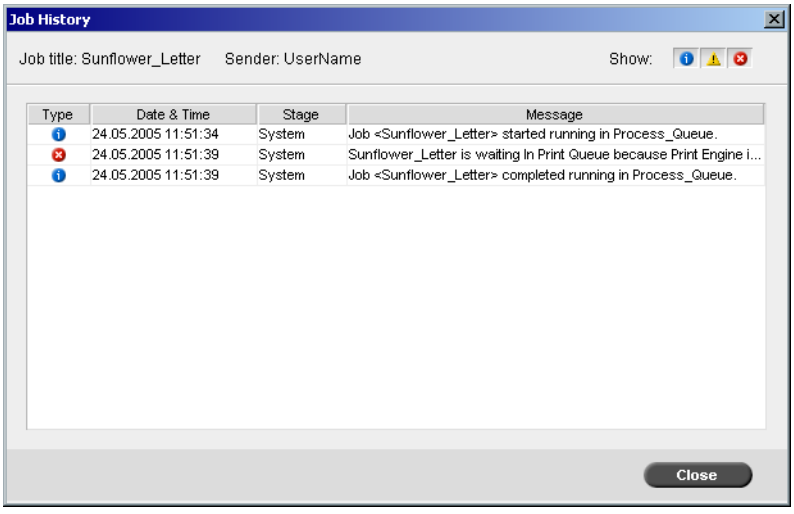
Job History

To view the job history:

➢ Do one of the following actions:

- ❒ Right-click a job in the Queues window or Storage window, and from the menu, select **Job History**.
- ❒ Select a job and from the **Job** menu, select **Job History**.

The Job History window appears, listing all the messages that were generated during the workflow of the selected job.
The Job History window indicates the job title and the sender name (the user name of the system from which the job originated).



Message Information

For each message, the following information is indicated by default:

- An icon denoting the type of message (Error, Warning, or Information)
- The date and time on which the message was emitted (the time stamp)
- The stage in the workflow (for example, Print or Process)
- The message text

You may filter the messages by type, and/or sort the list by one of the column headers.

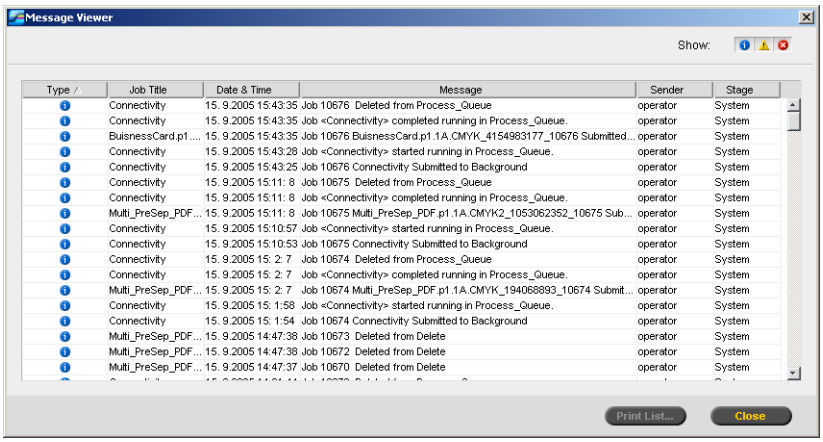
The Message Viewer

To open the Message Viewer:

➢ At any stage of work, from the **Tools** menu, select **Message Viewer.**

The Message Viewer window appears, listing all the messages that were generated during the workflow.

For more information about viewing messages related to a specific job, see "Job History" on page 202.



By default, all the jobs that were handled during the last 3 months (90 days) are listed.

The default may be changed in the Settings window under **Messages**. For more information about changing the default setting, see "Messages" on page 196.

Managing Messages

You can filter the messages by type, and/or sort the list by one of the column headers. In addition, you may print the list of messages.

If desired, you may reorder and resize columns, filter the list, or sort the list by one of its column headers.

Notes:

- This section is relevant for the Message Viewer and Job History windows (but not for the Job Alert window).
- These settings are retained after closing a window.

Filtering the Messages by Type

Each message in the Message Viewer and Job History windows is assigned an icon to denote the message type:


Information


Warning


Error

You can filter the list in order to view only messages of certain types.

➢ Click any message type icon—for example, **Error**— in order not to list such messages.

By default, all message types are listed in the Message Viewer.

Note: If the message type is not selected, messages of this type do not appear in the list.

The list updates accordingly.

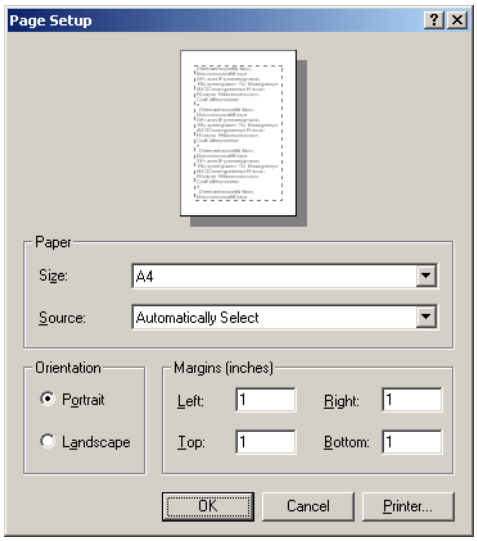
Printing the Message List

You can print the information as it appears in the Message Viewer (as it is currently filtered and sorted).

To print the message list:

1. Filter and sort the list as desired (the data is printed according to the current filtering and sorting).
2. Click **Print List**.

   The Page Setup window is displayed.



3. Set the printing options as desired, and then click **OK**.

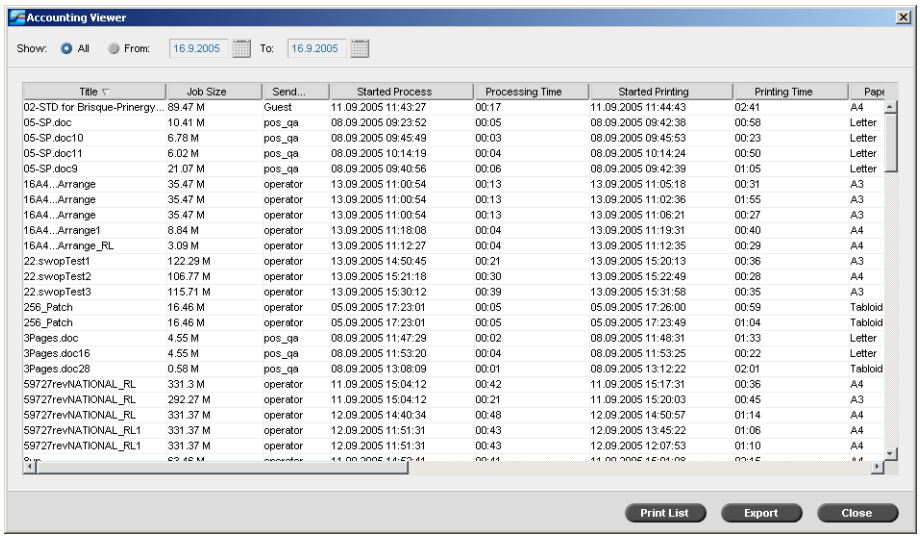
Job Accounting

The Accounting feature provides information about all the jobs that were printed successfully via the *Spire* CXP50 color server. The report is in the form of a tab-delimited file. You can filter, sort, and print the jobs in the report and also export the report to a spreadsheet software—for example, *Microsoft Excel*—where you can manipulate the data.

Viewing the Accounting Information

➢ At any stage of work, from the **Tools** menu select **Accounting**.

The Accounting Viewer window appears, listing information related to all the jobs that printed successfully via the *Spire* CXP50 color server.



Each row in the Accounting report contains information related to a specific job.

Notes:

- To see additional columns, use the horizontal scroll bar.
- By default, all the jobs that were handled during the past 3 months are listed. From the **Tools** menu, select **Settings**. In the Settings window, under **Preferences** > **Messages**, you can specify how long information remains before being overwritten. In addition, you can remove all the information from the window whenever desired.

The columns indicate the following information.

Table 15: Description of columns in the Accounting Viewer

Column name	Indicates the
Job Title	Original name of the file related to this job (that is, without the extension)
Sender	User name of the system from which this job originated
Submitted	Date and time the job was first submitted into the *Spire* CXP50 color server
Started Printing	Date and time on which the job first started printing

Table 15: Description of columns in the Accounting Viewer

Column name	Indicates the
Processing Time	Total time during which the job was processed
Printing Time	Total time during which the job was printed
Job Size	Job size in MB
Paper Size	Size of the media set for the job—for example, Letter, A3, A4
Paper Weight	Paper weight in gs/m
Coating	Paper stock coating status (Coated or Uncoated)
Sets	Actual number of printed copies
Job B/W Pages	Number of black-and-white pages in the original PDL file
Inserts	Number of inserts in jobs with exceptions
Job Color Pages	Number of color pages in the original PDL file
Total Pages Printed	Number of pages that were printed
Purged B/W	Number of B/W pages that were already in the paper path, and were cleared due to job abort, or paper jam
Purged Color	Number of color pages that were already in the paper path, and were cleared due to job abort, or paper jam
Page Exceptions	Existence of exceptions in the job (Yes/ No)
Account	[Optional] string of text, if such was entered in Job Parameters

Table 15: Description of columns in the Accounting Viewer

Column name	Indicates the
Recipient	[Optional] string of text, if such was entered in Job Parameters
Job Comments	[Optional] string of text, if such was entered in Job Parameters

Setting the Accounting/Message Viewer

By default, all the jobs that were handled during the past 90 days are listed in the *Spire* CXP50 color server Accounting window. Also, all jobs that were handled during the past 56 days are listed in the *Spire* CXP50 color server Message Viewer. You can specify how long information remains before being overwritten.

To change the Accounting/Message Viewer log setup, see "Messages" on page 196.

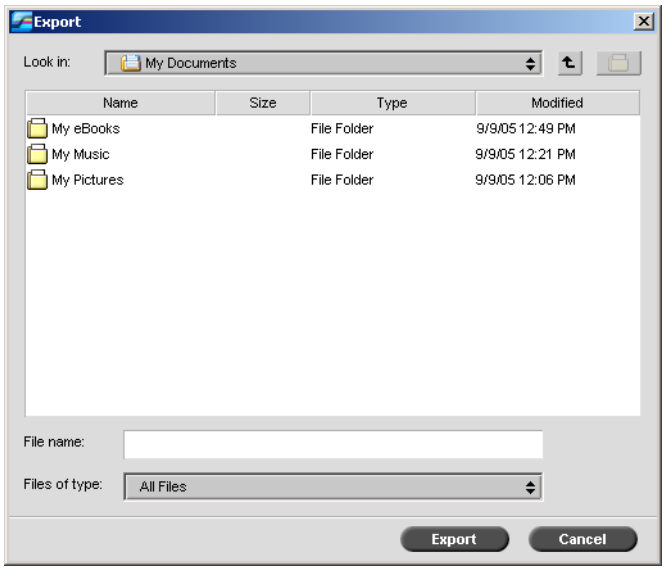
Printing and Exporting the Accounting Log

You can save the Accounting information to an ASCII Tab delimited file.

