Xerox CX Print Server, Powered by Creo for the Xerox DocuColor 7000AP/8000AP Digital Presses

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User Guide
English

XEROX®

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Welcome

Welcome to the CX Print Server User Guide

Welcome to your Xerox CX Print Server, Powered by Creo for Xerox DocuColor 7000/8000AP Digital Presses User Guide. This user guide is applicable to both the Xerox DocuColor 8000AP digital press and the Xerox DocuColor 7000AP digital press. Please note that although all printer references throughout this guide specify the DocuColor 8000AP, the information therein applies to both digital presses. We look forward to supporting you all the way from prepress to print.

The CX Print Server is a powerful, comprehensive color server that provides high throughput and print predictability to digital workflows. In combination with the DocuColor 8000AP, the CX Print Server effectively addresses the growth of on-demand printing needs and delivers the best output quality available.

This user guide will help you operate the CX Print 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 CX Print Server.

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

Overview of CX Print Server

The CX Print Server is an on-demand pre-press system that uses advanced pre-press technologies, to drive a DocuColor 8000AP.

As an optimal digital color solution for printers, the CX Print Server enables you to print from Microsoft® Windows®, Macintosh®, and UNIX® client workstations. The CX Print Server processes image files in page-description language (PDL) formats— for example, Adobe 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 CX Print Server also streamlines the printing process by allowing printing with preset workflows.

In combination with the DocuColor 8000AP, the CX Print 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 CX Print Server, the DocuColor 8000AP prints at the full-rated speed of 80 full-color A4 (210mm x 297mm) or Letter (8.5 inches x 11inches) pages per minute, on any media type and weight.

The CX Print Server combines RIP functionalities, automation, control tools and special hardware development capabilities with PC architecture.
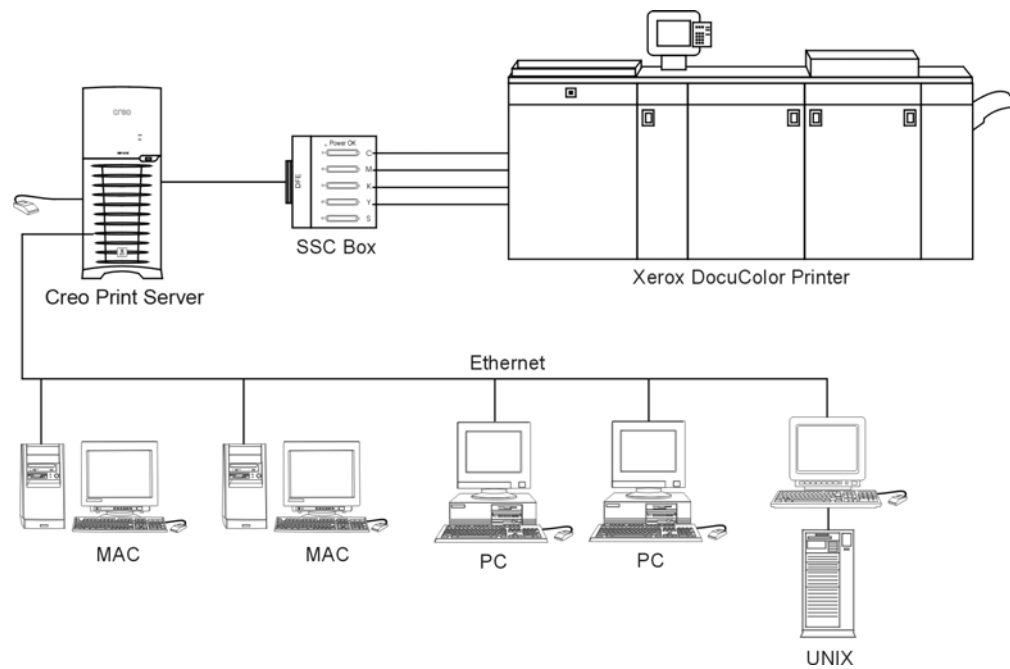
Figure 1: CX Print Server for the DocuColor 8000AP

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 CX Print Server is a dedicated Creo platform running in a Windows XP environment.

The CX Print Server includes:

- Creo hardware, including the interface board

- Software, including:

  ❑ Creo software

  ❑ Windows XP Professional Operating System

  ❑ Adobe® Acrobat® version 7.0

Supported Formats

The CX Print 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 CX Print Server receives and processes files from the following client workstations:

- Macintosh – running Mac OS X (10.1 and later)
- Windows – running Windows 2000 and XP
- UNIX Workstations and Servers

The CX Print Server basic workflow is as follows:
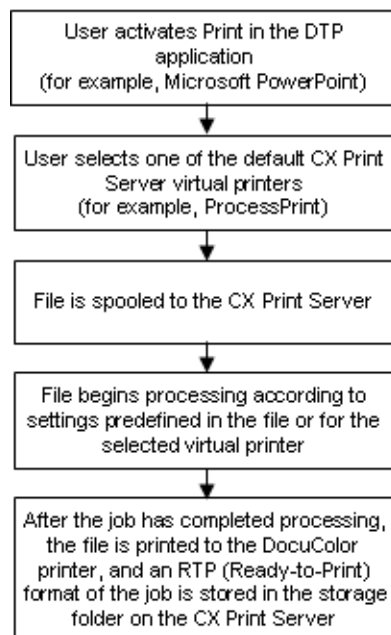
2

Getting Started

Turning On the CX Print Server

1. Turn on the monitor.

2. Press the power button located behind the front panel of the CX Print Server.

    The power indicator on the front panel lights up. The Windows operating system starts, and the CX Print Server splash screen appears.
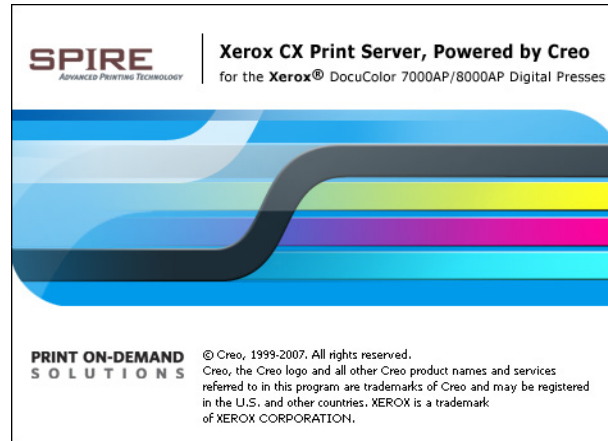
Notes:

*   If the CX Print Server workspace is already turned on, open the workspace from the **Start** menu.

*   By default, the **Auto Log On** check box is selected under **Tools > Settings > Administration > Security**. 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 158.

The Workspace

After you turn on the CX Print Server, the workspace automatically appears.
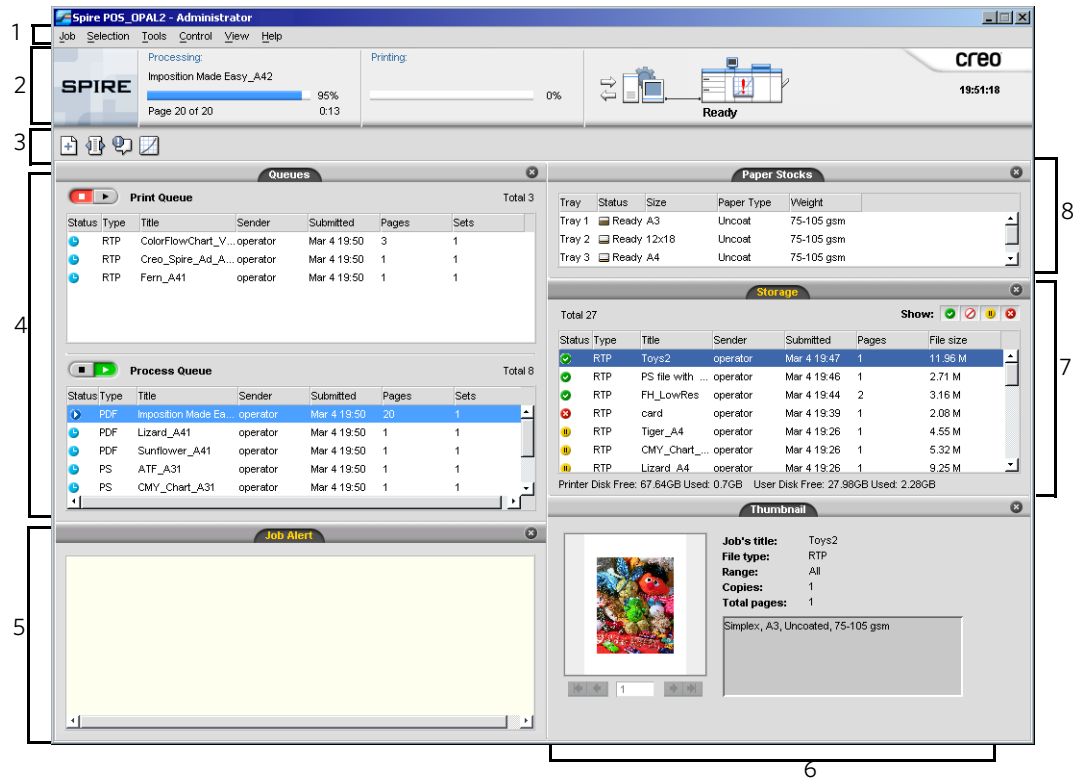
Table 1: CX Print Server workspace

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 8.
3	**Toolbar**	Consists of shortcut buttons for the Import window, Resource Center, Message Viewer, and Calibration window.
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 9.
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 174.
6	**Thumbnail**	Displays a thumbnail view of a specific page in an RTP job that has finished processing.

Table 1: CX Print Server workspace

Item	Name	Description
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 8.

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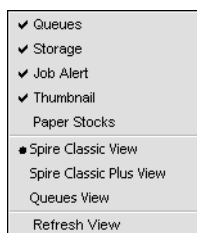
The **View** menu enables you to customize the workspace. From this menu, you can open and close the Queues window. The menu also provides the following view options:

- **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 **calibration reminder** indicator reminds you to calibrate the printer. You can set the reminder in the Settings window.

For more information about setting the calibration reminder, see *Color* on page 168.

Server icon   Printer icon

Calibration
reminder
indicator
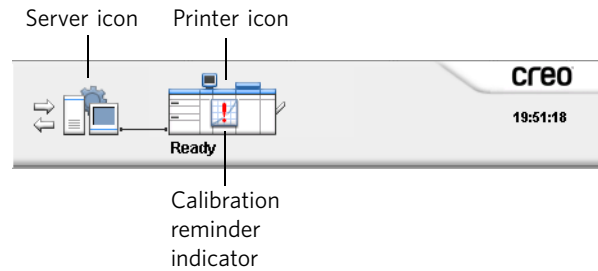
The DFE Monitor

➢ 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 DocuColor 8000AP
Toner	Whether there is enough toner
Consumables	Status of other refillables

The Job Queues

After entering the CX Print 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 24.

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 CX Print Server, the Queues window is displayed. The Queues window consists of the **Print Queue** and the **Process Queue**.
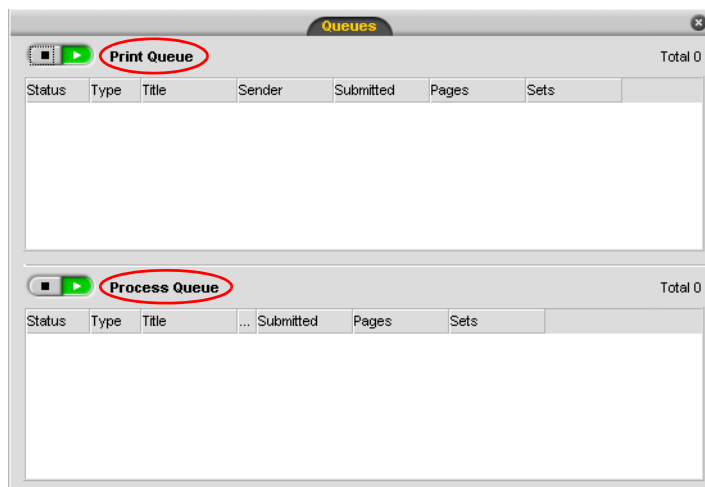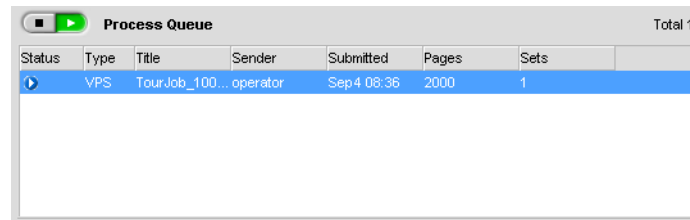
Each queue holds jobs in the order in which they enter it. The top job in the queue is currently running, while all others are waiting to run.

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 the jobs that are waiting in the queues. You can also view and edit the jobs' parameters.

The Queues Window
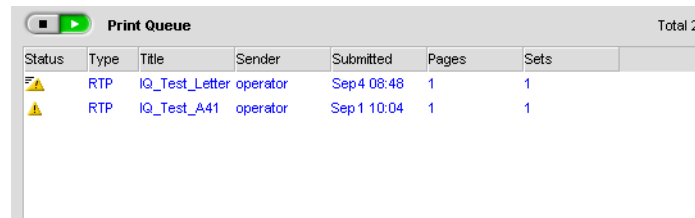
After you submit PDL jobs (or resubmit PDL jobs), the **Process Queue** lists the files to be processed.