To export the accounting information:

1. Filter the information as desired.
2. Click **Export**.

   The Export Accounting window appears.



3. Locate the folder in which to save the report.
4. Click **Save**.

   The log is saved as a Tab delimited text file in the specified location.

Notes:

- The log includes all the columns (even those that were hidden), listed in the original order and sorting.
- To export specific rows, select them before clicking **Export.** The exported log will include only these rows.
- The exported data is not deleted from the Accounting report on the *Spire* CXP50 color server (that is, it will still be displayed in the Job Accounting window).

5. If desired, open the *.txt file in a text editor or in a spreadsheet software—for example, *Microsoft Excel*—and manipulate the data.

You can print the Accounting information (filtered and sorted) to any connected printer.

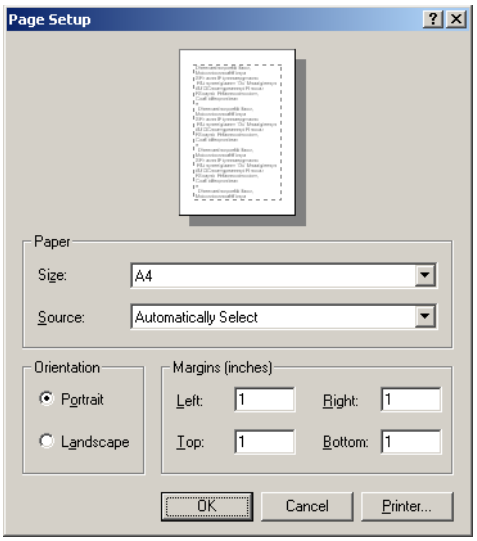
To print the accounting log:

1. Filter and sort the report as desired.

Note: To print specific rows, select the desired rows now. The printed report will include only these rows.

2. Click **Print List.**

   The Page Setup window appears.



3. Set the printing options as desired and click **OK.**

   The data is printed according to the current filtering and sorting.

Notes:

- To fit the maximum amount of columns on the page, print using Landscape orientation (if your printer supports it).
- The report includes all the columns (including those that were hidden), listed in the original order.

A

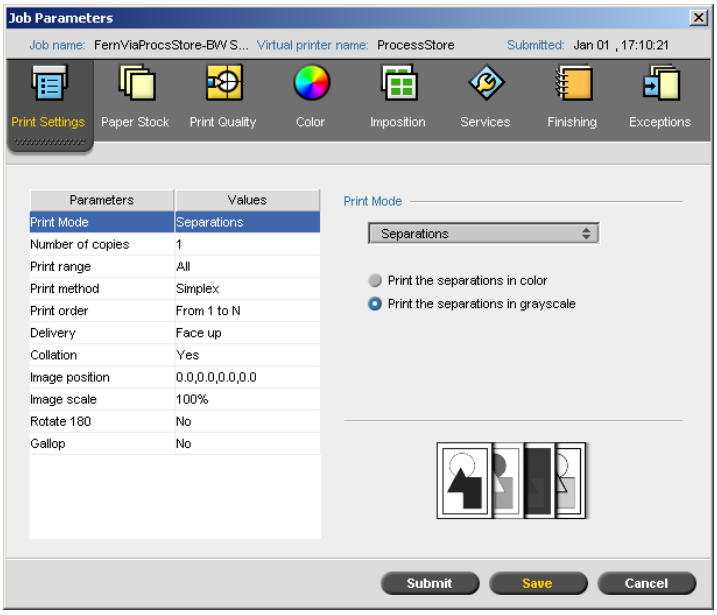
Setting Parameters

Setting Parameters in the Job Parameters Window

This section describes each area in the Job Parameters window, and explains how to set the job parameters.

For more information about opening the Job Parameters window, see "The Job Parameters Window" on page 23.

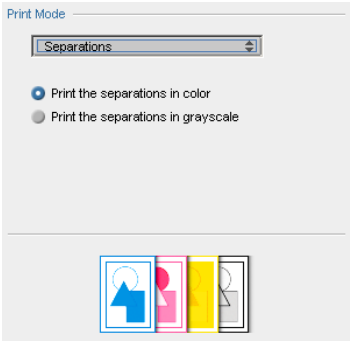
The Print Settings Tab



Print Mode

➢ In the **Print Mode** area, select the desired print mode:

- **Composite** (default setting): prints the job without separations. Each page of the job is printed once.
- **Separations**: prints the job with color or grayscale separations. If you select color, each page in the job is printed separately in four colors; C, M, Y, and K. If you select grayscale, each page in the job is printed separately four times in different shades of grayscale (K).



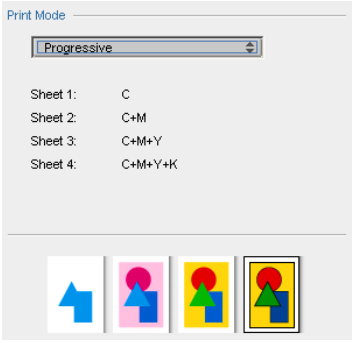
- **Progressive** (this option is available only for the *Spire* CXP50 color server with the Professional Kit): prints each page of the job four times in progressive color separations:

  Sheet 1 is printed only in C.

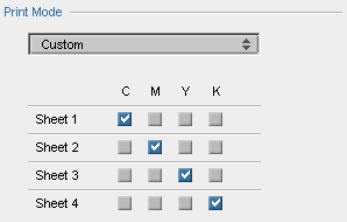
  Sheet 2 is printed in C and M.

  Sheet 3 is printed in C, M, and Y.

  Sheet 4 is printed in C, M, Y, and K.



- **Custom** (this option is available only for the *Spire* CXP50 color server with the Professional Kit): enables you to select the separations that you want to print for each sheet for each page of the job.



Number of Copies

➢ Type the number of copies to be printed.

Print Range

➢ Select the desired print range.

To select specific pages/booklets or page ranges, select **Pages/Booklets** and specify the pages or booklets to be printed as follows:

❒ Type one or several numbers separated by commas and no spaces. For example, `1,3,5`.

❒ Type a range of pages or booklets with a hyphen between the starting and ending numbers in the range. For example—`1-5`.

Note: For imposed jobs, instead of typing the desired pages, you should type the desired imposed sheets.

Print Method

➢ Select one of the following options:

❒ **Simplex** for single-sided printing

❒ **Duplex head to toe** for calendar-style hard copies (usually used with landscape jobs)

❒ **Duplex head to head** for printing book-style hard copies (usually used with portrait jobs)

Print Order

➢ Set the print order to **From 1 to N** (front to back) or **From N to 1** (back to front).

Delivery

➢ Select **Face up** or **Face down** as the delivery option.

Note: To collate a document and print the set in the correct order, select **Face down** and **From N to 1** or **Face up** and **From 1 to N**.

Collation

➢ Select the **Collation** option:

- ❒ **Yes** prints a complete copy of the job before the first page of the next copy prints
- ❒ **No** prints all copies of each page before going on to the next page

Image Position

This option enables you to adjust the image positioning on the sheet's printed page (simplex or duplex). The following terminology is used:

- **Rear** is the sheet's edge near the printer rear, where printing stops
- **Lead** is the edge of a sheet at which printing begins

The page's lead and rear edges are determined just after the page is printed out, before making any change in the page orientation.

➢ Select one of the following:

- ❒ To print your job in the center of the page, click **Center**
- ❒ To set page offsets, click the directional arrows or type **Rear** and **Lead** values

➢ To apply page offsets values to both odd and even pages, select the **Same on both sides** check box.

Tip: Use this option to move duplex page data away from the spine.

Image Scale

➢ Perform one of the following:

- ❒ To print the original image size, select **100%** (default).
- ❒ To fit the image to the selected paper size, select **Fit to Paper.**
- ❒ To custom size the image, select **Custom** and type the percent by which you would like to proportionally increase or decrease the image size.

Rotate 180°

➢ To rotate your job by 180°, select **Yes**.

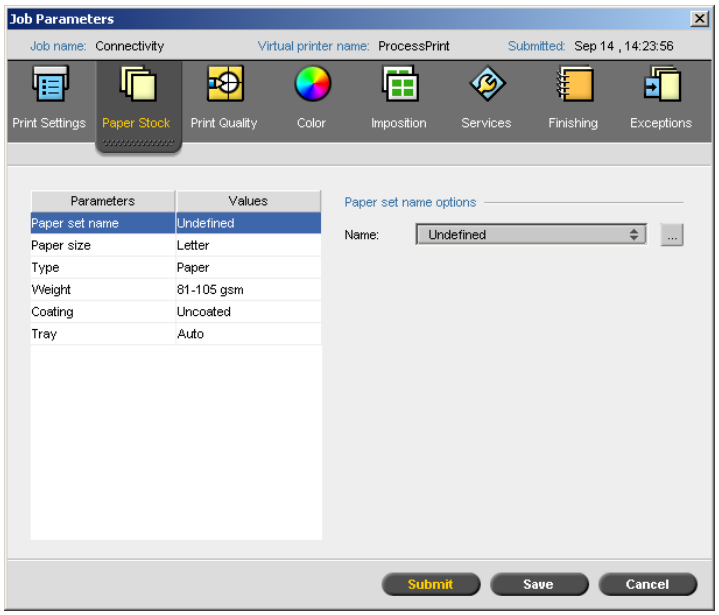
Note: If you also select **Finisher Module** > **CSS Staple Tray**, the staple position is modified. For example, instead of stapling on the upper left-hand corner, you can staple on the lower right-hand corner.

Gallop

Gallop enables you to begin printing a defined number of pages before the entire job has been RIPed.

➢ To enable this option, select **Yes** and enter the number of pages to RIP before printing starts.

The Paper Stock Tab



Paper Set Name

➢ Select the desired paper set from the **Name** list. If desired, a paper set can be added.

The selected paper set values (**Paper Size**, **Type**, **Weight**, and **Coating**) appear in the corresponding parameters in the **Paper Stock** tab.

For more information on managing paper sets, see “Managing Paper Sets” on page 57.

Paper Size

➢ From the **Size** list, select the desired stock size. If you select **Custom**, perform the following actions:

a. Type the desired **Height** and **Width**.

b. Select the desired **Feed Direction**:

- **LEF** (Long Edge Feed)
- **SEF** (Short Edge Feed)

Type

1. Select one of the following options:
   - ❒ **Paper**
   - ❒ **Transparency**
2. If you want to insert a blank page between transparencies, select the **Add Interleave** check box and customize the interleave by performing one of the following actions:
   - Select the desired paper set from the list
   - Select **Same as job** to use the default paper size
   - Click the **browse** button ... and add a new paper set

For more information about adding a paper set, see "Managing Paper Sets" on page 57.

Notes:

- Slip-sheets and/or blank pages (interleave) in a transparency job are counted by the number of sheets, not by the number of pages, (rastered pages) reported on the Admin page.
- If the job is imposed, the interleave is the size of the imposition sheet and is inserted between each sheet.

3. In the **Tray** list, select the desired tray and load the specific stock in this tray. If you select **Auto**, any tray with the specific paper stock is used.

Weight

➢ From the **Weight** list, select the desired stock weight.

Note: For the *Xerox* DocuColor 5000 digital press, the paperweight ranges are: 60-80 gsm, 81-105 gsm (default), 106-135 gsm, 136-186 gsm, 187-220 gsm, and 221-300 gsm.

Coating

➢ Select **Coated** to print on coated paper.

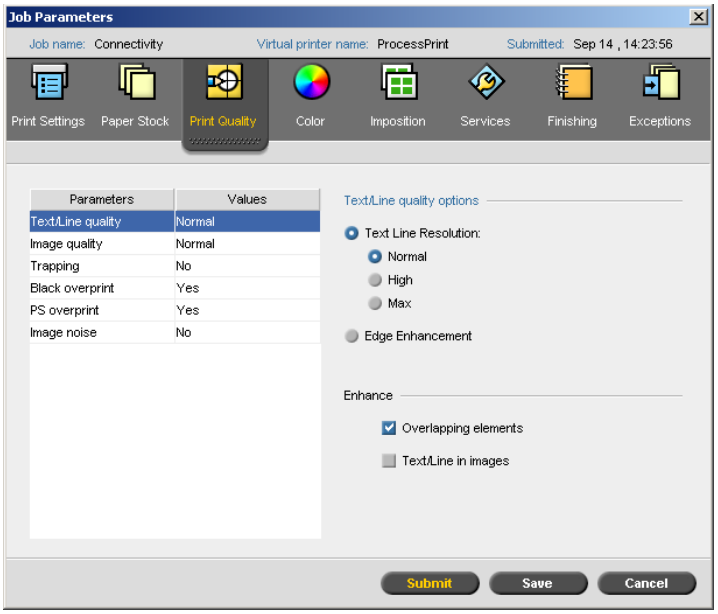
Tray

➢ In the **Tray** list, select the desired tray and load the specific stock in this tray. If you select **Auto**, any tray with the specific paper stock is used.

Notes:

- The **Auto** tray option uses the paper in the selected tray only if it complies with all the other paper stock parameters. If the paper stock in the assigned tray does not match any Job Stock parameter, the job is *frozen*.
- If you selected the **Custom Paper Function** option in the Settings window (see "General Defaults" on page 190), in the **Custom Profile** list, select the custom profile.

The Print Quality Tab



Text /Line Quality

The **Text/Line Quality** parameter improves text quality. Text/line quality and text and line-art elements are processed separately to produce optimal rendering of all the elements on a page. This option improves the text quality of diagonal lines, borders, and blends; causes blends to appear

smooth with no banding; and displays crisp diagonal lines without (or with minimal) jaggies (rough edges) which are the result of the limited resolution of the print engine.

1. In the **Text/Line quality options** area, perform one of the following actions:

   - Select **Text Line Resolution**, and select one of the following options:

     - **Normal** (default) provides regular text quality.
     - **High** smooths LW elements and renders contours to 1200 dpi.
     - **Max** smooths LW elements and renders contours to 2400 dpi.

     Note: You cannot merge jobs with different gray font rendering.

   - Select **Edge Enhancement** to enhance edges (LW only)

2. In the **Enhance** area, select the elements you want to enhance:

   - **Overlapping elements** improves the quality of overlapping vector and image elements

     Note: If you select **Overlapping elements**, the corresponding enhancement is automatically selected in the **Image Quality** parameter.

   - **Text/Line in images** improves the resolution of text and line-art in images

Image Quality

The **Image quality** parameter refers to the ability to maintain the same detail and smoothness with different degrees of enlargement. This feature is especially useful when your *PostScript* file includes several images of different qualities—for example, images that were scanned at different resolutions, were rotated, or were downloaded from the internet.

1. In the **Image quality options** area, select one of the following options:

   - **High** to provide superior image quality. This setting applies the *Creo* proprietary smooth scale algorithm, which improves the quality of images containing several resolutions (such as images taken from the Internet).

Note: If you select the **High** option, the processing speed is decreased.

   - **Normal** (default) to provide normal image quality (for jobs that do not require improved picture quality)

2. In the **Enhance** area, select the **Overlapping elements** check box to improve the quality of overlapping vector and image elements.

Note: If you select **Overlapping elements**, the corresponding enhancement is automatically selected in the **Text/Line Quality** parameter.

Trapping

Trapping is a solution that solves misregistration between color separations in both offset and digital printing. Misregistration occurs regardless of the accuracy of the printing device and results in white lines around objects on top of a background (in a knock-out procedure) and also between adjacent colors. Trapping extracts the element or the background and creates an overlap between them.

Note: Do not use this option with VI jobs.

1. To set trapping, select **Yes.**

Notes:

- If you select **Yes**, the **Frame Thickness** and **Protect Small Text** options are activated. These options cannot be selected through the PPD.
- If you select **No**, trapping incorporated by DTP software (for example, *Photoshop*) is not affected. *Creo* Full Auto Frame trapping software (FAF) should not be used with software-based trapping. In a *PostScript* file that already contains trapping from the originating software, it is not necessary to use *Spire* CXP50 color server trapping.

2. In the **Frame Thickness** box, select the default thickness (0.08mm/ 0.003 inch), or type the desired value. The thicker the frame, the less chance that white areas appear between images.
3. Do one of the following actions:
   - Select the **Protect Small Text** check box to prevent the trapping of text that is 12 points or less.
   - Clear the **Protect Small Text** check box to trap all text elements.

Tip: Apply the **Protect Small Text** option to small or complex images to ensure their quality is not decreased.

Black Overprint

➢ Select **Yes** to ensure that black prints cleanly within a tint or picture area.

The text appears in a richer, deeper black, with the underlying CMY values equal to those of the printed background.

PS Overprint

➢ Select **Yes** to use the overprint information that exists in the input file.

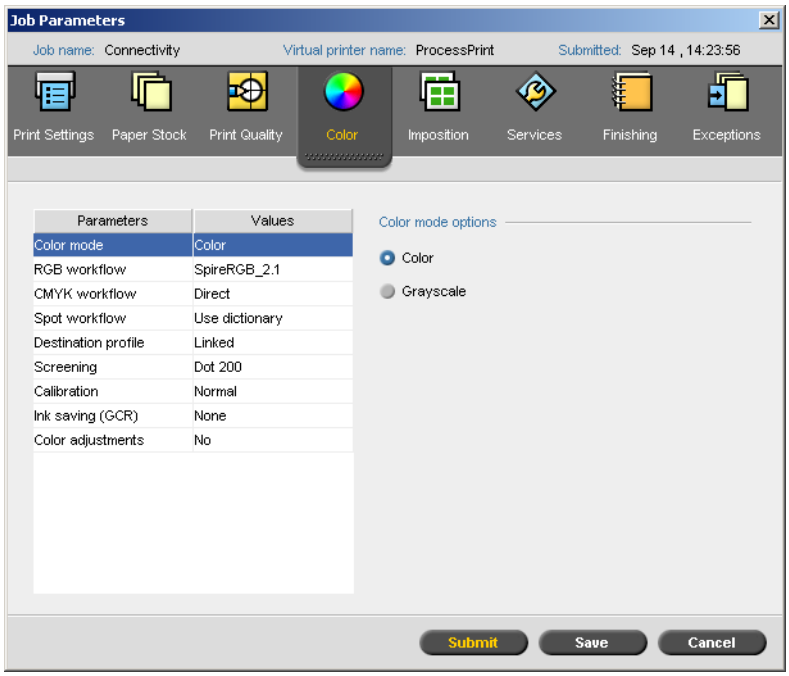
This parameter also determines whether the DTP software overprint settings are honored in the RIP.

Image Noise

The **Image Noise** parameter enables you to smooth and blend vignettes of continuous tone (CT) images.

➢ Select **Yes** to set the image noise level and move the slider to change the noise level as desired.

The Color Tab



Color Mode

➢ Select one of the following options:

- **Color** to print the job in color using CMYK
- **Grayscale** to print the job as black and white using Black (K) toner only

Note: If the job contains grayscale images that were created in RGB software, such as *Microsoft PowerPoint*, specify as monochrome. This selection ensures that grayscale images are counted as black and white instead of color in both the *Spire* CXP50 color server and in the *Xerox* DocuColor 5000 digital press billing meters.

RGB Workflow

The **RGB Workflow** parameter enables you to select an RGB profile and apply it to RGB elements in your job. You can use predefined profiles, or to achieve better color results, import your own custom profile via the Profile Manager.

1. In the **RGB Workflow** list, select the desired RGB source profile:
   - To use the embedded color space array (CSA) or source CSA, select **Use SourceCSA**.
   - To use a *Spire* or *Adobe* CSA, select a CSA from the list. The default option is **SpireRGB_2.1**.
   - To use a custom RGB profile, select the profile name from the list.
2. In the **Rendering intent** list, select the desired option.

For more information on rendering intent, see "Rendering Intent" on page 265.

3. To print RGB gray text and graphics with black toner only, select the **Print grays using black toner** check box.

Note: The **Print grays using black toner** check box not only affects R=G=B values, but may also cause slightly different values (R+/-4=G+/-4=B+/-4) to produce gray.

4. Select **Apply CMYK emulation** to convert RGB elements according to the CMYK emulation method selected in the **CMYK Profile** list in the **CMYK Workflow** parameter. The RGB elements receive the same look as the CMYK elements, creating a consistent appearance.

CMYK Workflow

The **CMYK workflow** option is used to emulate various standards used in lithographic printing. These standards represent specific combinations of paper and ink, as well as popular proofing systems. This option is also used to emulate other digital printers or other printing devices, such as offset presses. An example of a CMYK workflow job would be printing a test sample for a survey before moving to an offset press to print millions of survey forms. In such a case, it is best to emulate the offset press before the job actually goes to offset printing.

Note: RGB colors are not affected by the CMYK workflow.

The **CMYK workflow** parameter is also used to specify the desired rendering intent for CMYK elements.

To select CMYK workflow options:

1. In the **CMYK Profile** list, select the desired CMYK profile.

Note: The system emulates the selected option during the RIP process. GCR and CMYK emulation do not affect the processed job.

2. In the **Rendering intent** list, select the desired option.

For more information about choosing the correct rendering intent, see "Rendering Intent" on page 265.

3. To emulate the original paper tint, select the **Emulate source paper tint** check box.

Notes:

- The **Emulate source paper tint** check box is available only if you select **Device Link** as the CMYK profile.
- When you select the **Emulate source paper tint** check box, the *Spire* CXP50 color server applies the absolute colorimetric rendering method.
- When you select the **Emulate source paper tint** check box, the **RGB Workflow > Apply CMYK emulation** check box is selected by default.
- If the job is simplex, only the front side will be printed using the tint emulation.

4. Select the **Preserve pure colors** check box to preserve pure cyan, magenta, yellow, and black during transformation.

Spot Workflow

By default, the *Spire* CXP50 color server searches the spot color dictionary for the correct value for each recognized spot color.