Once a file has been processed successfully, it moves to the **Print Queue** and waits 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 26.

The Queues window lists informations 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 28.

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:
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 CX Print 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 person who submitted the job when the CX Print Server is logged on to a domain controller. If the CX Print Server is not logged on to a domain controller, "guest" will be displayed in the Sender column.
Submitted	Date and time this job was first submitted to the CX Print Server
Pages	Number of pages to be processed in a PDF job. If the DTP software supported it, the number of pages is indicated for other PDL jobs.
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

This Column	Indicates This Information:
Account	Account name taken from the **Job Info** parameter
Job Info	Job info type 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 **Processing** and **Printing** status areas contain the following:

- The **suspend** and **resume** buttons (for more information see *Suspending and Resuming Queues* on page 26)

- 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.

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 desktop publishing 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 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.

Show:

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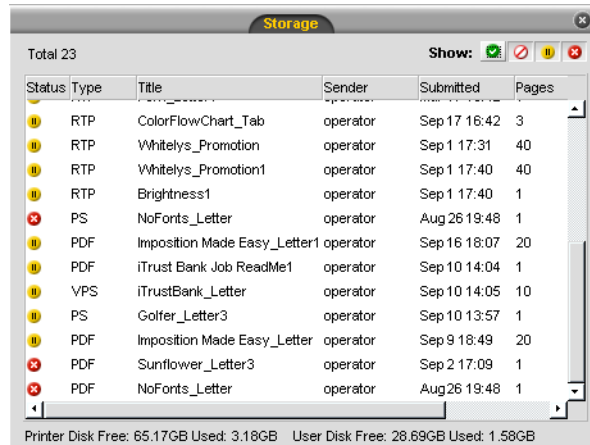
If you click the **Completed Jobs** button again, the button is pushed in and the list shows the completed jobs.

Note: When all the status buttons are in the released (unselected) position, the Storage window shows no jobs.

In the Storage window you can perform the following actions:

• Submit a job. See *Importing and Printing Jobs* on page 22.

• Run a rush job before other jobs. See *Running a Rush Job* on page 28.

• Preview and edit a job, using PitStop Edit for unprocessed jobs, or the Job Preview & Editor window for processed jobs. See *Editing Jobs* on page 33.

• View and edit the parameters of a job. See *Viewing and Editing Job Parameters* on page 28.

• Archive a job. See *Archiving and Retrieving Jobs* on page 30.

• Duplicate a job. See *Duplicating Jobs* on page 30.

• Delete a job. See *Deleting a Job* on page 29.

• View a job's history (in the Job History window). See *Viewing a Job's History* on page 32.

• Export a job as a PDF file. See *Export as PDF2Go* on page 86.

• View the job ticket report for a job. See *Job Ticket Report* on page 32.

• View the preflight report for a job. See *Preflight Report* on page 106.

    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* on page 103**.**

• Use the PDF analyzer to detect problems in imported PDF files that may affect processing. See *Analyzing a PDF Job* on page 103

The Settings Window
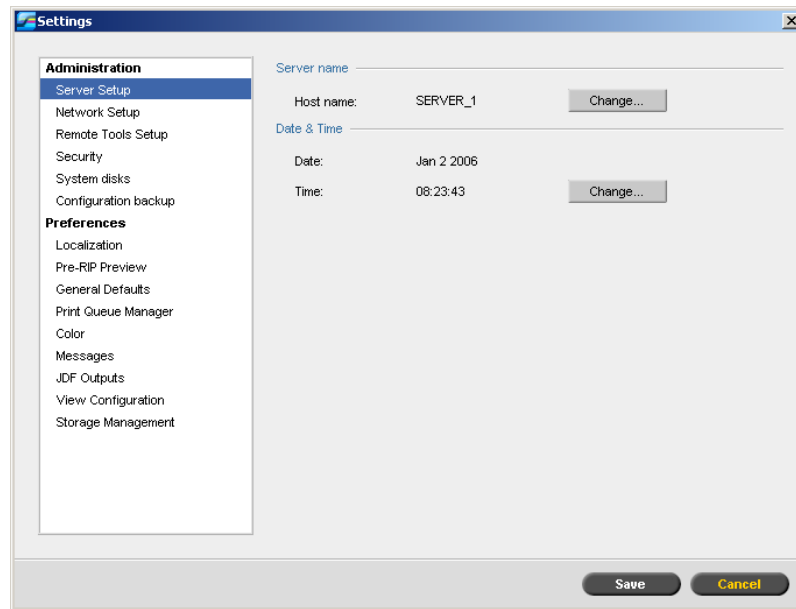
You can set all system preferences in the Settings window.

Note: If you log on to the CX Print 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 CX Print Server* on page 150.

The Resource Center
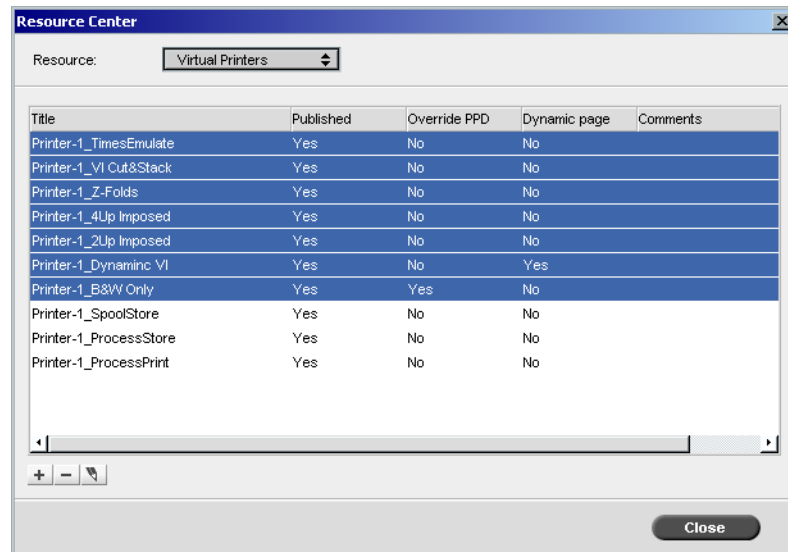
The Resource Center enables you to add, remove, and manage external resources for the CX Print Server.

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 41

- Fonts, see *Managing Fonts* on page 101

- Imposition Templates, see *Creating, Viewing and Modifiying Imposition Templates* on page 72

- Cached VI Elements, see *Managing VI Elements* on page 146

- Paper Sets, see *Managing Paper Sets* on page 44

- Profile Manager, see *Profile Manager* on page 125

The Job Parameters Window

The CX Print 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.
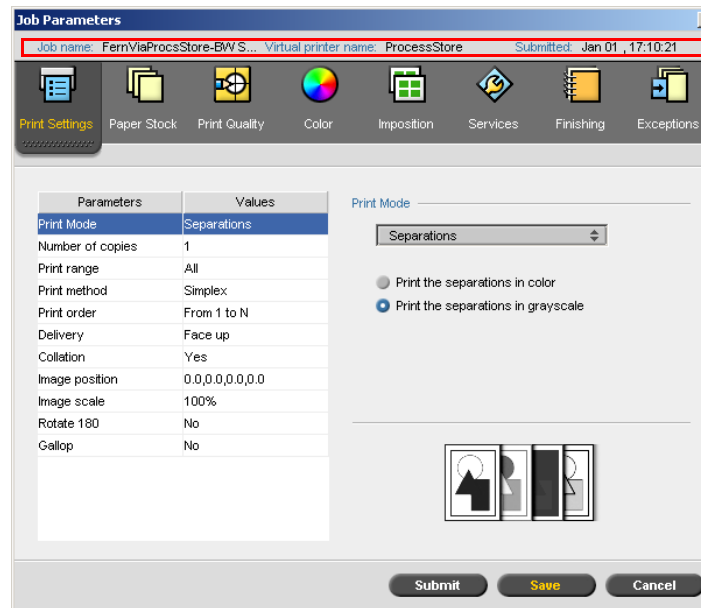
The Job Parameters window title bar displays the following information:

- 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 184.
Paper Stock	Set job parameters related to paper stock—for example, **Paper size** and **Paper set name**. See *The Paper Stock Tab* on page 188.
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 190.
Color	Apply last minute color corrections, or set the output job to match other output devices. See *The Color Tab* on page 192.
Imposition	Set job parameters related to positioning, folding, trimming, and binding of pages—for example, **Margins** and **Template**. See *The Imposition Tab* on page 197.

Table 7: Description of tabs in the Jobs Parameters window

This tab	Enables you to
Services	Set job parameters that will assist your job workflow—for example, **APR path** and **Preflight**. See *The Services Tab* on page 203.
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 208.
Exceptions	Define paper sets to include special exceptions in a job, and add inserts or interleaves. See *The Exceptions Tab* on page 211.

The Help Menu

The Help menu provides information about the version of software that is installed on your CX Print 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**.
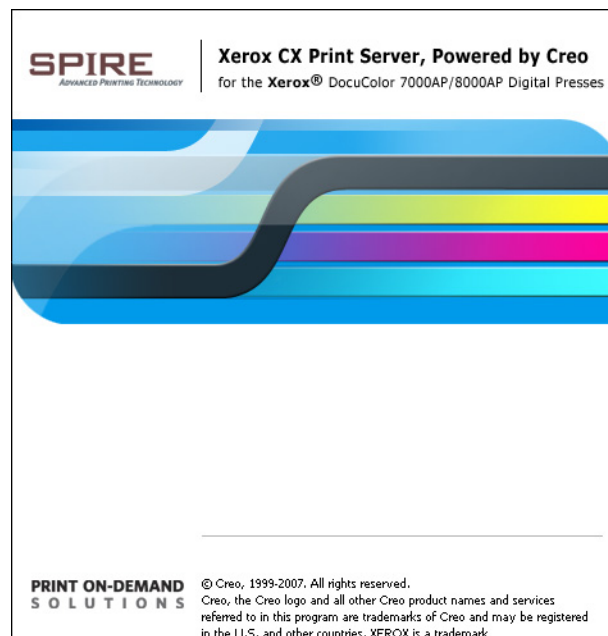
The About window displays the following information:

• CX Print 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 CX Print Server

1. In the CX Print Server workspace, from the **Job** menu, select **Exit**.

   The CX Print Server workspace closes, and you return to the *Windows* desktop.

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

2. Verify that the CX Print Server icon has disappeared from your taskbar.

   Taskbar with CX Print Server icon   Taskbar without CX Print Server icon

3. From the Windows desktop, select **Start > Shut Down**.

4. In the shutdown dialog box, select **Shut down**.

5. When the Windows shutdown is complete, turn off the monitor.

6. On the CX Print Server, click the power button behind the front door.

   The power LED on the front panel turns off.

   Note: Some situations may require the power button to be depressed for more than 4 seconds.

3

Basic Workflows

Importing and Printing Jobs

The basic workflow for printing a job in the CX Print Server consists of three main stages:

1. Importing the file.

2. Processing the job.

3. Printing the job.

After the job is printed, it is stored in the Storage window and can be resubmitted for printing, see *Reprinting Jobs* on page 24.

Importing Jobs

The Import Job feature may be used 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 CX Print Server

*   When a PDL file is located on an external medium, such as a CD-ROM

*   When the desired file resides locally on the CX Print Server

To import a job to the CX Print Server:

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

    The Import window appears.
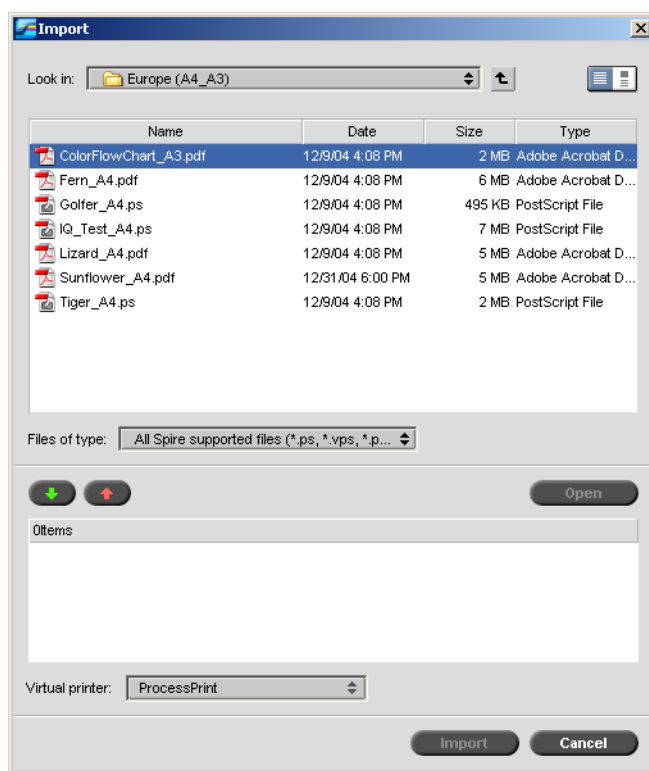
2. To access the desired files, click the **up one level** button ⬆, or double-click on the file folders to go down the file tree.

3. In the upper list in the Import window, select the desired file(s) and click the

   add button [image].

   Note: Use SHIFT or CTRL to select several files or CTRL+A to select all the files. If desired, add the same file more than once.

   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 [image].