For more information about spot colors, see "Spot Color Editor" on page 141.

- Select the relevant options:
  - **Use Spire spot color dictionary**: to use spot colors in the dictionary
  - **Protect RGB colors**: to retain RGB colors as defined
  - **Protect Gray colors**: to retain grays as defined
  - **Protect CMYK colors**: to retain CMYK colors as defined

Note: If you protect RGB, grayscale or CMYK colors, all colors with that specific combination found in the job will be protected. For example, a specific color combination used in a logo may align with a color used in an image in the job. The spot transformation affects the image color as well as that of the logo, sometimes to undesired results.

Destination Profile

- Select the desired profile, or select **Linked** to use the destination profile that was mapped to a paper color in the Profile Manager.

There is one predefined *Spire* CXP50 color server profile; **SpireDC5000**.

For more information on managing destination profiles, see "Profile Manager" on page 137.

Screening

Screening converts Continuous-Tone (CT) and Line-Work (LW) images into information (halftone dots) that can be printed. The human eye *smooths out* this information, which seems visually consistent with the original picture. Thus, the more lines per inch, the more natural the image appears.

Screening is achieved by printing dots in numerous shapes or lines in an evenly spaced pattern. The distance between the screen dots or lines is fixed and determines the quality of the image.

Using screening, printers can work with even amounts of toner and still produce a wide range of colors when you use screening. The darker the color, the larger the dot, or the thicker the line. In this manner, screens give the appearance of different toner quantities printed in a certain area.

To select a screening method:

➢ In the **Screening** list, select the desired option. For CT images, use a dot option; for LW images, use a line option.
If you select **Automatic**, **Dot 200** is used for CT images, and **Line 200** is used for LW images.

Calibration

The purpose of color calibration is to achieve a consistent level of color quality. Calibration corrects printer colors by measuring a color density chart.

The *Spire* CXP50 color server calibration tool enables you to create and edit calibration tables, either through an automatic process or by editing an existing calibration table. The available calibration options are **Normal**, **Saturated**, and **None**.

For more information about calibration tables, see "Creating a Calibration Table" on page 124 and "Editing Calibration Tables" on page 129.

The **Calibration** parameter enables you to select the desired calibration table for the job.

To select a calibration table for a job:

➢ In the **Calibration** list, select a calibration table. The default calibration table is **Normal**.

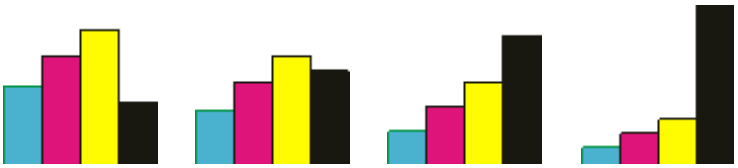
Tip: For optimal printing performance, use the **Normal** calibration setting with **Ink Saving (GCR)** set to Medium.

Ink Saving (GCR)

Gray component replacement (GCR) prevents the consequences of excessive toner buildup, such as flaking and cracking, and the curling effect that may occur when you print transparencies.

Note: There is no change to the color quality of the printed image even though the gray component of each color is replaced by black.

➢ To set ink saving, select one of the following options:



No GCR Low GCR Medium GCR High GCR

- **None:** no GCR is performed on the file, and the printer applies maximum dry ink coverage
- **Low**, **Medium**, or **High**: the selected amount of CMY dry inks replaces the black dry ink.

Note: Select **High** for minimum ink coverage and to save on toner. **High** also prevents curling effects.

Color Adjustments

Gradation

The **Gradation** list contains gradation tables that were created by the *Spire* CXP50 color server's gradation tool. Each gradation table contains specific settings for brightness, contrast, and color balance.

When you select your predefined gradation table, your job is adjusted according to the specific table's settings.

For more information about creating gradation tables, see "Gradation Tool" on page 148.

➢ In the **Gradation** list, select one of the defined gradation tables.

Note: The default setting is **None**—no gradation table is applied to your job.

Brightness

Use this option to make last-minute adjustments to the print job after proofing.

➢ To select a brightness level for a job, move the **Brightness** slider to the desired brightness level (the range starts from **Light**, which applies -15%, to **Dark**, which applies +15%).

Contrast

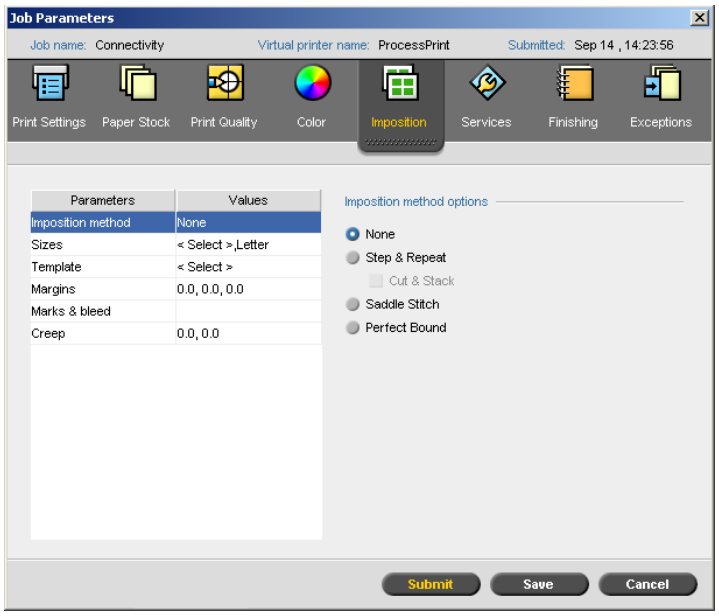
Adjust the **Contrast** option to control the difference between light and dark tones in your image.

➢ To select a contrast level for the print job, move the **Contrast** slider to the desired contrast level (the range starts from **Less**, - which applies -10%, to **More**, - which applies +10%).

The Imposition Tab

The **Imposition** tab enables you to set job options related to the positioning, folding, trimming, and binding of pages.

Note: If you use a dynamic page exceptions virtual printer to print a job, the **Imposition** tab is unavailable. For more information, see "Dynamic Page Exceptions" on page 94.



Imposition Method

The **Imposition Method** parameter specifies how printed sheets are finished.

➢ Select one of the following options:

❒ **None** for no imposition (this is the default option). The imposition parameters are unavailable and the thumbnail viewer does not display an image.

❒ **Step & Repeat** prints multiple copies of the same image on one sheet so that the sheet is used to maximum capacity. This method is used mainly for printing business cards.

Notes:

- When you use the **Step & Repeat** template for VI jobs, the job prints in Z-Sorting mode. This mode enables imposed VI jobs to be sorted for **Cut & Stack** finishing.
- You can use specific **Step & Repeat** templates to print several different images on one sheet.

If you select **Step & Repeat**, the following option is available:

- **Cut & Stack** enables **Step & Repeat** jobs to be printed, cut, stacked, and bound in the most efficient manner, while preserving the original sorting. A job's pages, booklets, or books are sorted in a Z-shape. In other words, each stack of pages is sorted in consecutive order. When stacks are piled one on top of another, the entire job is already sorted up or down.

Note: If you select **Cut & Stack,** you cannot make changes or enter a valid exception in the **Exceptions** tab.

❒ **Saddle Stitch** prints pages ready for applying a book-finishing technique in which the pages of a book are attached through stitching or stapling in the spine fold—for example, brochures.

- **Perfect Bound** prints pages ready for applying a book-finishing technique in which the pages of a book are attached by trimming the spine fold, roughening the edges of the gathered pages, and gluing them together—for example, hardcover books.

Sizes

1. In the **For sheet size use paper set** list, select the desired paper set. If you need to add a new paper set, click the **browse** button ....

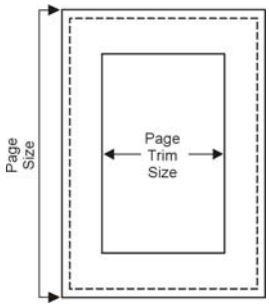
   Paper set defines the paper stock attributes (paper size, type, weight and coating) on which the imposed job will be printed. The *Spire* CXP50 color server enables you to define all the paper stock settings of an imposed job on the **Imposition** tab with no need to switch to the **Paper Stock** tab and define the paper stock settings there.

For more information about adding paper sets, see "Managing Paper Sets" on page 57.

2. In the **Trim Size** list, select the desired trim size. **Trim size** is the size of the finished, trimmed document. You can adjust your page size by adjusting the trim size.

Note: If you set the trim size to be smaller than the page size set in the DTP software, some of the data is cropped. Setting a larger trim size results in a larger border on the printed page.

If you select **Custom**, define a custom trim size and type the desired height in the **H** box, and the desired width in the **W** box.



3. Select the desired **Orientation** (**Portrait** or **Landscape**) for the trim size. If you specify the wrong orientation, an unsuitable template might be selected and the job might be cropped.
4. Select **Fit to sheet** size to fit the page to the sheet size.

Template

1. From the **Category** options, select one of the following options:
   - **Predefined** to choose a predefined *Spire* CXP50 color server imposition template
   - **User-defined** to choose a user defined *Spire* CXP50 color server imposition template

For more information about user defined templates, see "Imposition Templates" on page 82.

2. The rows and columns indicate how the pages will be placed on the sheet. Set the **Layout** as follows:
   a. In the **Columns** list, select the number of pages to place horizontally. You can select the number of columns from the drop-down list. The template preview area displays your settings.
   b. In the **Rows** list, select the number of pages to place vertically. You can select the number of rows from the drop-down list. The template preview area displays your settings.

Note: If you select the **User Defined** option, **Layout** is unavailable.

3. Select the **Print Method** from the list.

4. Select the **North South** check box if the template you chose is either step and repeat 2×1 or 1×2. The pages will be placed 180 degrees from each other, on the same side of the imposed sheet.

Previewing the Template Layout

When you choose a template, you need to account for other job parameters—for example, **Trim Size**, **Bleed**, **Margin**, **Gutters**, and **Paper Size**. In the **Template Options** area, you can preview the template layout of your job and check your imposition settings. For example, green arrows indicate that the template layout is rotated, which the blue and black arrows indicate the direction of the pages on the sheet. The sequence of pages is indicated by the page numbers.

If the parameters conflict, you will see where the conflicts exist when you preview the template layout:

- Red corners indicate that the trim size is larger than the sheet size.
- Yellow corners indicate unsuitable margin settings—for example, if the margin size is unsuitable.
- Dotted lines indicate conflicting trim size settings and template settings—for example, A3 trim for Step & Repeat 2x2 Duplex template.

Note: You can preview the imposed job in the Job Editor window, **Imposed sheets** tab, see "Viewing and Editing Job Parameters" on page 36.

Margins

➢ Enter the desired margin sizes to adjust the spaces between the outside edges of pages and the edges of the sheet on which they are printed.

Margin settings must accommodate finishing equipment and requirements. Confirm binding parameters with your binder when planning your sheet.

Marks & Bleed

The **Marks & bleed** parameter enables you to mark where trimming and folding should occur.