5. Click **Import**.

   All files currently listed on the lower list are sent to the CX Print 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.
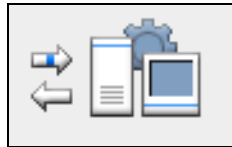
   The Importing/Retrieving window appears.
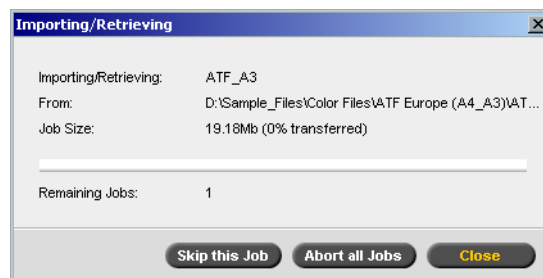
   The Importing/Retrieving window indicates the name of the file being imported, its location and the job size. It also indicates the percentage of the job already transferred, both numerically and graphically.

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 CX Print 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 24.

Printing Jobs

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 30.

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 24.

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

Reprinting Jobs

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 CX Print 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 CX Print 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 and comes to a stop.

Note: The CX Print 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 167.

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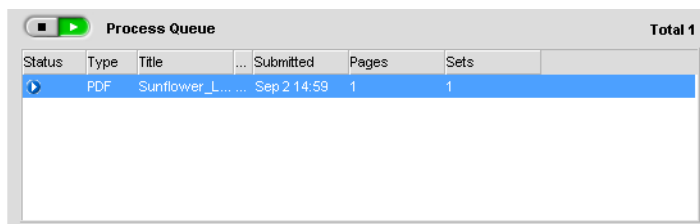
The job moves from the queue to the Storage window, and the Job Alert window is updated.

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 Queue or Print Queue:

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

Moving a Job to the Storage Window

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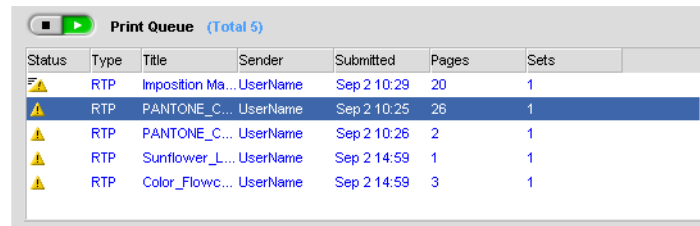
2. Right-click the job, and select **Move to storage**.

The job moves from the queue to the Storage window, and appears with the **held job** indicator .
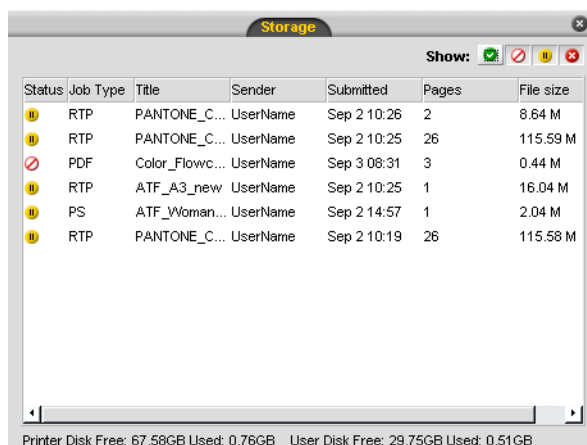
To return a held job from the Storage window to its original queue:

➢ 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.

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**.

The Job Parameters window appears.

For more information on the Job Parameters window, see *Setting Parameters in the Job Parameters Window* on page 184.

Running a Rush Job

When you have a job that's urgent, you can submit it for processing or printing and 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 CX Print Server. Thereafter, to print the job, you must resubmit it to the CX Print 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 27).

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.
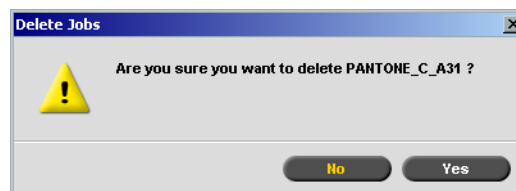
2. Click **Yes**.

   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 Jobs

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 Jobs

To duplicate a job:

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

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.

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 Jobs

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 146.

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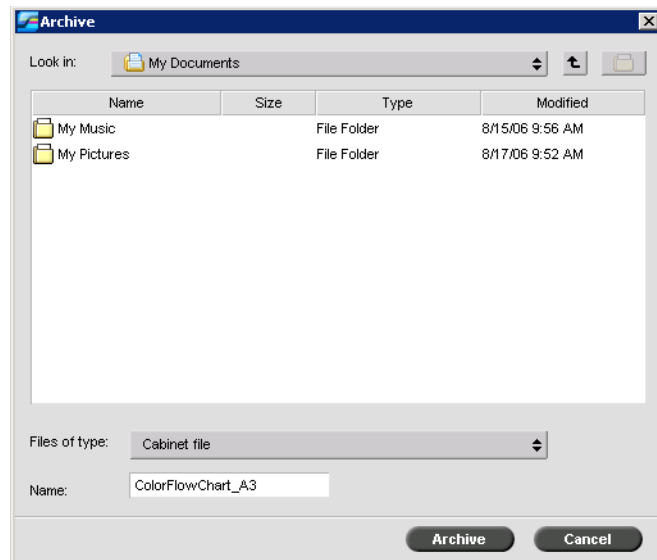
2. Locate the desired folder, and then click **Archive**.

   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 Retrieve dialog box appears.
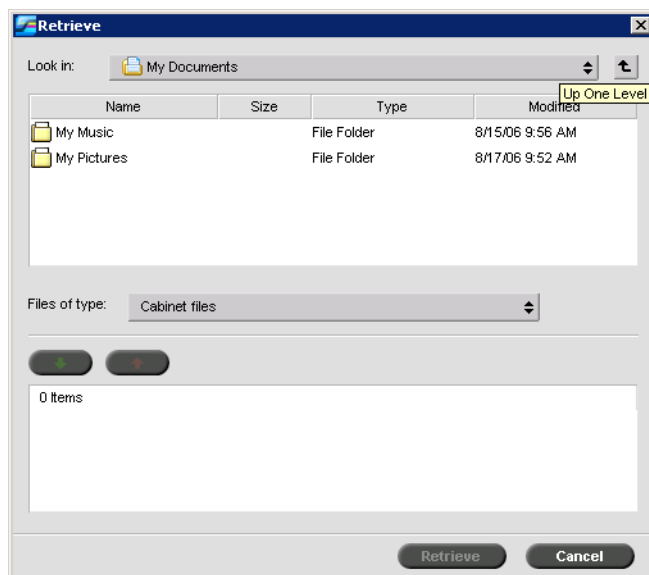
2. Locate the archived job under its archive name, select the related cabinet file, and click **Retrieve**.

    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 174.

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 to the Hot-Line service 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**.

3. The Job Ticket Report is exported as a text file.

Editing Jobs

There are two ways to preview and edit jobs from the CX Print Server:

- Before processing, use the Enfocus PitStop Edit software for Acrobat. See *Editing an Unprocessed Job* on page 34.

- After processing, use the CX Print Server Job Editor. See *Editing Processed Jobs* on page 34.

Editing an Unprocessed Job

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. 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 Processed Jobs* on page 34.

    Your file opens in Acrobat.

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

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

Editing Processed Jobs

The Job Editor tool enables you to preview and edit RTP jobs before printing. You can use the Job Editor to delete, move or insert 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 Editor window appears, displaying the first page of the selected job.

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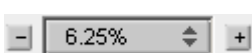
The navigation buttons enable you to select a specific booklet or page to view, and to browse the pages of the current job.

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 the 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 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.
6.25%	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.

Viewing Pages in the Job Editor

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

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 a non-imposed RTP job.

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.
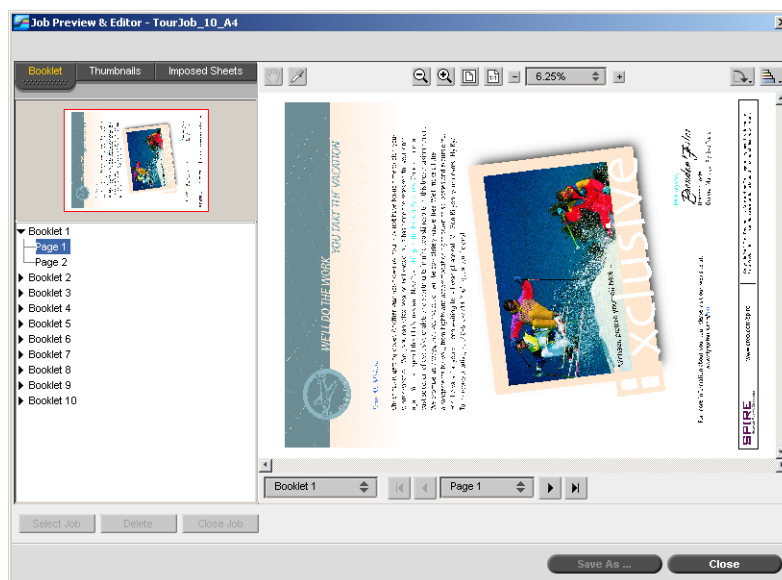
The Thumbnails Tab

The **Thumbnails** tab displays miniature views (thumbnails) of each page in the selected booklet. These thumbnails enable you to find a specific page more 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, as desired, to view all of the pages.
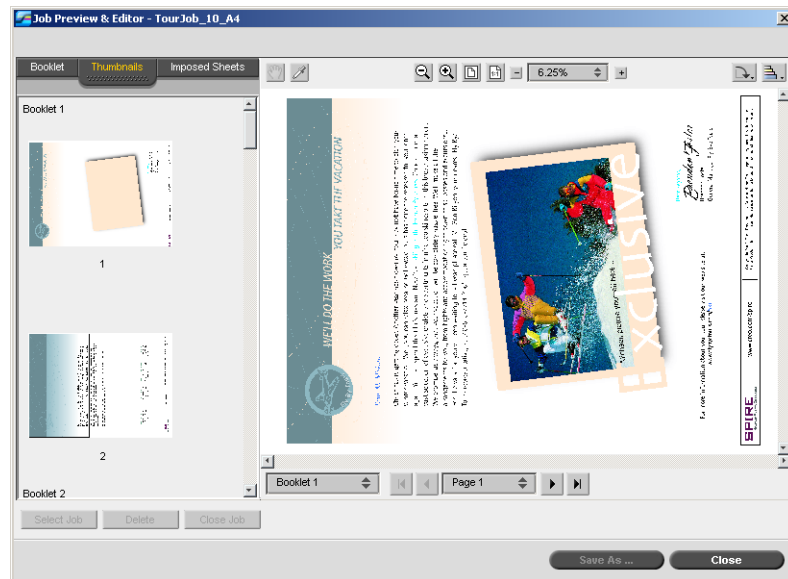
3.   To view the thumbnails side by side, resize the thumbnail pane by dragging the bar that divides the panes in the tab.

4.   Double-click the thumbnail of the page that you want to view.

      The page is displayed in the right pane.

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 the job on this tab.

Notes:

- In VI jobs, the booklet number appears in 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.
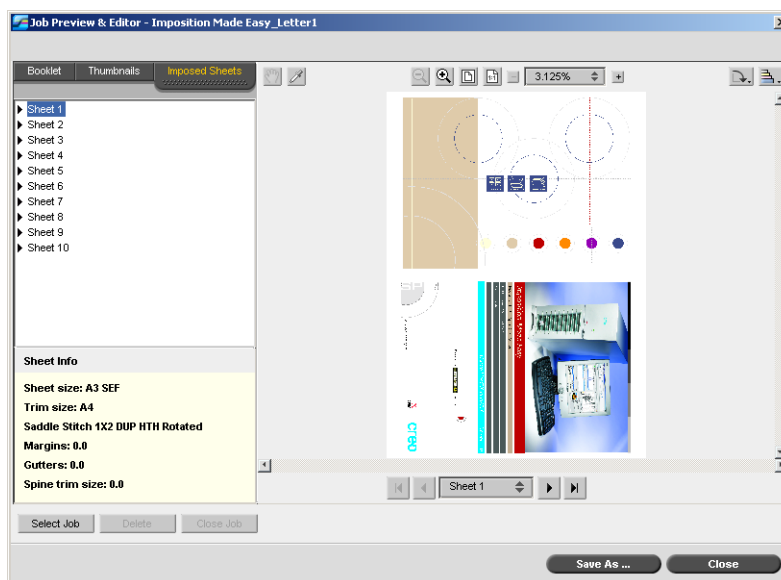
4. To edit the job, click the **Booklets** or **Thumbnails** tab.

    Note: If you edit an imposed RTP job and then return to the Imposed sheet view, the view will be 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 can edit in the Job Editor cannot be re-RIPed. Once a job has been saved in the Job Editor, it is 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 marker indicates where the page will be inserted.
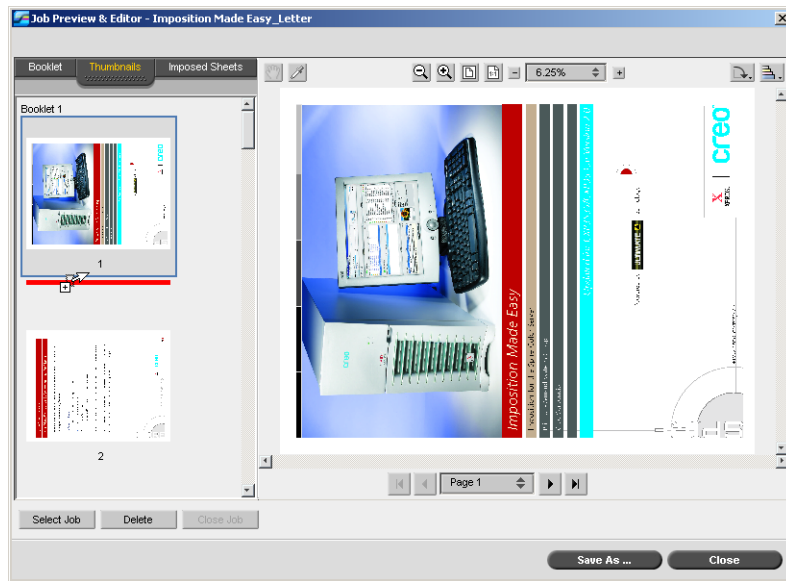
The page moves to the selected location, and the page numbers are updated accordingly.

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

To delete a page from a job

1. In the Job Editor window, click 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.

Copying Pages Into a Job

You can copy one page or all pages from one job to another.

To copy a page into a job:

1. In the Job Editor window, click **Select Job**.

   The RTP Jobs window appears.
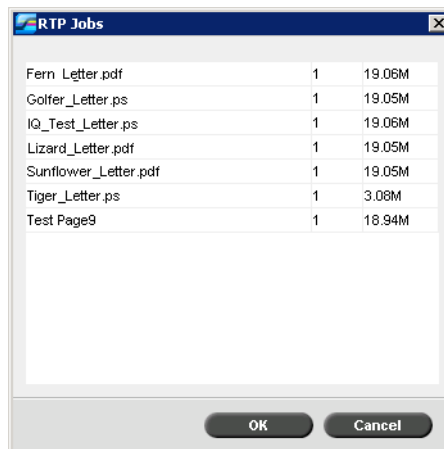
2. Select the job with the page you want to copy and click **OK**.

   In the **Thumbnails** tab, the left pane splits into two. The thumbnails of the second job appear below those of the job you are editing.
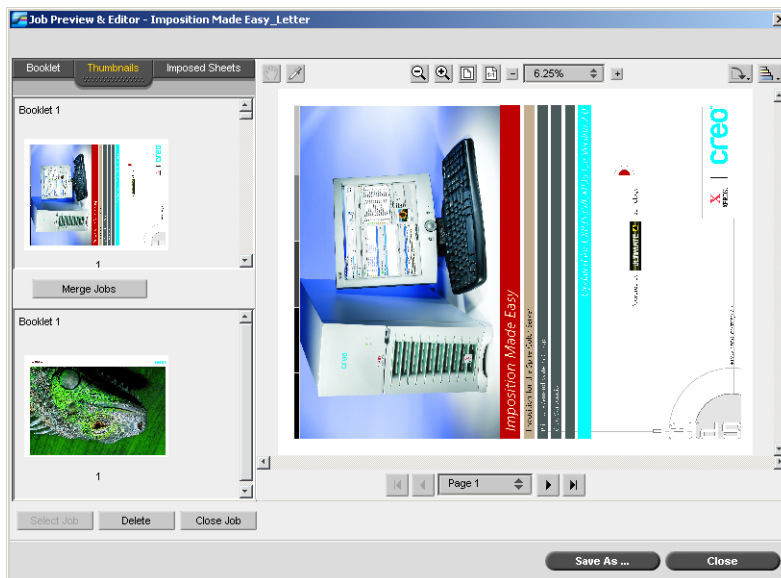
3. In the lower set of thumbnails, locate the page that you want to copy.

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

   Note: The red marker indicates where the page will be inserted.
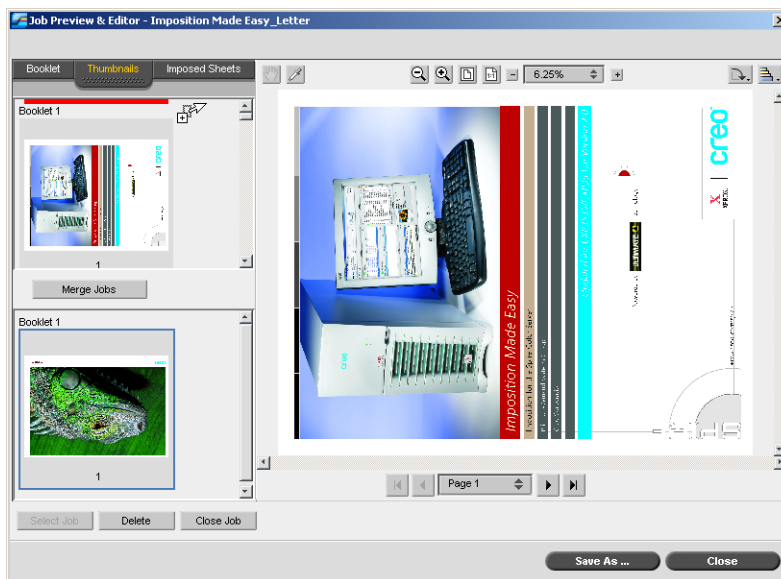
   The copied page is inserted in the desired location, and the page numbers are updated accordingly.

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

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 39).

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.

Managing Virtual Printers

The CX Print 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 CX Print Server. The CX Print Server contains a mechanism that automatically installs the published virtual printers on your client workstation with the PPD and suitable printer driver.

The CX Print Server is predefined with three virtual printers:

- **ProcessPrint**
  Files sent to this printer are automatically processed and immediately sent to print from the DocuColor 8000AP.

- **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 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.

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**.
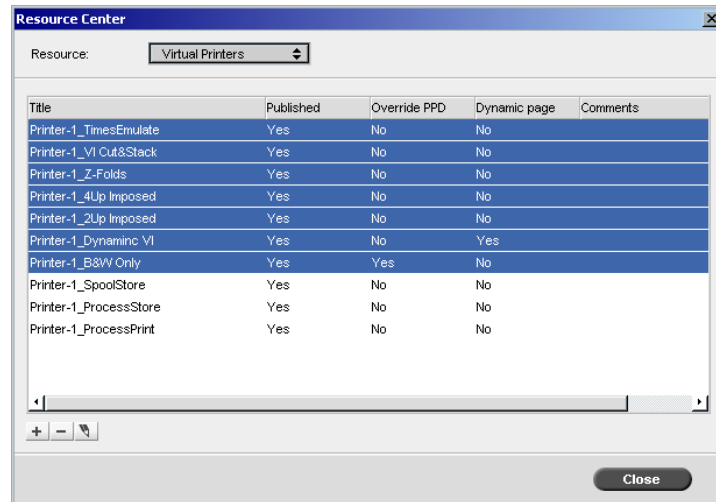
3. Click the **Add** button.

   The Add New Virtual Printer dialog box appears.
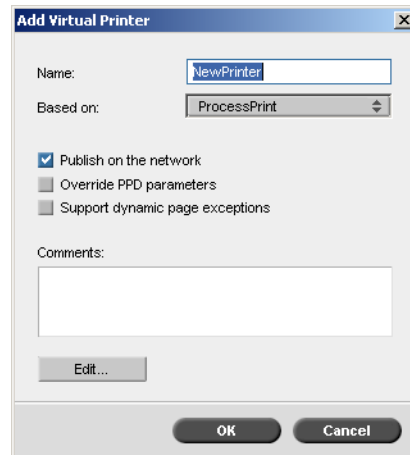
4. In the **Name** box, type a name for the new printer you want to add.

5. From the **Based on** list, select an existing printer with similar settings.

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 99.

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.
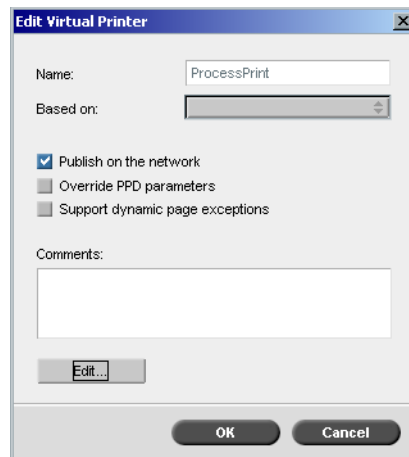
2. Click **Edit**.

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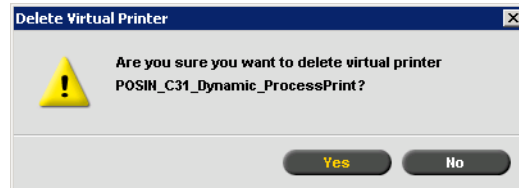
2. In the message that appears, click **Yes** to delete the designated printer.

Managing Paper Sets

The CX Print 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**.
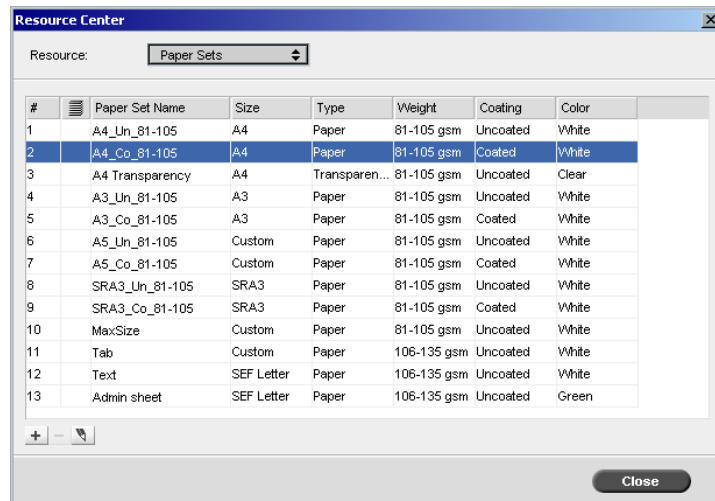
3. Click the **Add** button .

    The Paper Set Properties window appears.
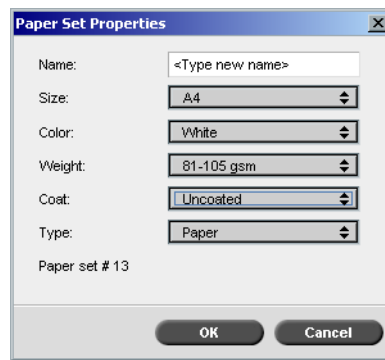
4. Enter the following parameters:

    ❐ **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 166.

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 [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 [icon].

    The Paper Set is deleted.

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

4

Working at a Client Workstation

Overview

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

- Print the job via one of the CX Print 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).
  If you use the hot folder method, you can print most PDL files on the CX Print Server— for example, PostScript, PDF, EPS, Variable Print Specification, and VIPP files.

For more information about hot folders, see *Using Hot Folders* on page 59.

Note: PDL jobs that are spooled to the CX Print Server must have the appropriate file name extensions—for example, *.ps or *.pdf.

Working From Windows Client Workstations

The CX Print Server can receive print jobs from a Windows client workstation that has one of the following operating systems:

- Windows 2000 and Windows XP

As an example, the following section describes how to define a CX Print 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 CX Print Server network printers.

Note: When you add a new CX Print Server network printer to a client workstation, there is no need to install the CX Print 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.
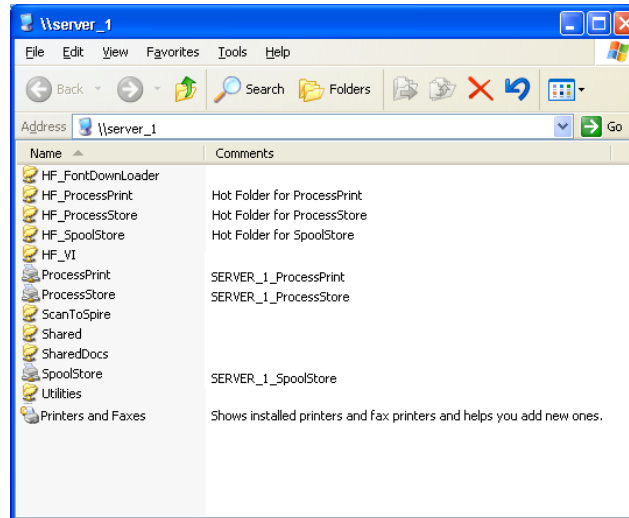
2. Double-click on the network printer icon.

   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 CX Print Server—for example, at customer sites.

1. On the CX Print 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 Acrobat.

2. From the **File** menu, select **Print**.

   The Print window appears.

3. From the **Name** list, select the desired CX Print Server network printer—for example, **Spire_ProcessPrint**.

   For more information about installing CX Print Server network printers on client workstations, see *Working From Windows Client Workstations* on page 48.
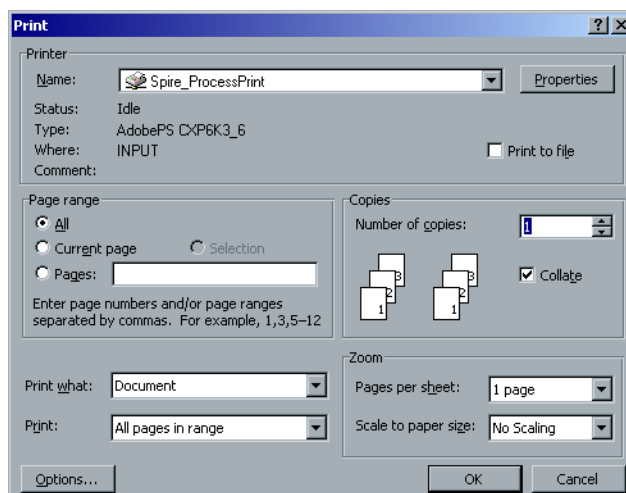
4. If desired, click the **Properties** button and modify the job parameters.