When you set bleed options, you extend part or all of the printed image beyond the trimming boundary. The bleed options ensure that an inaccurate trim setting will not leave undesired white space at the edge of the page. The bleed options produce sharp page boundaries with color that extends all the way to the edge of the page.

To select marks and bleed options:

1. In the **Marks** area, select one of the following options:
   a. To print lines that indicate where the sheet should be cropped, select the **Crop Marks** check box.
      - To print the crop marks on both sides of the page, select the **Both sides of sheet** check box.
   b. To print lines that indicate where the sheet should be folded, select the **Fold Marks** check box.

Notes:

- Crop marks are placed according to the **Trim Size** option. A minimum of 6 mm is required for crop marks, and 10 mm for fold marks.
- If your job already includes crop marks incorporated in the DTP software, you do not need to add crop marks here. If you do add crop marks, both sets of crop marks can be printed.
- If you want to use crop marks incorporated in the DTP software, make sure that enough space is left around your page in the *PostScript* file so that the page prints with crop marks.

2. In the **Bleed** area, select one of the following options:
   a. **Maximum bleed** to extend the bleed to the sheet fold lines.
   b. **Custom bleed size** type the desired bleed size in millimeters.

Notes:

- You cannot extend the bleed size beyond the sheet fold lines. Bleed does not affect the position of crop.
- Bleeding must be defined in your DTP software in order for the *Spire* CXP50 color server to apply the bleed options.

Creep

Tip: It is recommended that you use a border around all documents when you use creep.

The **Creep** parameter uses the following terminology:

- **Creep in** specifies the amount of movement towards the spine applied to the center two pages and their backs (in other words, the pages that require the most amount of compensation).
  An ever-decreasing amount of movement is automatically applied from the center quartet of pages back to the outside four pages of the job (in other words, every quartet of pages is moved by an amount less than the previous quartet).

Note: The outside two pages and their backs are not moved (the value 0.0 is used).

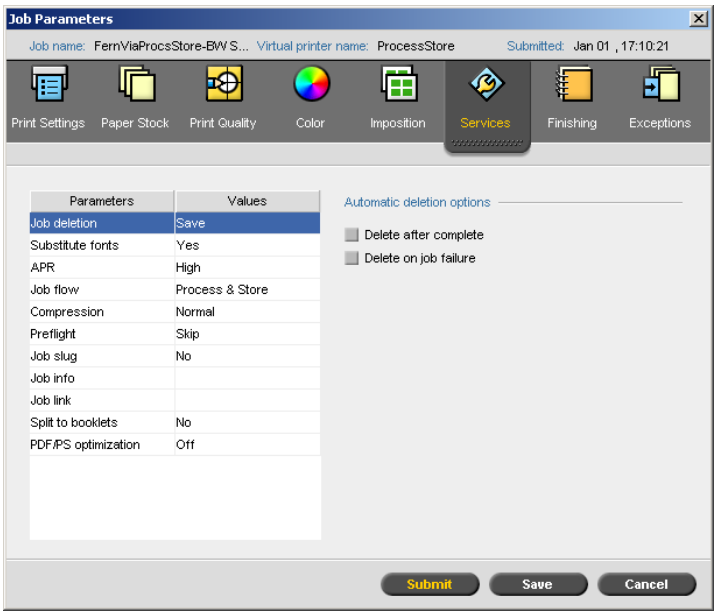
- **Creep out** is used when you find that the page images are too close to the spine. This problem can be resolved by selecting a value for **Creep out**. This will move all the pages of the job further out towards the outside margin (away from the spine) by the specified amount. This movement takes place before the **Creep in** value is applied.

To set the creep options:

1. In the **Creep in** area, select **Auto** to automatically set the creep based on paper stock weight, or type the desired amount for **Creep in**.
2. In the **Creep out** area, type the desired amount.

Note: Units of measurement (mm or inches) are set in the Settings window, see "Localization" on page 187.

The Services Tab



Job Deletion

Select this parameter to delete each page on the fly after it has been successfully printed. In this way, the *Spire* CXP50 color server maintains enough free disk space for the duration of the print run. Reusable elements are not deleted.

Notes:

- This option sustains enough free disk space for the duration of the print run and only affects the sub-job.
- The Variable Print Specification file is also deleted.

To set a deletion policy:

1. Suspend the **Process Queue** and import your job.
2. Double-click your job to open the Job Parameters window.

3. On the **Services** tab, in the **Automatic deletion options** area, select one of the following options:
   - To remove pages or jobs after printing is completed, select **Delete after complete**.
   - To remove failed jobs while processing or printing, select **Delete on job failure**.
4. Click **Save**.
5. Select the **resume** button to resume the **Process Queue** and start the processing of your job.

Substituting Fonts

➢ Select one of the following options:

❒ **Yes** to substitute a missing font with the default font that is set in the Settings window.

❒ **No** to stop the job processing if the desired font is missing.

For more information on managing fonts, see "Fonts" on page 96.

APR

Note: This feature is available only for the *Spire* CXP50 color server with the Professional Kit.

For more information on APR, see "Creo APR" on page 85.

1. In the **APR options** area, select one of the following options:
   - **Print with high res** to replace low-resolution images in your job with high-resolution images that are located in a specified APR path.
   - **Print with low res** to print the job with the existing low-resolution images—for example, for proofing purposes.

2. In the **Use APR mask from** area, select one of the following options:
   - **PostScript image** to use the masking data contained in the low-resolution image file.
   - **High res** to use the masking data contained in the high-resolution image file.
   - **Both** to use the masking data that is common in both high-resolution and low-resolution image files—for example, if the images defined by the two sets of masking data overlap, the overlapping area is RIPed.

Note: If the masking data in the low-resolution image file defines a completely different part of an image than the masking data in the high-resolution file, no masking data is used.

Setting a High-Resolution Path

There are two default paths in which the *Spire* CXP50 color server searches for high-resolution images:

- **Search in the input folder:** The *Spire* CXP50 color server first searches for high-resolution images in the same folder as the PDL file.
- **D:\Shared\High Res:** If you want to save your high-resolution files in this folder, copy the files to **D:\Shared\High Res**.

You can also add a new high-resolution path, and then edit, or delete the path.

Paths other than the default paths are defined on a per-job basis, or set in the virtual printer. You can specify paths on local hard drives, CD-ROM drives, and the floppy drive connected to the *Spire* CXP50 color server. You can also specify paths on remote clients or file servers.

To add a high-resolution path:

1. Under the **APR path** box, click **Add**.

   The HiResPath dialog box appears.

2. Click the **Add** button  .

   The Open dialog box appears.

3. Locate your high-resolution images, and then click **Select**.

   The new path is displayed in the HiResPath dialog box.

4. To promote or demote a selected APR path, use the arrow buttons.

Note: The order in which the APR paths are listed is the order in which the *Spire* CXP50 color server searches for the high-resolution images.

To modify a high-resolution path:

1. In the HiResPath dialog box, select the path you want to modify.
2. Click the **Edit** button  .

   The Open dialog box appears.
3. Locate your high-resolution images, and then click **Select**.

   The new path is displayed in the HiResPath dialog box.

To delete a high-resolution path:

1. In the HiResPath dialog box, select the path you want to delete.
2. Click the **Remove** button  .

   The selected path is deleted.

Job Flow

This parameter enables you to specify a job flow for a job that is imported to the *Spire* CXP50 color server from the network or from the *Spire* CXP50 color server folders.

➢ Select the desired job flow option:

- **Process & Print** to set the *Spire* CXP50 color server to RIP, print, and store the PDL files in the **Storage** window (unless the **Job Deletion** parameter is set to **Delete after Complete**).
- **Process & Store** to RIP and move the PDL files to the **Storage** window as RTP jobs.
- **Spool & Store** to place the PDL files directly into the Storage window without processing them.

Note: This option can be defined only through the PPD parameters of the virtual printer.

Compression

Some jobs can fail to print because they contain images that cannot be compressed. Increasing compression can resolve this problem.

Note: Choosing a higher compression can result in lower quality.

- Select one of the following options:
  - **Normal** for normal compression
  - **High** for higher compression

Preflight

Note: This parameter is available only if you have the *Spire* CXP50 color server with the Professional Kit.

- Select **Run Preflight check** to check the status of key job components before the job is sent for printing.

  For more information on the **Preflight** parameter, see "Preflight Check" on page 105.

Job Slug

Note: This parameter is available only if you have the *Spire* CXP50 color server with the Professional Kit.

➢ Select the desired job slug options to be printed in the margins of your job:

- ❒ **Color bar**: prints a measurable color bar enabling you to know the state and consistency of the printer and calibration, and perform color proofing if necessary
- ❒ **Job name**: prints the job name
- ❒ **Sheet number and side (front/back)**: prints the sheet number, and front/back side information
- ❒ **Date and Time**: prints the date and time the job is printed
- ❒ **Comment**: enter comments for your job (up to 30 characters)

Job Info

This parameter provides the following information:

- **Job Title**—the original name of the file related to this job
- **Sender**—the user name of the system from which this job originated
- **Account**—the account number of a specific customer or group
- **Recipient**—the name of the customer
- **Job Comments**—the any special instructions that you want to include with your job

Job Link

This parameter displays the relevant URL for the linked elements of JDF jobs.

Note: JDF jobs are only supported in the *Spire* CXP50 color server with the Professional Kit.

➢ Click the link to open the linked element.

Split to Booklets

The **Split to booklets** parameter enables you to split a *PostScript*, PDF, or large VI job that does not have a booklet structure into booklets.

Note: Unexpected results might occur when you use this option for VI jobs that already have a booklet structure.

1. In the **Split to booklets options** area, select **Yes**.
2. In the **Number of pages per booklet** box, type the desired number.

Note: If the specified number of pages per booklet is not sufficient to produce complete booklets and there is a remainder of pages, the last pages will form a booklet that contains less pages than specified.

PDF/PS Optimization

Note: This option is available only for the *Spire* CXP50 color server with the Professional Kit.

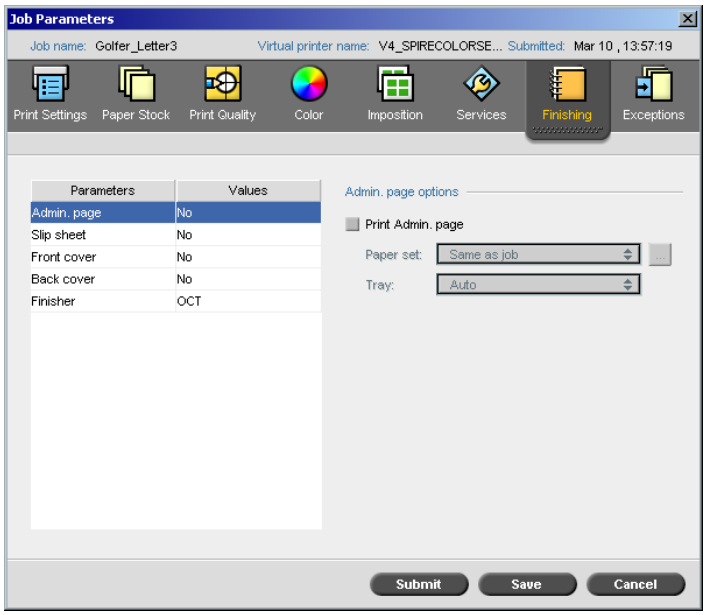
Use this option if you have a PDF or *PostScript* job with repeated elements and want to significantly decrease processing time by applying the PDF/PS workflow.