    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 CX Print Server.

5. Click **OK.**

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

    The file is sent to the CX Print Server.

Working From Macintosh Client Workstations

The CX Print Server can receive jobs printed from Macintosh client workstations running Mac OS X (10.x).

As an example, the following section describes how to define a CX Print Server network printer for a Macintosh client workstation running Mac OS X.

You can also submit jobs using the CX Print Server virtual printers over a TCP/IP protocol. This connection enables a significantly higher spooling speed.

Copying the CX Print Server PPD File for Mac OS X (10.4)

Before you define a network printer you need to install the CX Print Server PPD file on your Macintosh client workstation.

1. From the **Go** menu, select **Connect to Server**.
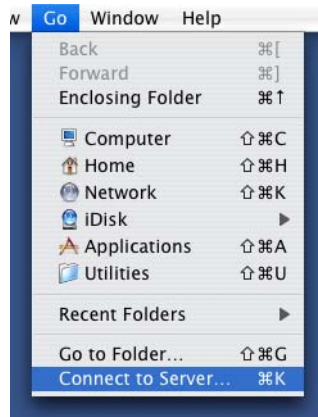
    The Connect to Server window appears.
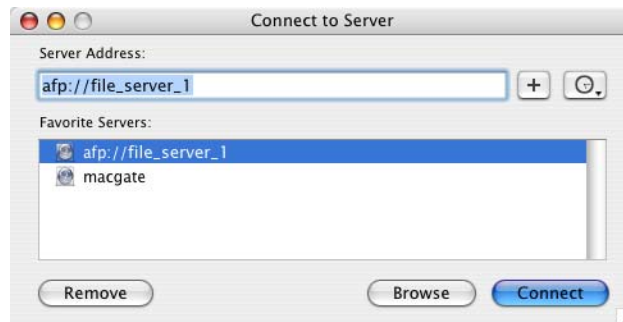
2. Click **Browse** to locate the desired CX Print Server, and then click **Connect**.
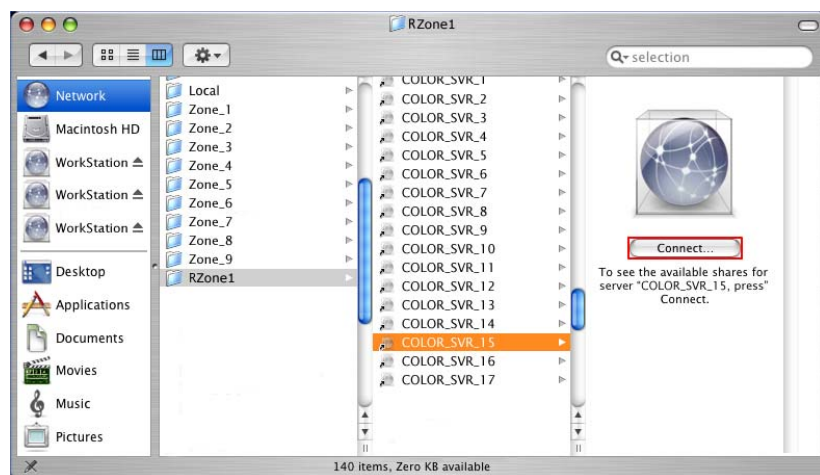
    The Connect to Server window appears.
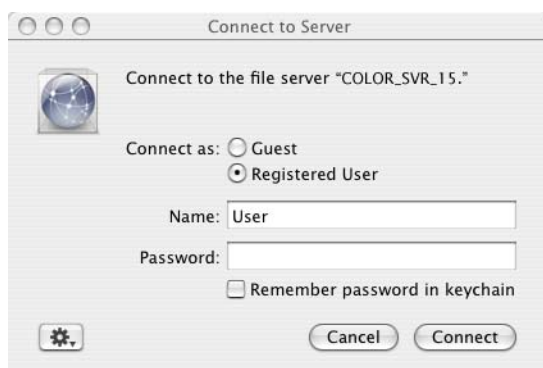
3. Select **Guest**, and then click **Connect**.
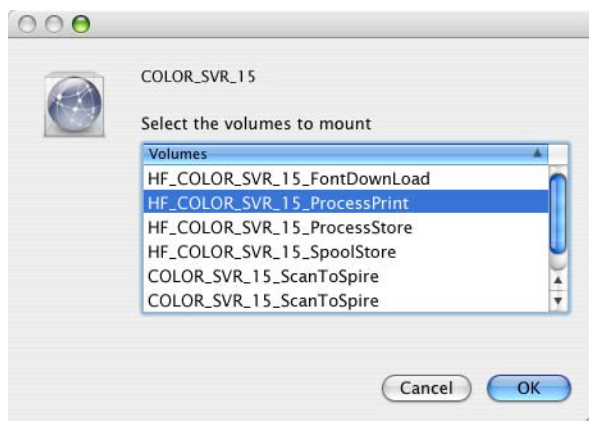
4. Select the server **Utilities** folder, and then click **OK**.

   The **CX8000AP_Utilities** folder is mounted on your desktop.

5. Double-click the **CX8000AP_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 CX Print Server to your Macintosh hard disk.
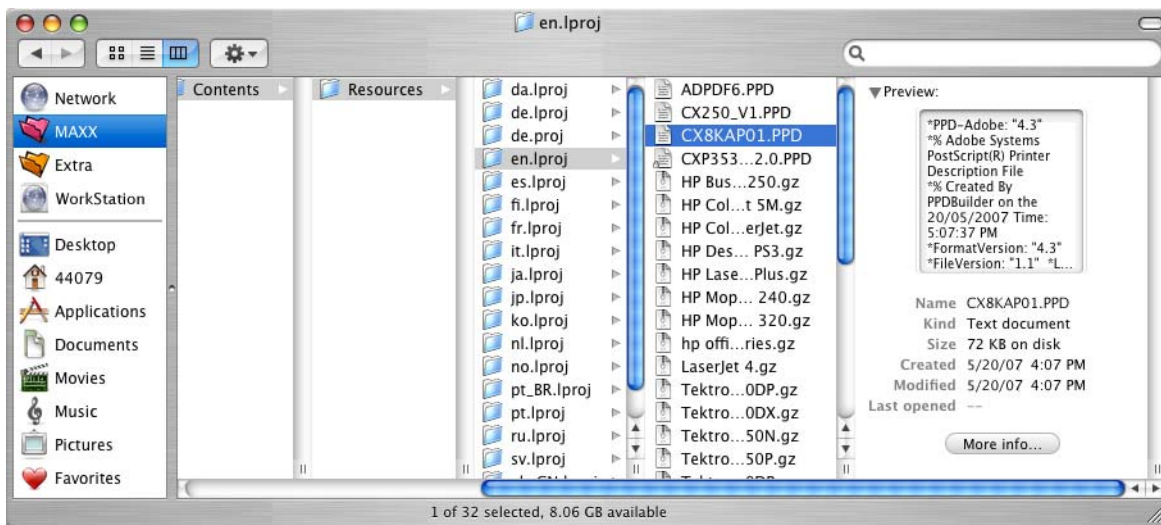
Tip: It is recommended that you copy the PPD file by dragging it from the CX Print Server to the **Library > Printers > PPDs > Contents > Resources > en.lproj** folder on your Macintosh.

Adding a Network Printer for Mac OS X (10.4)

1. Copy the CX Print 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 CX Print Server PPD File for Mac OS X (10.4)* on page 51.

2. From the **Go** menu, select **Applications**.
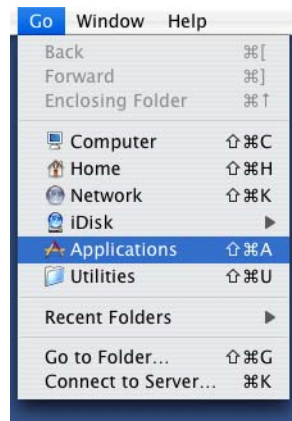
3. Open the **Utilities** folder and double-click the **Printer Setup Utility** icon.

Note: If you have Mac OS X (10.2), double-click the **Print Center** icon in the **Utilities** folder.
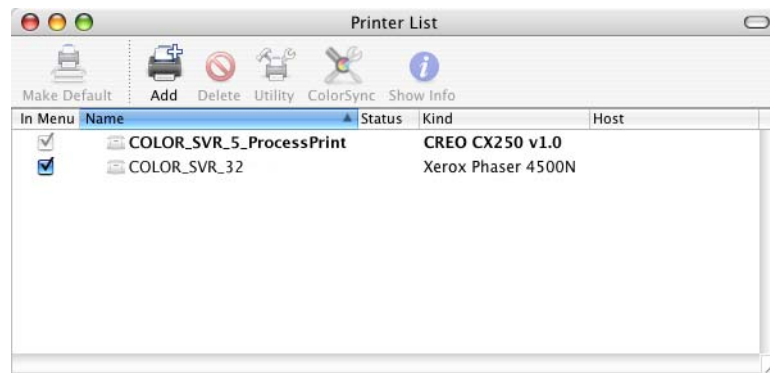
4. Click **Add**.
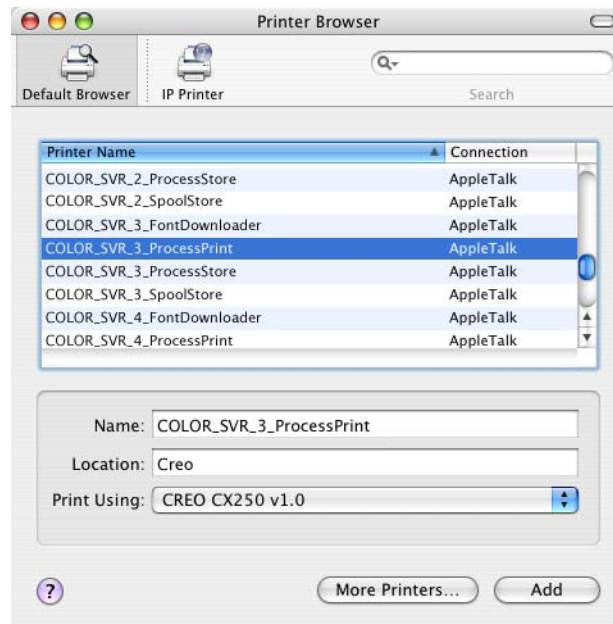
5. Select the CX Print Server.

6. In the **Print Using** list, select **Other.**

    A browser window appears.

7. Locate the folder to which you have copied the PPD file, and then select the
    PPD file.
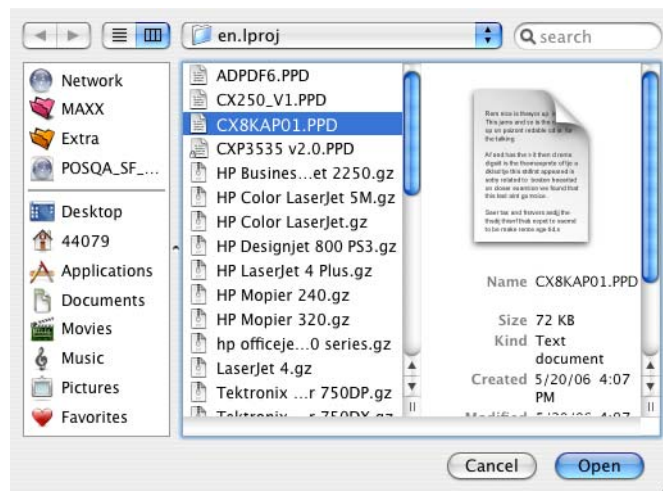
8. Click **Open** to assign the PPD file to the selected CX Print Server network printer.

9. Click **Add** to add the new printer to the printer list.
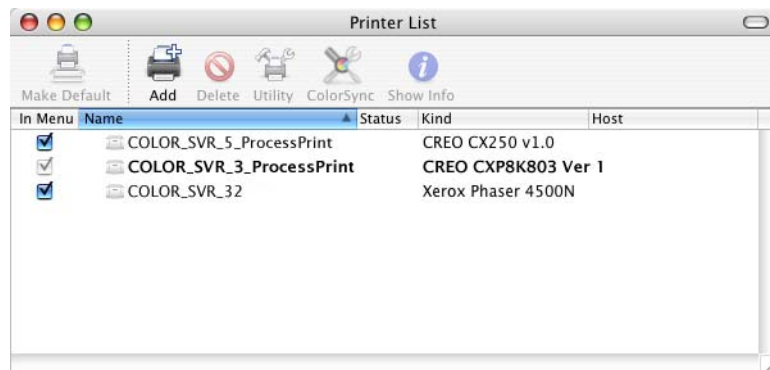
Printing from a Macintosh

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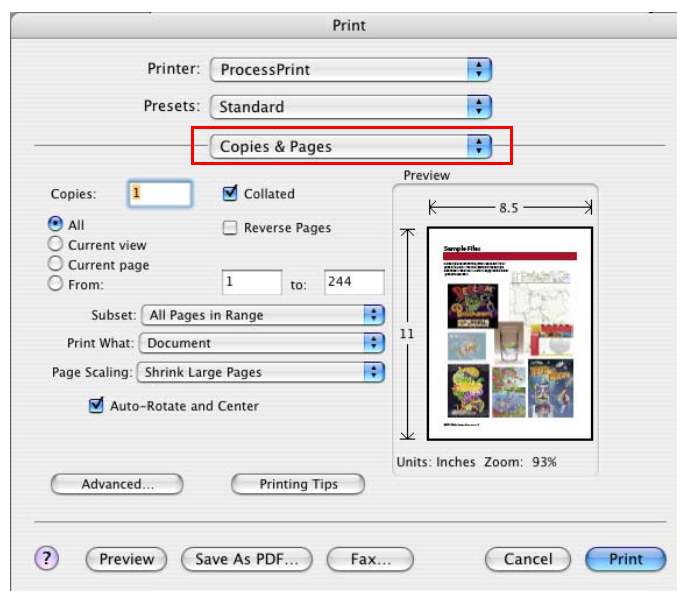
3. From the **Printer** list, select the desired printer.