➢ Select the relevant option.

The repeated elements are cached once, and then reused without repeated processing.

Important: Verify that in your *Acrobat Distiller* settings, **Optimize for Fast Web View** is selected (in *Acrobat* 4.0 the corresponding option is **Optimize PDF**).

The Finishing Tab



Administration Page

The administration page contains job-related information, such as the job title, the name of the sender, the date and time that the job was submitted, account information, and comments.

The Administration page is printed in the same order as the job.For face-down printing, the page is printed before each set; for face-up printing, the page is printed after each set.

Note: If you change the options in the **Admin page** parameter, you must re-RIP the job.

To print an administration page:

➢ Select the **Print Admin page** check box and set the specifications as desired.

Slip Sheet

You can print slip sheets with your job and select a different paper set in which to print the slip sheet. If the job is collated, the slip sheets will be printed between sets. If the job is not collated, the slip sheets will be printed between groups.

To set slip sheet options:

1. Select the **Print slip sheet** check box.
2. In the **Paper set** list, select the desired paper set. If you need to add a new paper set, click the **browse** button.

For more information about adding paper sets, see "Managing Paper Sets" on page 57.

3. In the **Tray** list, select the desired tray.
4. In the **Frequency** list, type the number of slip sheets you want to print. The default is 1; a slip sheet is printed between each set.

Front Cover

By default, your job is printed without a front cover. You can choose to print a front cover using the same or a different paper set, as desired.

To print a front cover:

1. Select the **Print front cover** check box.
2. In the **Paper set** list, select the desired paper set. If you need to add a new paper set, click the **browse** button.

For more information about adding paper sets, see "Managing Paper Sets" on page 57.

3. In the **Tray** list, select the desired tray.
4. In the **Cover printing** area, select one of the following options:
   - **None** to print a blank front cover.

Note: A blank page is automatically inserted between the cover page and the first page of the job so that both sides of the cover page are defined, and the job starts on the next odd page.

- **Print on front side** to print the first page of the job as the cover page.
- **Print on both sides** to print the first two pages of the job as the cover page.

Back Cover

By default, your job is printed without a back cover. You can choose to print a back cover using the same or a different paper set, as desired.

To print a back cover:

1. Select the **Print back cover** check box.
2. In the **Paper set** list, select the desired paper set. If you need to add a new paper set, click the **browse** button.

For more information about adding paper sets, see "Managing Paper Sets" on page 57.

3. In the **Tray** list, select the desired tray.
4. In the **Cover printing** area, select one of the following options:
   - **None** to print a blank back cover.

Note: A blank page will automatically be inserted between the back cover and the last page of the job so that both sides of the back cover are defined.

   - **Print on back side** to print the last page of the job as the back cover.
   - **Print on both sides** to print the last two pages of the job as the back cover.

Finisher

The **Finisher** parameter enables you to select the destination of the printed output.

Note: The available stapling methods for *PostScript* files depend on the page orientation and size. The stapling methods for PDF files depend on the page size.

➢ In the **Module** list, select one of the finisher options:

❒ **OCT** (offset catch tray) (default)

- The **Offset** check box is selected by default. If you don't want to use an offset between sets, clear this check box.

Note: If the page size is larger than A3 (standard or custom), the Offset check box is unavailable.

❒ **EHCS** (enhanced high capacity stacker)

a. Select the relevant tray type (**Top Tray** or **Stack Tray**).

b. If you have a chained EHCS, select the desired tray from the drop-down list.

c. If you selected **Stack Tray**, select the **Offset** check box for the following types of jobs:

- **Collated** to offset each copy from the next copy.
- **Uncollated** to insert an offset sheet when a new page number is delivered (when you are printing more than one copy of each page).

❒ **CSS** (common stacker stapler)

a. Select the relevant tray type (**Top Tray** or **Stack Tray**).

b. If you selected **Stack Tray**, select one of the following options:

- **Offset** to use an offset.
- **Stapler** to select stapling.

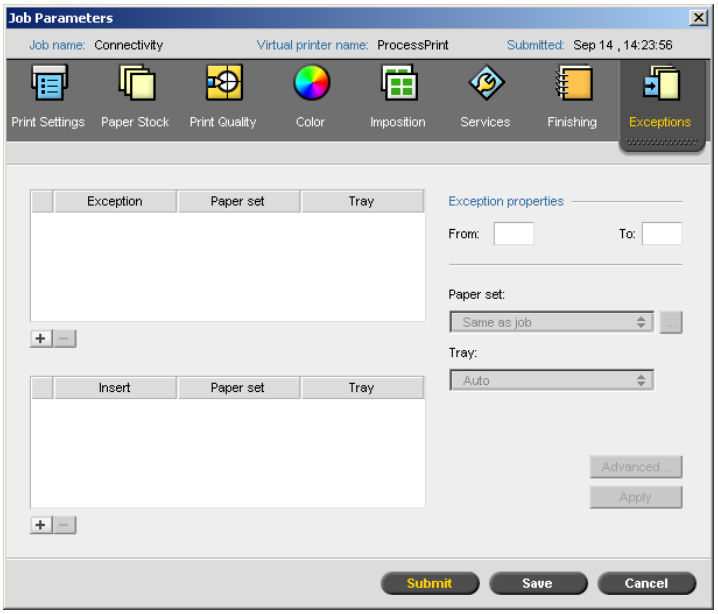
c. If you selected **Stapler**, select the desired staple location (**Front**, **Rear**, or **Dual**).

❒ **DFA** (document finishing architecture)

a. Select the desired **Profile** from the list, according to the profile set in the printer you are using.

b. Select the desired **Function**, according to the profile set in the printer you are using.

The Exceptions Tab



The **Exceptions** tab enables you to add and delete page exceptions and inserts.

Note: If you have the *Spire* CXP50 color server with the Professional Kit, use the **Exceptions** tab to map paper sets for dynamic page exceptions.

For more information about the dynamic page exceptions workflow, see "Dynamic Page Exceptions" on page 94.

Managing Exceptions

You can add and delete exceptions.

To add exceptions to a job:

1. In the **Exception** area, click the **Add** button .
2. In the **From** and **To** boxes, type the desired page range for the exception.

3. In the **Paper set** list, select the desired paper set. If you need to add a new paper set, click the **browse** button.

For information about adding a paper set, see "Managing Paper Sets" on page 57.

Note: The default paper stock properties are those specified for the job.

4. In the **Tray** list, select the desired tray.
5. To set image position options:
   a. Click **Advanced**.
   b. Clear the **Same as job** check box.
   c. To shift an image, follow one of these steps:
      - Click the arrows to shift the image on both sides.
      - Type a value in the **Rear** and **Lead** boxes.
   d. To set the values back to 0.0, click **Center Image**.
   e. Click **Save**.
6. Click **Apply**.

   The exception is added to the **Exception** area.

To delete an exception:

1. In the **Exception** area, select the desired exception and click the **Remove** button  .
2. In the confirmation message, click **Yes**.

Managing Inserts

To add an insert:

1. In the **Insert** area, click the **Add** button  .
2. In the **After page** box, type the number that will precede the insert.
3. In the **Quantity** box, type the number of inserts that you want.

4. In the **Paper set** list, select the desired paper set. If you need to add a new paper set, click the **browse** button.

Note: The default paper stock properties are those specified for the job.

For information about adding a paper set, see "Managing Paper Sets" on page 57.

5. In the **Tray** list, select the desired tray:
6. Click **Apply.**

   The insert is added to the **Insert** area.

To remove an insert:

1. In the **Insert** area, select the desired insert and click the **Remove** button  .
2. In the confirmation message, click **Yes**.

Setting PPD File Parameters

You can set job parameters from a client workstation using the *Spire* CXP50 color server PPD file or you can define a virtual printer with predefined PPD file settings.

To print a file from *Windows*, first set up a *Spire* CXP50 color server network printer with the appropriate PPD file. The PPD file contains all the parameters and paper stock definitions for the printer and enables you to print your file properly.

Notes:

- In the PPD file, the **Printer's Default** option is selected for all PPD file parameters. The **Printer's Default** option corresponds to the settings of the currently selected virtual printer.
- Print settings defined in the job file override the settings of the virtual printer.

The following table lists the PPD file parameters available.

Table 16: PPD parameters

PPD Parameter	Printing Options
Print Method	See "Print Method" on page 216.
Image orientation for imposition	See "Sizes" on page 233.
Reverse Print Order	See "Print Order" on page 217.
Face Up	See "Delivery" on page 217.
Collation	See "Collation" on page 217.
Image Scale	See "Image Scale" on page 218.
Rotate 180	See "Rotate 180°" on page 218.
Paper Set	See "The Paper Stock Tab" on page 219.
Type	See "Type" on page 220.
Weight	See "Weight" on page 220.
Coating	See "Coating" on page 220.

Table 16: PPD parameters

PPD Parameter	Printing Options
Text and Line Quality	See “Text /Line Quality” on page 221.
Image Quality	See “Image Quality” on page 222.
Trapping	See “Trapping” on page 223.
Black Overprint	See “Black Overprint” on page 224.
PS Overprint	See “PS Overprint” on page 224.
Image Noise	See “Image Noise” on page 224.
Color Mode	See “Color Mode” on page 225.
RGB Workflow	See “RGB Workflow” on page 226.
Gray RGB	See “RGB Workflow” on page 226.
Rendering Intent for RGB	For setting this parameter, see “RGB Workflow” on page 226. For more information on rendering intent, see “Rendering Intent” on page 265.
CMYK Workflow	See “CMYK Workflow” on page 226.
Emulate Source Paper Tint	See “CMYK Workflow” on page 226.
Emulate RGB Elements	See “CMYK Workflow” on page 226.
Preserve Pure Colors	See “CMYK Workflow” on page 226.
Rendering Intent for CMYK	See “CMYK Workflow” on page 226.
Use Spire Spot color dictionary	See “Spot Workflow” on page 227.
Destination profile	See “Destination Profile” on page 228.
Calibration	See “Calibration” on page 229.
Screening Method	See “Screening” on page 228.
Ink Saving (GCR)	See “Ink Saving (GCR)” on page 229.
Brightness	See “Color Adjustments” on page 230.

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Image Noise	See “Image Noise” on page 224.
Color Mode	See “Color Mode” on page 225.
RGB Workflow	See “RGB Workflow” on page 226.
Gray RGB	See “RGB Workflow” on page 226.
Rendering Intent for RGB	For setting this parameter, see “RGB Workflow” on page 226. For more information on rendering intent, see “Rendering Intent” on page 265.
CMYK Workflow	See “CMYK Workflow” on page 226.
Emulate Source Paper Tint	See “CMYK Workflow” on page 226.
Emulate RGB Elements	See “CMYK Workflow” on page 226.
Preserve Pure Colors	See “CMYK Workflow” on page 226.
Rendering Intent for CMYK	See “CMYK Workflow” on page 226.
Use Spire Spot color dictionary	See “Spot Workflow” on page 227.
Destination profile	See “Destination Profile” on page 228.
Calibration	See “Calibration” on page 229.
Screening Method	See “Screening” on page 228.
Ink Saving (GCR)	See “Ink Saving (GCR)” on page 229.
Brightness	See “Color Adjustments” on page 230.