4. In the **Copies & Pages** list, select **Printer Features**.
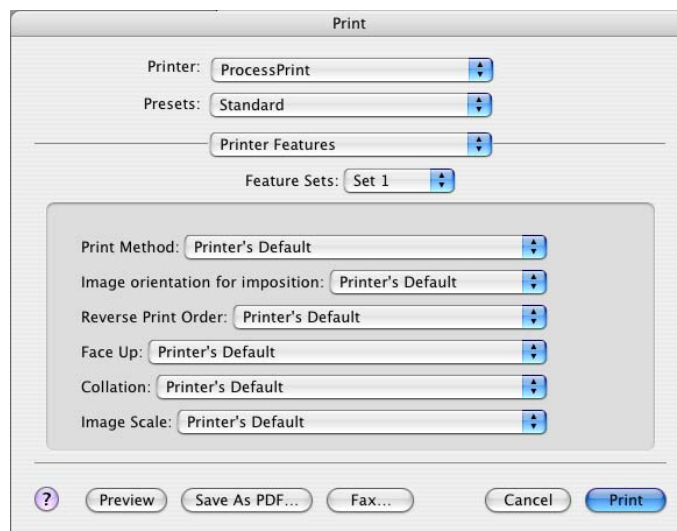
5. Adjust the printer options as desired.

    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 CX Print Server.

Spire Web Center

The **Spire Web Center** is an internet site that provides CX Print Server information and can be accessed from client workstations.

The **Spire Web Center** enables you to:

* View the status of jobs in the CX Print Server 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 CX Print Server-related documentation, such as release notes, CX Print Server 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 CX Print 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 155.

1. On your desktop, click the **Internet Explorer** icon.

2. When the Internet Explorer starts, in the address field type:
   http://<CX Print Server name>—for example, if the station name is FALCON_E, type http://FALCON_E.

   Note: You can also use the CX Print Server IP address—for example, http://192.168.92.0.

   Important: If you would like to connect to the CX Print 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 CX Print Server Web Center appears.
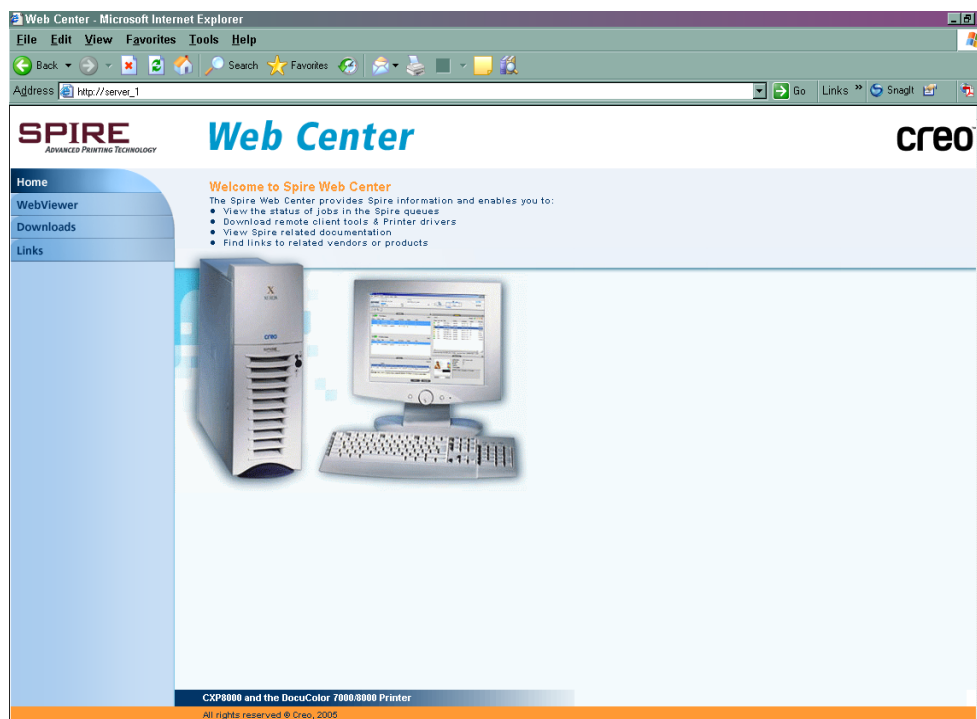
The Web Viewer

The Web Viewer page enables you to view the printer configuration and system information, the jobs that currently reside in the CX Print 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 CX Print Server **Print Queue** and **Process Queue**
Storage	CX Print Server Storage window and the jobs that reside in this window

Table 9: Description of tabs in the Web Viewer

This tab	Enables you to view
Alerts	The CX Print 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 CX Print Server.
Printer	CX Print Server system information

Downloads

The **Downloads** page enables you to access the CX Print Server **Utilities** folder and download available tools and files for Windows and Macintosh client workstations—for example, the CX Print Server PPD file.

Links

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

Using Hot Folders

For every published CX Print Server network printer that you define on a client workstation, a corresponding hot folder is automatically created in the CX Print Server **D:\Hot Folders** folder. The CX Print 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 CX Print Server over the network, you can use the hot folder to submit PDL jobs to the CX Print 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 CX Print 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 CX Print Server, it disappears from the hot folder and enters the CX Print Server **Process Queue** or Storage window, according to the selected workflow.

Note: If you send files for printing through a hot folder while the CX Print 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 CX Print 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 CX Print 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 CX Print 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 CX Print Server.

3.   Double-click the CX Print Server.

     A list of all the shared folders, hot folders, and virtual printers appears.
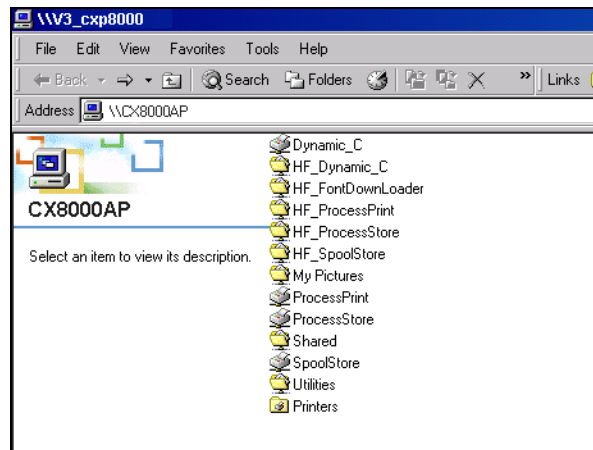
4.   Double-click the desired hot folder—for example, **HF_ProcessPrint**.

     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. From the **Finder** menu bar, select **Go** > **Connect to Server**.

The Connect to Server window appears.
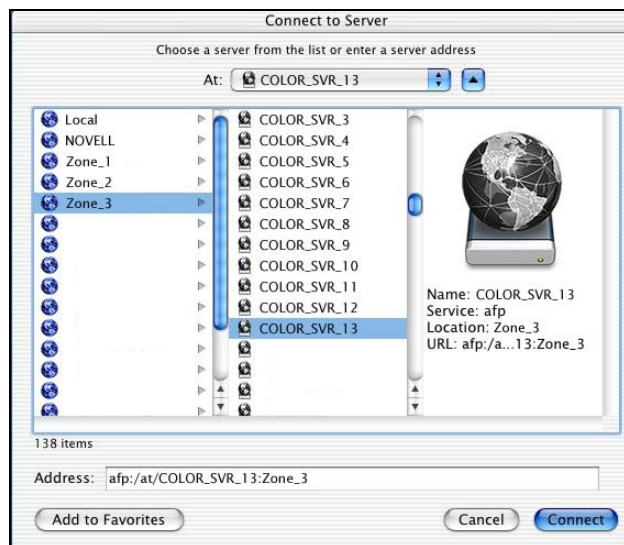
2. Locate your CX Print Server on the network, and click **Connect**.
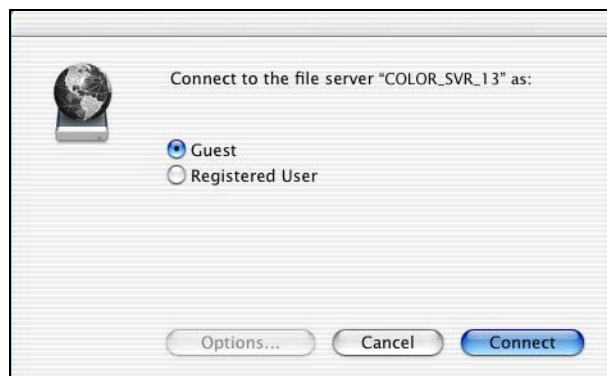
3. Select **Guest**, and then click **Connect**.
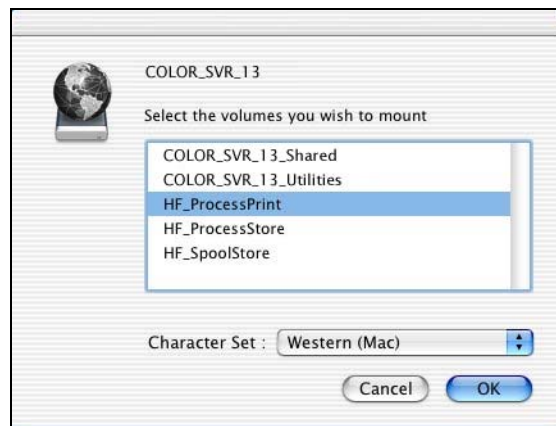
4. From the list, select the desired hot folder—for example, **HF_ProcessPrint**

    —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.

CX Print Server Print Driver Software

About the Print Driver

The CX Print Server Print Driver software enables you to set job parameters for jobs that you send to the DocuColor 8000AP from any application on your client workstation. The Print Driver software also enables you to see the DocuColor 8000AP configuration, monitor's the printer status, and save a set of print parameters for reuse.

Installing the Print Driver

The Print Driver software is automatically installed on the client workstation when you set up a network printer. Once the printer is defined, you must activate the print driver's enhanced user interface.

Defining a Printer in Windows

To define a printer in Windows, refer to *Working From Windows Client Workstations* on page 48.

Activating the Print Driver

To activate the print driver's enhanced user interface:

1. On the desktop, select **Start** > **Settings** > **Printers and Faxes**.

2. Right-click the printer icon, and select **Properties**.

3. Click the **Print Driver** tab.

4. In the **Enable enhanced user interface** list, select **on**.
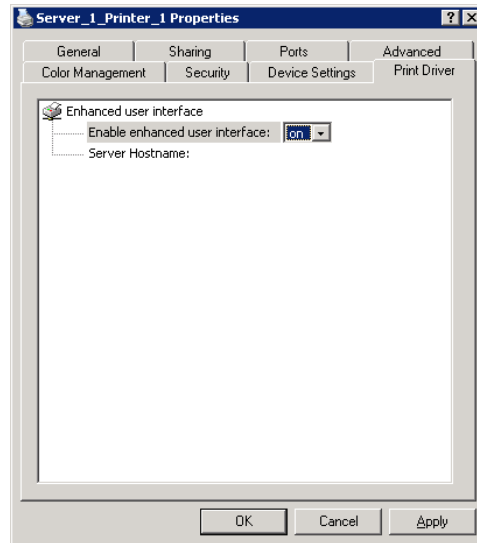
5. Click **Apply**.

6. Click **OK** to close the dialog box.

Using the Print Driver Software

1. Open the file that you want to print—for example, a PDF file.

2. From the **File** menu, select **Print**.

3. In the Print dialog box, click **Properties**.

   If this is the first time that you are using the Print Driver software, a message tells you that the software is loading. Then a dialog box appears with the print settings.

   Note: The loading process might take a few minutes. Afterwards, accessing the Print Driver software takes less time.
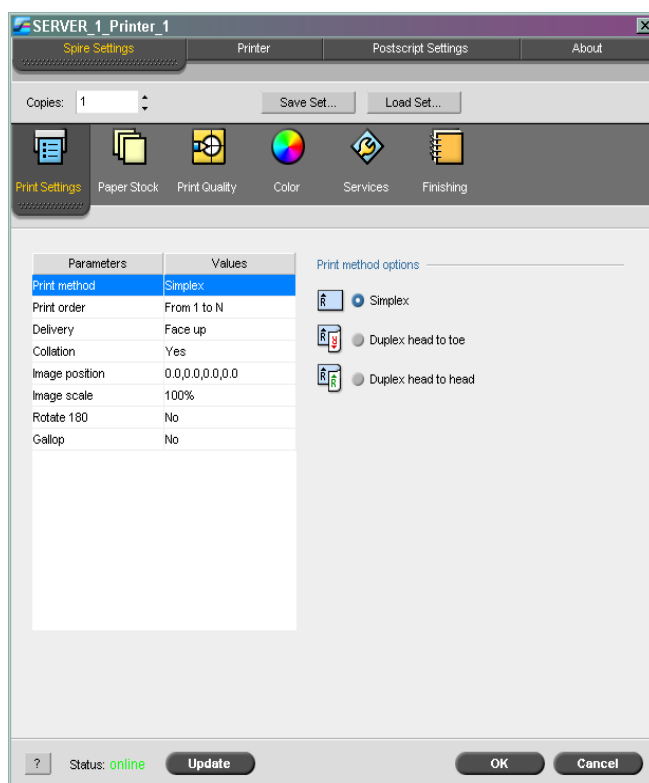
In the Print Driver software window, you can perform the following actions:

- Define job parameters

- Change parameters and save the settings as a profile

- Load a saved profile

- Check the status of the DocuColor 8000AP

- Define PostScript settings for the job

Setting Job Parameters in the Print Driver

1. Under Spire Settings, click the tab on which you want to change parameters:

    - **Print Settings**

    - **Paper Stock**

    - **Print Quality**

    - **Color**

    - **Services**

    - **Finishing**

    For more information on setting the job parameters, see *Setting Parameters in the Job Parameters Window* on page 184.