Table 16: PPD parameters

PPD Parameter	Printing Options
Text and Line Quality	See “Text /Line Quality” on page 221.
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Image Noise	See “Image Noise” on page 224.
Color Mode	See “Color Mode” on page 225.
RGB Workflow	See “RGB Workflow” on page 226.
Gray RGB	See “RGB Workflow” on page 226.
Rendering Intent for RGB	For setting this parameter, see “RGB Workflow” on page 226. For more information on rendering intent, see “Rendering Intent” on page 265.
CMYK Workflow	See “CMYK Workflow” on page 226.
Emulate Source Paper Tint	See “CMYK Workflow” on page 226.
Emulate RGB Elements	See “CMYK Workflow” on page 226.
Preserve Pure Colors	See “CMYK Workflow” on page 226.
Rendering Intent for CMYK	See “CMYK Workflow” on page 226.
Use Spire Spot color dictionary	See “Spot Workflow” on page 227.
Destination profile	See “Destination Profile” on page 228.
Calibration	See “Calibration” on page 229.
Screening Method	See “Screening” on page 228.
Ink Saving (GCR)	See “Ink Saving (GCR)” on page 229.
Brightness	See “Color Adjustments” on page 230.

Table 16: PPD parameters

PPD Parameter	Printing Options
Contrast	See “Color Adjustments” on page 230.
Automatic Deletion	See “Job Deletion” on page 238.
APR	See “APR” on page 239.
Job Flow	See “Job Flow” on page 241.
Split to booklets	See “Split to Booklets” on page 244.
Admin Page	See “Administration Page” on page 245.
Slip Sheet	See “Slip Sheet” on page 246.
Finisher Module	See “Finisher” on page 247.
Finisher Offset	See “Finisher” on page 247.
Staple Options	See “Finisher” on page 247.
Account	See “Job Info” on page 243.
Recipient	See “Job Info” on page 243.
Job Comments	See “Job Info” on page 243.

Glossary

24-bit/3-byte image

An image can be either RGB or CMY and each of the three colors uses 1 byte or 8 bits of data. Since 3 bytes equals 24 bits, these images are also known as 24-bit images. This system is used for high quality video imaging and scanning. For process color printing, a fourth color (black) is added for optimum effect.

32-bit/4-byte image

An image that uses 8 bits each for CMYK pixels, or 8 bits for each RGB pixel and 8 pixels for a mask layer or other future use. Since 4 bytes equals 32-bits, these images are also known as 32-bit images. An 8-bit CMYK image is the minimum required for high quality print reproduction.

4-color printing

Color reproduction method used to create full color output by overlaying cyan, magenta, yellow and black inks.

8-bit/1-byte image

An image limited to 256 tones of one color or 256 different colors. Since 1 byte contains 8 bits and each bit has two choices, 1 byte equals 28 choices or 256 possibilities.

Absolute colorimetric

A rendering intent method similar to “Relative colorimetric” except that it does not make adjustments according to the white point. In this method, colors that do not fit within the output color space are rendered at the extremes of the output color space. Colors that fall inside the output color space are aligned very accurately.
This method is valuable for representing *signature colors*. Colors that are highly identified with a commercial product such as the cyan in the *Creo* logo.

Additive color model

Color system in which the picture is composed of the combination of Red (R), Green (G), and Blue (B) light transmitted by the original subject. Effective for monitors and TV's, but not for print. Scanners normally first scan in RGB and convert into CMYK for printing. See also “*RGB*”, “*CMYK*”, “*Process colors*”, “*Subtractive color model*”.

Amplitude modulation

Halftone screening, as opposed to FM screening, has dots of variable size with equal spacing between dot centers.

Anti-aliasing A step effect in which angled lines or curved edges of elements in an electronic image look broken or jagged, as a result of producing it in a grid format. Increasing resolution can reduce this affect or using a technique called anti-aliasing where the edges are softened.

APR *Creo's* Automatic Picture Replacement workflow. In this workflow, two versions of a file are created: a high-resolution file and a low-resolution file called PSImage. The latter is used for positioning and manipulation in your DTP software. The low-resolution file is replaced automatically by the high-resolution version during the RIP process. See also "*PSImage*".

Binding The process by which pages of a book or other publication are attached to one another.

Bit Abbreviation of binary digits. The smallest unit of information used to store information in a computer. Bits are expressed as a binary notation, that is, in ones and zeros.

Bitmap graphics An image composed of individual pixels. The color value and position of each pixel are individually described in bits and bytes of computer memory. It is called a bitmap because it is effectively a map of bits. See also "*Raster file*".

Bleed An extra amount of printed image, which extends beyond the trim edge of the sheet or page.

Booklet VI jobs are composed of booklets, which are personalized copies of a document. A booklet can consist of several pages, but the entire document is targeted at a specific item or address. VI jobs include elements that may differ from booklet to booklet, including text, graphics, pictures and page backgrounds.

Byte A grouping of 8 bits of stored information, giving 256 levels of data. Each byte represents a value or character, such as a letter or a number. In a color system, a byte can describe one out of 256 distinct shades.

CIE Abbreviation for Commission Internationale d'Eclairage. This body was created for the study of illumination problems. CIE color coordinates specify proportions of the three additive colors required to produce any hue and are used for comparative color measurement.

CMYK The process colors—cyan, magenta, yellow, and black. See also "Color separations", "*Process colors*", and "*Subtractive color model*".

Color gamut

The range of colors possible with any color system.

Color separations

Separate films are prepared for each of the process printing inks—cyan, magenta, yellow, and black. These films are used to prepare the printing plates for printing on press. See also *"CMYK"*.

CSA (Color Space Array)

Color space array is the spectrum of specific variants of a color model with a specific gamut or color range. For example, within the color model RGB, there are numerous color spaces, such as *Apple* RGB, sRGB, and *Adobe* RGB. While each of these define color by the same three axes (R, G, and B), they differ in gamut and other specifications. CSA is comprised of a three-dimensional geometric representation of colors that can be seen or generated using a certain color model and are quantitatively measured. Source CSA is to be used only under the assumption that the upstream color workflow was managed and monitored. Otherwise it should be replaced with a *Creo* profile, which is the default.

CSA profiles

There are three CSA profiles with gammas of 1.8, 2.1, and 2.4. The higher the gamma, the darker the RGB appears. This workflow should be used when you have images from different sources, such as digital cameras, Internet, and scanners and you want the images to have the common RGB color spaces.
Other possible CSA profiles are sRGB and *Adobe* RGB.

Composite mode

In composite mode, the data required to separate a page into its CMYK components is all contained within one single (composite) file. Brisque or PS/M separates the file into CMYK as part of the conversion process. This processing mode is the fastest and most efficient in the majority of cases.

Creep

The effect of middle pages of a folded signature extending slightly beyond outside pages, compensated by shingling. See also *"Shingling"*.

Crop

To eliminate portions of an illustration or photography so the remainder is clearer, more interesting or able to fit the layout.

CT

Abbreviation for continuous tone. Color or black and white photographic images with tones that change gradually from dark to light (unlike the abrupt changes in linework).

DCS Abbreviation for Desktop Color Separation, an EPS format containing 5 files. Four of the files contain the color information for each of the CMYK colors and the fifth is a low-resolution composite file used in electronic page layouts. See also *"OPI"*.

Degradé A gradual blend or transition between colors—also known as a vignette or graduated blend (*"Vector drawing"*).

Digital front end system In electronic publishing, the workstation or group of workstations containing all the software for preparing pages of type and graphics. In prepress, the workstation that provides access to the user for hardware operation. For example, proofer, platesetter, imagesetter.

Digital proof A black and white or color image reproduction made from digital information without producing intermediate films. It can be output as a digital hard proof using a peripheral output device or displayed as a digital soft proof on a video monitor.

Dot The individual element of a halftone.

Dot area The percentage of an area covered by halftone dots ranging from no dots at 0% to a solid ink density at 100%. The size of a single dot is stated in a percentage of the area it occupies.

DTP Abbreviation for Desktop Publishing. The process of page production using personal computers, off-the-shelf software, and an output device such as a printer or imagesetter. Usually, these components form a system that is driven by a device-independent page description language such as *PostScript*.

EPS Abbreviation for Encapsulated *PostScript*, also known as EPSF. EPS is a graphic file format used to transfer *PostScript* graphic files from one software to another. It includes both a low-resolution preview and the high-resolution *PostScript* image description. On the *Macintosh*, the preview is in PICT format, on the PC it is in TIFF format.

Finishing stage The stage following the press process, which may include procedures such as laminating, perforating and varnishing.

Font A complete assortment of letters, numbers, punctuation marks, characters, and so on, of a given design and size.

Frame A color overlap created intentionally at a color border to minimize the effects of misregistration, also known as trap or grip. See also *"Trapping"*.

Frequency modulated screens A method of creating halftones where the spots are all the same size, but the frequency or number of dot changes in a given area. There are more dots in a dark area and fewer in a light area.

Frozen job A job for which the appropriate paper stock is not available—for example, the correct paper type, paper size, or paper weight.

GCR Abbreviation for Gray Component Replacement. GCR is a method for reducing the CMY amounts that produce the gray component in a color, without changing the color hue.

Graduated blend See *"Degradé"*.

Gravure printing A printing method in which the image is engraved through a screen below the surface of a cylinder. The toner is transferred to paper when pressed to the cylinder. Gravure is used for very long print runs and on many substrates.

Gray component The amounts of CMY in a color, which result in neutral gray, based on the lowest separation value of the color. See also *"GCR"*.

Grayscale A scale of gray tones from white to black. Digitally, grayscale images have up to 256 different levels of gray. See also *"8-bit/1-byte image"*.

Halftone A negative or positive image where detail of the image is reproduced with dots varying in area, but of uniform density. It creates the illusion of continuous tone when viewed with the naked eye.

Highlights The whitest portions of the original or reproduction that have no color cast. The highlight dot is ranged in the reproduction from the smallest printable dot to approximately 25%. See also *"Midtones"* and *"Shadows"*.

HSL Abbreviation of Hue, Saturation, and Lightness. This is a color model, which specifies a color by its wavelength (hue), chroma or purity of the color (saturation) and value of its brightness (lightness).

Image area The portion of a negative or plate corresponding to inking on paper. The portion of paper on which ink appears.

Imposition The arranging of pages in a press form to ensure the correct order after the printed sheet is folded, bound, and trimmed.

Ink jet proof A digital image proof printed by using jets that squirt minuscule drops of ink. Inkjet proofers can print onto a variety of surfaces.