2. Click **OK**.

Using Profiles

Once you have selected the parameters for a job, you can save this set of parameters for future use. Sets are useful when you want to print different jobs with the same parameters, or if you want to reprint a job.

To create a set:

1. Select all of the desired parameters for the job, and click **Save Set**.
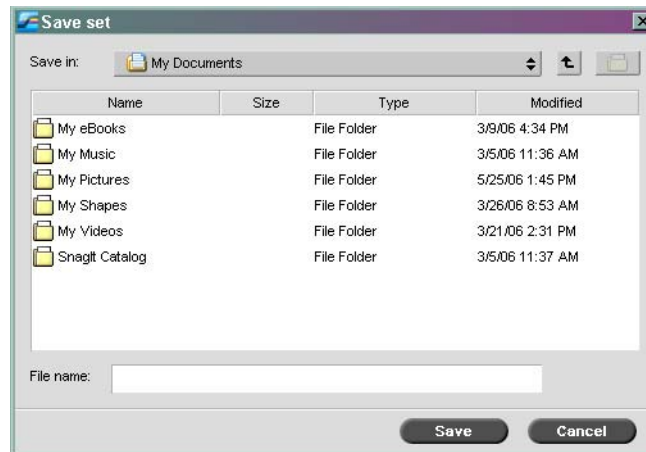
2. Locate the folder in which you want to save the settings.

3. In the **File name** box, type the desired file name.

4. Click **Save**.

    The parameters are saved as a set.

To retrieve a set:

1. Under Spire Settings, click **Load Set**.
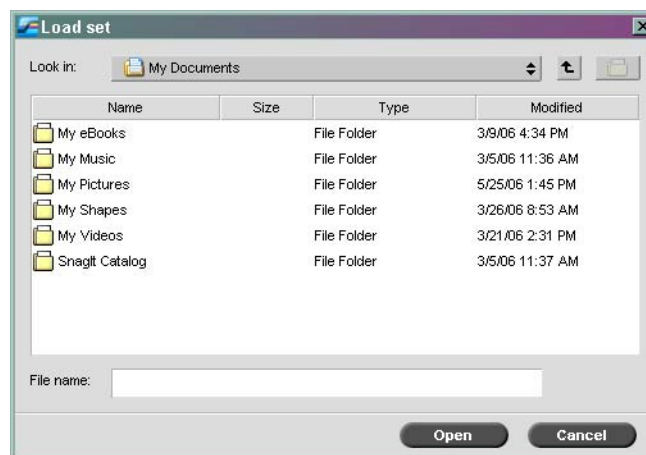
2. Locate and select the profile, and click **Open**.

    The set of paramters are applied to the job.

Tip: You can modify any of the parameters as desired.

Viewing the Printer's Status

1. Click the **Printer** tab.

2. Click the **Paper Stock** tab to view information on the paper stock in the trays.
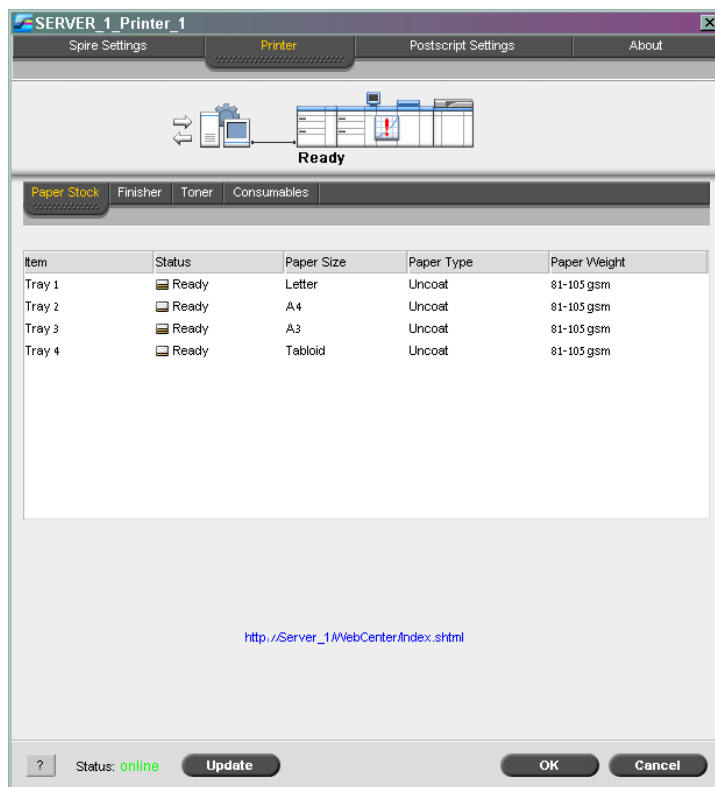
3. Click the **Finisher** tab to view information on the finishing options.
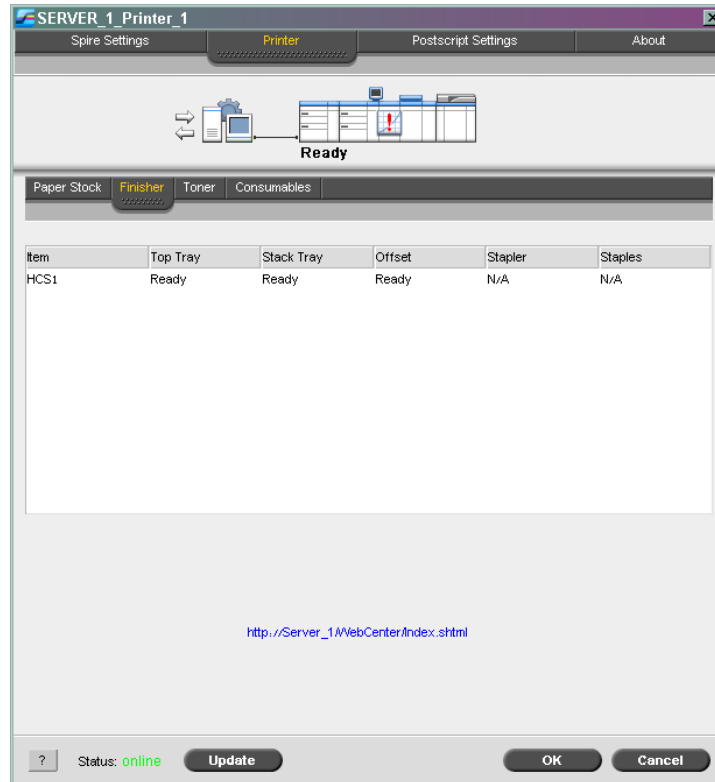
4. Click the **Toner** tab to view information on the toners.
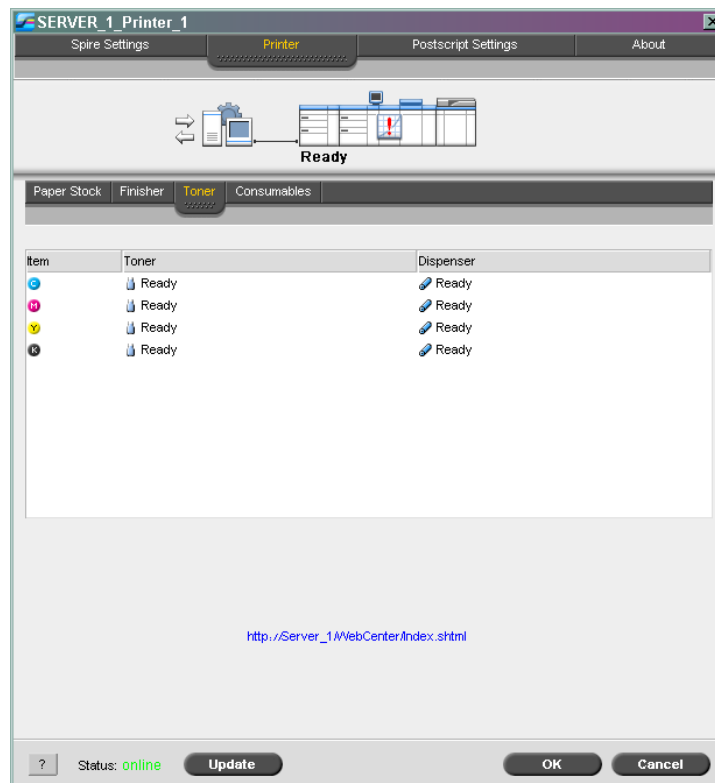
5. Click the **Consumables** tab to view information on consumables such as bottles and fuser oil.
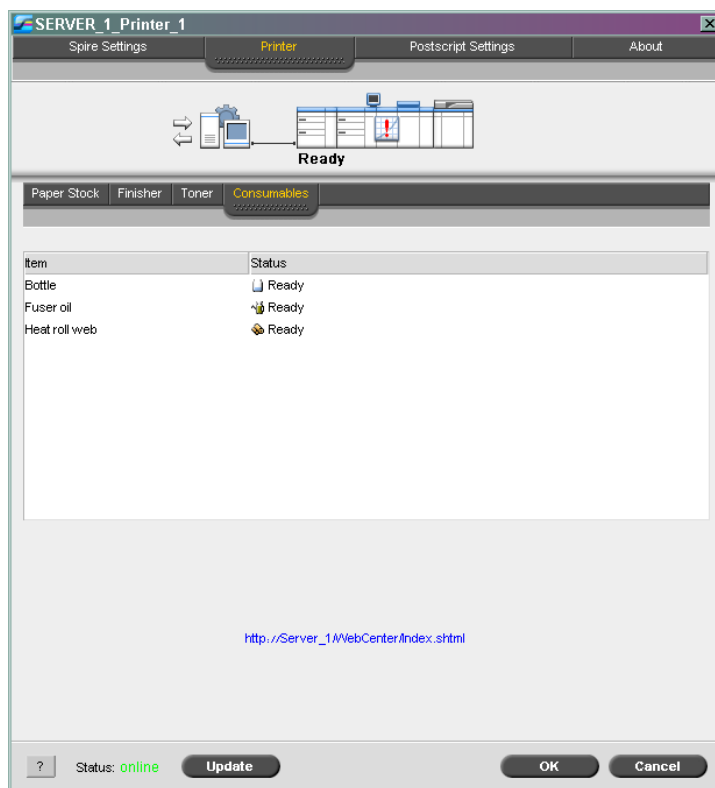
6. Click **Update** if you want the software to dynamically update the information that it displays.

    Notes:

    •   When you access the Print Driver software, the resource information is only refreshed after you click **Update**.

    •   Clicking **Update** updates the gradation tables.

PostScript Settings

1. Click the **PostScript** tab and adjust the settings as desired.
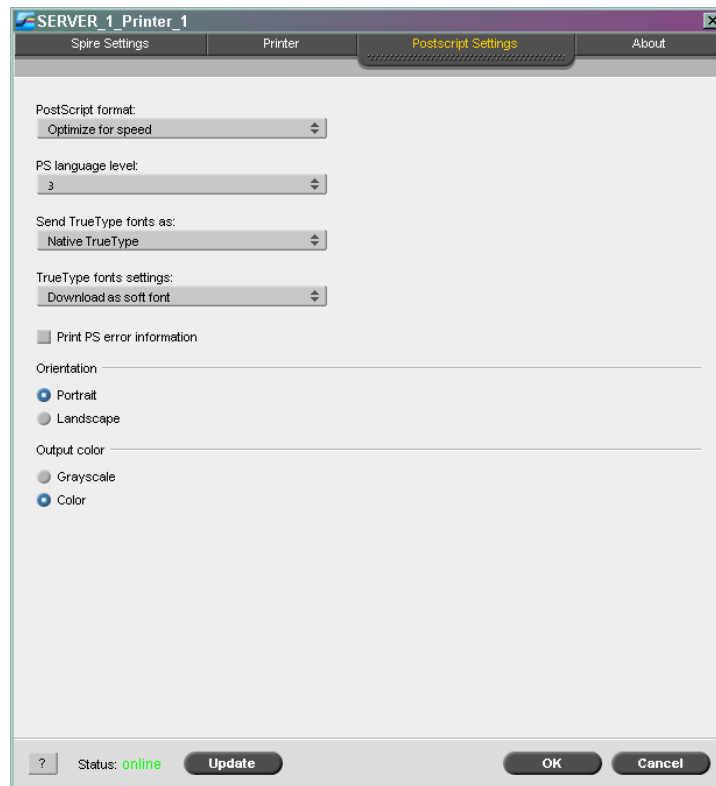
2. Click **OK** to save the settings.

Working Offline

The printer is offline under the following circumstances:

- Your workstation is not connected to the CX Print Server.