Job flow Job flow refers to the job parameter settings of selected virtual printers that are automatically applied to all jobs printed using that virtual printer. These settings determine how a sent or imported file is processed. For example, a file sent to a virtual printer with a Process & Print job flow will be RIPed, printed, and stored in the Storage window. A file sent to a Process & Store job flow virtual printer will be RIPed and stored, without printing.

LEF A printer page orientation, where pages are delivered long edge first.

Laserwriter driver A part of the *Macintosh* system software that generates *PostScript* instructions from a software file when the Print command is activated.

Look-up table (LUT) A two or three-dimensional array of values stored for specified input-output relationships. When one input value is known, the system can automatically determine the correct output value. For example, the system can find the needed dot size for a given set of printing conditions based on the stored gray level; color setups can be saved in color tables (color transformation tables) which are one of the many kinds of LUTs.

Linework Linework graphics are characterized by sharply defined lines and very clear transitions from one color to another. Linework is stored in the computer as a series of geometric (vector) drawing instructions.

Metamerism Metamerism occurs when two colors match under one light source, but appear different under another light source. These two colors are called a metameric match. A metameric match might cause problems when trying to match proofs to presssheets under different lighting conditions.

Midtones Density values of an image (original or reproduction) between the highlights and the shadows. In the reproduction, midtones are printed with dot areas between approximately 40% or 60%. See also "*Highlights*" and "*Shadows*".

Misregistration

A situation common during printing where one or more of the color separations is slightly misaligned with regard to the others on the press. Misregistration shows up as white gaps or tinted overlaps at the borders of color pairs. Colors containing such files are trapped to compensate for this possibility. On continous tone (CT) images, misregistration can lead to blurring. See also "*Overprint*" and "*Trapping*".

Moiré

An interference pattern caused by differences in halftone screen angles or rulings. In process color printing, screen angles are selected to minimize this pattern. If the angles are not correct, a pattern that distracts the eye from the picture may be produced.

OPI

Abbreviation of Open Prepress Interface. OPI is a prepress convention established by Aldus Corps. It refers to tags or place holders in *PostScript* source files that point to TIFF or EPS images that have not been embedded in the file. These images reside in other locations and are merged with the *PostScript* file when processed. Normally used for performing high-resolution/low-resolution image substitutions (alternative to *Creo* APR).

Output resolution

The number of laser dots per unit of linear measurement (millimeter, inch, and so on) on film or paper.

Overprint

A technique that overlaps colored elements to eliminate the appearance of gaps between elements caused by misregistration of the various separations during printing. For example, black text is normally set to overprint. See also "*Trapping*" and "*Misregistration*".

PDL

Printer Description Language files (for example, *PostScript*, PDF, EPS, VPS, VIPP). The *Spire* CXP50 color server processes image files in PDL formats, converting them into a suitable Ready-To-Print format for direct, high-quality printing.

Perceptual (Photographic)

Default for RGB—a rendering intent method that preserves the visual relationship among the colors as they are perceived by the human eye. In other words, all colors are proportionally scaled to fit the output gamut. All or most colors in the original are changed but the relationship between them does not change.
This method is recommended when working with realistic images, such as photographs, including scans and images from stock photography CDs.

PICT A *Macintosh* file format for bitmaps and vector graphics.

Pixels The contraction of *Picture Element*; the smallest element of a digital image.

PostScript A programming and page description language that has become an industry standard for electronic publishing. It is used to describe the entire page, including both text graphics and images. The *PostScript* format, developed by *Adobe Systems*, Inc.™, is completely independent of the printing device.

Prepress Generic term used to describe the processes involved in preparing images for printing, includes the input, edit, and output stages.

Printer description files PPDs (*PostScript* Printer Definition) and PDFs (Printer Definition Files). These files are used by *Macintosh* software to prepare page and documents for specific output devices.

Process colors The four ink colors used to reproduce full color images—cyan, magenta, yellow, and black.

PSImage A low-resolution EPS file used in the *Creo* APR workflow. This file is used for positioning in page layouts. Changes made to this file are applied to the high-resolution file, which automatically replaces it shortly before exposure. See also *"APR"*.

Quartertone The tone area of an image influencing highlight detail and with density values between the white point and midtone; typically, printed with a dot area near 25%. See also *"Highlights"*, *"Midtones"*, *"Shadows"*.

Raster file A data file that was scanned, processed or output sequentially, bit by bit and line by line. Also known as a bitmap.

Rasterization The translation of vector information into bitmap information. Bitmaps may also require a new rasterization to comply with the screening parameters (dot shape, dot size) of the imagesetter that exposes them on film. See also *"RIP"* and *"RIPing"*.

Register Fitting of two or more printing images or plates in exact alignment with each other.

Register marks Crosses or other targets applied to the original copy prior to printing. Used for positioning films in register or for registering two or more colors in process printing.

Relative colorimetric

A rendering intent method in which colors that fall within the output color space remain the same. Only colors that fall outside are changed to the closest possible color within the output color space.
When using this method, some closely related colors in the input color space can be mapped to a single color in the output color space. This reduces the number of colors in the image.

Resolution

The number of pixels, points or dots per unit of linear measurement. For example, pixels per millimeter on a video display, number of dots per inch or millimeter on film or paper.
The resolution of an image is usually set the same vertically and horizontally. For example, a square millimeter with a resolution of 12 contains 144 pixels. The higher the resolution, the more image detail is recorded and the larger the digital file size.

Rendering Intent

All printers, monitors, and scanners have a gamut or range of colors that they can output (or view in the case of a scanner). If a color needs to be output and is outside the gamut of the output device, it must be mapped or approximated to some other color, that exists within the gamut. Rendering intent enables you to compress out-of-gamut colors into the color capability of the press you are using. You can set any rendering intent value for **RGB** elements by selecting the desired rendering intent from the **Rendering intent options** list. The default value for RGB is **Perceptual (photographic)**. The default value for CMYK is **Relative Colorimetric.**
There are several methods that can be used when translating colors from one color space to another. These methods are called rendering intents because they are optimized for various uses. When working with ICC profiles, it is important that you select the Rendering Intent that best preserves the important aspects of the image. Each rendering method specifies a CRD for color conversions. You can modify the rendering method to control the appearance of images, such as prints from office software or RGB photographs from *Photoshop*.

Resolution

The number of pixels, points, or dots per unit of linear measurement. For example, pixels per millimeter on a video display, number of dots per inch or millimeter on film or paper.
The resolution of an image is usually set the same vertically and horizontally. For example, a square millimeter with a resolution of 12 contains 144 pixels. The higher the resolution, the more image detail is recorded and the larger the digital file size.

RGB Abbreviation for the additive primaries red, green, and blue. They are used in video monitors, scanning, and other uses where the light is direct and not reflected. The component colors are the three predominant colors in the visible light spectrum detected by the human eye; combining these 3 colors together creates white light.

RIP Abbreviation for Raster Image Processor. RIP is software or a hardware device that converts vector information into pixel information to be imaged on an output file. The output file is imaged based on commands from the page description language.

RIPing The process of rastering or converting bitmaps and vector graphics into raster images suitable to the screening parameters of the output device. Files are RIPed prior to exposure or plotting.

Saturated color A color where the high and medium values approach 100%. In a saturated clean color, the values of the wanted colors are near 100% and the value of the unwanted color is near 0%. For example, when the color is red, 5% cyan, 90% magenta, and 80% yellow is more saturated than 30% cyan, 90% magenta, and 80% yellow.

Saturated (presentation) A rendering intent method that scales all colors to the strongest saturation possible. The relative saturation is maintained from one color space to another.
This rendering style option is optimal for artwork and graphs in presentations. In many cases, this style option can be used for mixed pages that contain both presentation graphics and photographs.

Saturation The strength of a color.

Screen angle The angle of rows of halftone dots represented in degrees. During output of films for reproduction, the dot arrangement of each separation film is placed at a distinct and different angle to the other separations. See also "*Moiré*".

Screen rulings The number of rows of printing dots per inch on a halftone film. A 150 lpi-screen ruling provides much better quality than 65 lpi.

SEF A printer page orientation, where pages are delivered short end first.

Shadows The darkest part of an image (original and reproduction) having densities near to maximum density. In the reproduction, shadows are printed with dot areas between 80% and 100%. See also "*Highlights*" and "*Midtones*".

Shingling A procedure that moves the image area of a page toward the direction specified, usually towards the binding, in order to compensate for creep.

Signature A sheet of printed pages that when folded becomes part of the publication.

Solid The point in a picture that is printed with a dot area of 100%. See also "*Highlights*", "*Midtones*" and "*Shadows*".

Spot color An additional separation (fifth, or more) that is used with special inks to achieve difficult color combinations, such as gold, or chocolate brown. Spot color is sometimes used by graphic artists to define special corporate colors—for example, company logos. On the *Spire* CXP50 color server, spot colors are translated into CMYK values using a dictionary that can be edited to adjust CMYK values.

Step and repeat The process of copying the same image by stepping it in position both horizontally and vertically according to a predetermined layout.

Stochastic screening A method of creating frequency-modulated halftones that depends on the number of laser dots in a given area rather than the size of the laser dots in a given area. The dots are randomly placed and very small. Areas with a higher dot percent have more spots exposed in that area and those with a low dot percent have fewer spots. Stochastic screening is used to eliminate moiré and improve picture detail and sharpness in high-end color printing.

Subtractive color model A color process in which the red, green, and blue components of the original subject are reproduced as three super-imposed images in the complementary (subtractive) colors of cyan, magenta, and yellow respectively. See also "*CMYK*", "*Process colors*", "*Additive color model*".

Three quartertone Tone area of an image influencing the shadow detail and with density values between the midtone and the dark point; typically printed with a dot area near 75%.

Tone compression The reduction of the density range of an original to the density range achievable in the reproduction.

Tone reproduction curve A graph showing the density of each point of the original and its corresponding density on the reproduction.

Trapping Creating an overlap (spread) or an underlap (choke) between colors that adjoin each other to hide misregistration during printing. Trapping is sometimes referred to as spreads and chokes, or fatties and skinnies.

UCR Abbreviation of Undercolor Removal. This is a method for reducing the CMY content in neutral gray shadow areas of a reproduction and replacing them with black. As a result, the reproduction appears normal, but less process color inks are used. See also *"GCR"*.

Unsaturated color A color whose highest value is less than approximately 80%. In an unsaturated, dirty color, the difference in the values of the wanted colors and the unwanted color is relatively low.
For example, when the color is red, 30% cyan, 80% magenta, and70% yellow is more unsaturated than 0% cyan, 90% magenta, and 80% yellow.

Variable information (VI) Variable information (VI) jobs are jobs in which the printed materials are individualized for specific recipients or purposes. These materials can include bills, targeted advertising, and direct mailings.

Vector drawing The geometric system used to define lines and curves in many computer graphics most often used for line drawings.

Vignette See *"Degradé"*.

Virtual printer For *Macintosh* and *Windows* networks, the *Spire* CXP50 color server provides three default network printers, known as virtual printers. Virtual printers contain preset workflows that are automatically applied to all print jobs processed with that virtual printer.

White point The whitest neutral area of an original or reproduction that contains detail and is reproduced with the smallest printable dot (typically 3% to 5%).

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