- The DocuColor 8000AP and the CX Print Server are not communicating.

- You are working in a non-TCP/IP environment such as a Novell environment.

- The selected virtual printer is not currently published on the CX Print Server.

When the DocuColor 8000AP is offline, you can select and save settings in the Print Driver software for the selected virtual printer. However, you cannot update the display of information about the printer resources—for example, paper or toner.

Uninstalling the Print Driver Software

1. On the desktop, select **Start > Settings > Printers and Faxes**.

2. Right-click the CX Print Server network printer, and select **Delete**.

   The printer is deleted from your client workstation.

3. In the Printers and Faxes window, from the **File** menu, select **Server Properties**.

4. In the Print Server Properties dialog box, click the **Print Driver** tab, select the Xerox printer driver—for example, **AdobePS CX8KAP01**—and click **Remove**.

    The Xerox **driver is removed.**

5. **Select Start > Run**.

6. Locate the CX Print Server.

7. Navigate to **\Utilities\PC Utilities\Driver Extension**.

8. Double-click **Creo_Driver_Uninstall.exe**.

    The Print Driver software is uninstalled.

5

Production Printing

Imposition Workflow

Imposition is the process of arranging pages of a job on a press sheet in a particular order so that they will be in the proper sequence after printing, folding, and cutting. Finding the best imposition layout helps create more organized output and saves paper. Imposition does not affect the content of the pages. It affects only the placement of the pages on the press sheet.

The arrangement of the pages on the press sheet depends on many factors, including the size of the pages, the size of the press sheet, and the binding requirements of the finished job. You can also add various marks to the sheets to aid the production process. These marks show where the paper should be folded or trimmed.

Whenever possible, you should define imposition settings before RIPing a job. Changing key imposition settings—for example, template settings—post RIP may result in inefficient re-RIPing of your job.

In the CX Print Server, you can define imposition settings in three different ways, depending on your needs.

- Use the **Imposition** tab to define imposition settings for a one-time job or to make changes on the fly.

  For more information about the **Imposition** tab, see *The Imposition Tab* on page 197.

- Use the Imposition Template Builder to create and save reusable templates.

- Use a CX Print Server virtual printer to predefine imposition settings for repeat jobs or jobs that have the same imposition settings.

  When you create a new virtual printer or edit an existing one, define the imposition settings for that particular printer. These settings become the printer's default options and are applied to all jobs that use that printer.

  For more information about virtual printers, see *Managing Virtual Printers* on page 41.

You can also set page exceptions for imposed jobs on the **Exceptions** tab.

For more information about the Exceptions tab, see *Setting Exceptions for Imposed Jobs* on page 88.

Creating, Viewing and Modifiying Imposition Templates

In the CX Print Server, you can use the Imposition Template Builder to create templates for similar types of jobs that have the following imposition settings in common:

- Imposition method
- Columns and rows
- Simplex/duplex
- Binding

For example, if you want to create an imposition template for A4-sized brochures printed on A3 paper, you could create a template, called "A4Brochure", and select the following settings:

- **Imposition method: Saddle Stitch**
- **Columns: 1**
- **Rows: 2**
- **Type: Duplex** (selected by default)
- **Binding: Left**

You would define all the other imposition settings—for example, **Trim Size**, **Bleed**, **Margin**, **Gutters**, and **Paper Size**—on the **Imposition** tab.

To Open the Imposition Template Builder

➢ From the **Tools** menu, select **Imposition Template Builder**.

The Imposition Template Builder window appears.
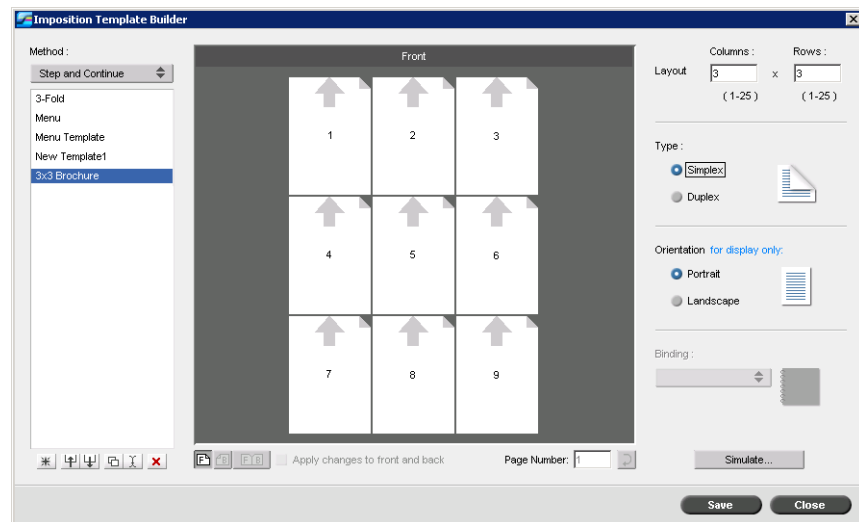
To Create a Template

1. From the **Method** list, select an imposition method.
2. Click **New** ![icon].
3. Type the name of the new template, and press ENTER.

4. In the **Layout** area, type the number of columns and number of rows that you need.

    The imposition method that you select determines the number of columns and rows that you can enter. For **Saddle Stitch** and **Perfect Bound**, you can place up to 64 pages on one sheet (8 × 8). For **Step & Repeat** and **Step & Continue**, you can place up to 625 pages on one sheet (25 × 25).

    For more information about imposition methods, see *Imposition Method* on page 197.

5. Under **Type**, select **Simplex** or **Duplex**.

6. Under **Orientation**, select **Portrait** or **Landscape**.

    Note: The **Orientation** setting in the Imposition Template Builder is for display purposes only. This parameter is not saved in the template. (You set job orientation on the **Imposition** tab, under **Sizes**.)

7. From the **Binding** list, select the appropriate binding method.

    Note: **Binding** is available only when **Saddle Stitch** and **Perfect Bound** imposition methods are selected.

8. Click **Save**.

All saved templates appear on the **Imposition** tab. After you select an imposition method**,** the related templates appear in the **Template** parameters, in the **Layout** list. See Table 10. For example, if you created a **Step & Continue** template, the template appears in the **Layout** list only when you select the **Step & Continue** imposition method.

Some templates appear under more than one imposition method.

Table 10: Saved imposition templates in Layout list according to imposition method

Method selected on Imposition tab:	Template layout type in the layout list:
Step & Repeat	Step & Repeat, Cut & Stack
Step & Continue	Step & Continue
Saddle Stitch	Saddle Stitch, Perfect Bound
Perfect Bound	Saddle Stitch, Perfect Bound

Viewing Templates

As you create or modify a template, you can see your template in the template viewer. As you select parameters, the template viewer dynamically changes to reflect your selections.

In the template viewer, you can view an imposition template in three ways:

- Click **Front** to view the front pages.
- Click **Back** to view the back pages.
- Click **Both** to view both the front and back pages simultaneously.

Notes:

- When **Simplex** is selected, only the **Front** view is available.
- Sheet size is set on the **Imposition** tab. The sheet size that appears in the template viewer is dynamic. It changes to accomodate the parameters that you choose.

Modifiying Templates

The template viewer enables you to rotate one or more pages and change the location of pages on the sheet.

The gray arrow on each page indicates the top of the page. The page number is indicated by the number that appears on each page.

To rotate a page 180 degrees:

1. Make sure the **Apply changes to front and back** check box is clear.
2. Select the desired page.

   Tip: To select multiple consecutive pages, click the first page, press and hold SHIFT, and then click the last page. Select multiple non-consecutive pages by pressing and holding CTRL as you click each page.

3. Click **Rotate 180** .

To rotate both the front and back sides of a page 180 degrees:

1. Select the desired page.
2. Select the **Apply changes to front and back** check box.
3. Click **Rotate 180** .

You can change the location of a page on a sheet as needed. Changing the location of a page is often necessary when the **Step & Continue** imposition method is selected.

To change the position of a specific page on a press sheet:

1. Click the target location that you want to move the page to—for example, click page 1 if you want to place a different page in that location.

   The target location turns blue when selected.
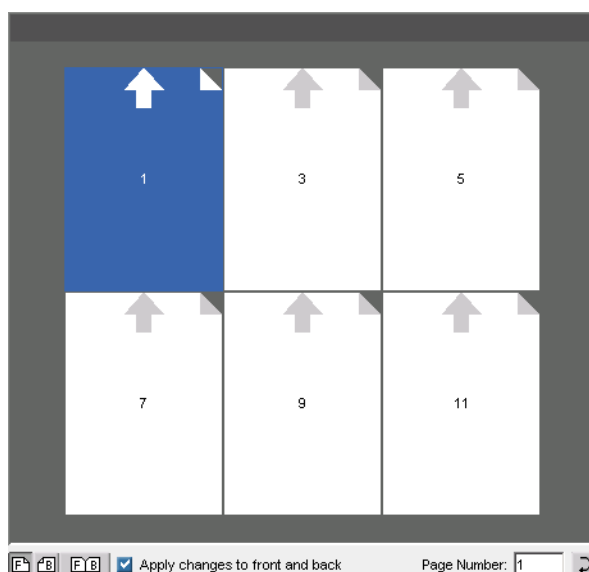
2. Click the **Page Number** box, and type the number of the page that you want to move to the target location. For example, you would type 5 to place page 5 in the location of page 1.

3. Press ENTER.

   The page moves to its new location.
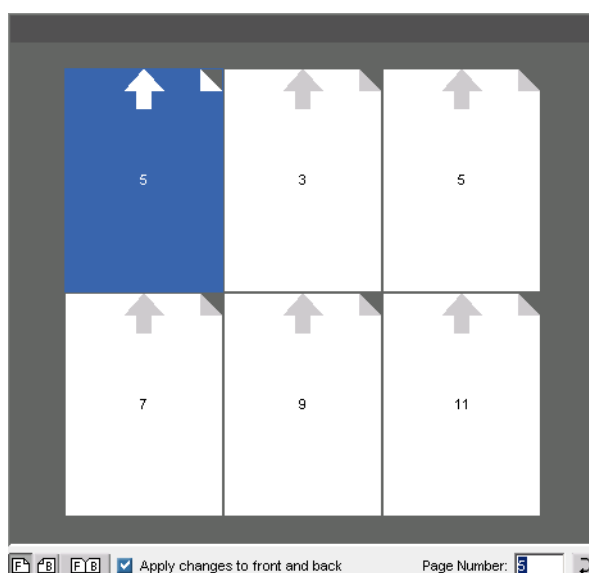
   Important: The page number that was previously in the target location is not automatically moved to another location. To retain this page, manually move this page to a new location.

If you have a duplex job and the **Apply changes to front and back** check box is selected, the page number for the back side of the page also changes. Using the example above, page 6 would be on the back side of page 5.

Simulating Jobs With Your Template

You can simulate how jobs from the Storage window will look if you apply an imposition template to them.

Note: The impostion template parameters are not actually applied to the job— you are viewing only a simulation of how the job would look if this template were selected on the **Imposition** tab.

To simulate a job with a specific imposition template:

1. In the Imposition Template Builder window, click the **Simulate** button.

2. Click **Browse**.

   The Storage window appears.
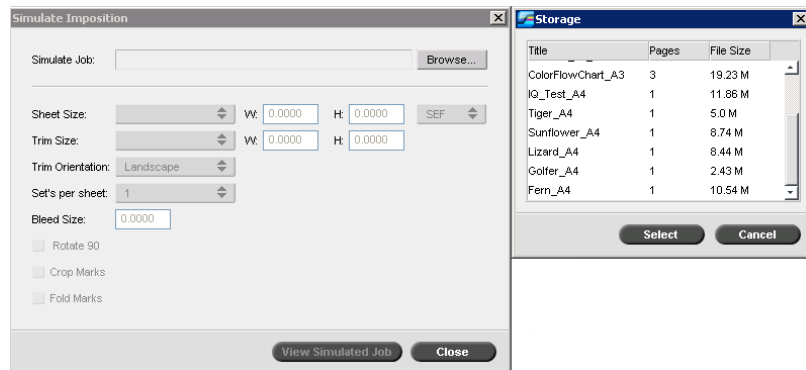
3. Select a job, and then click **Select**.

   The parameters of the job (**Sheet Size**, **Trim Size**, **Trim Orientation**, **Sets per sheet**, **Bleed Size**, **Rotate 90**, **Crop Marks**, and **Fold Marks**) appear with their values in the Simulate Imposition window.

   Note: Both RTP and non-RTP jobs are available for simulation.

4. Change the parameters as desired.
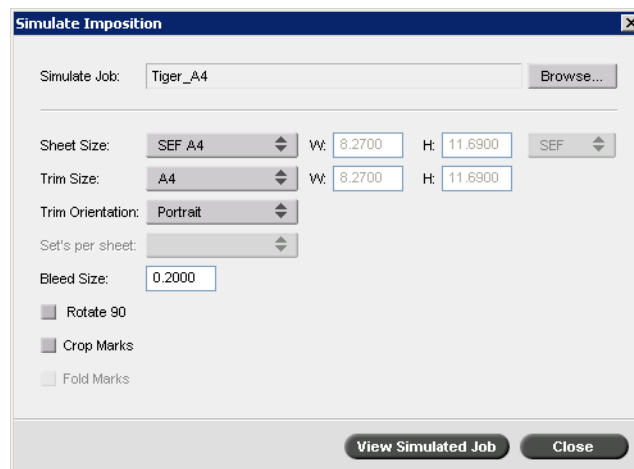
5. Click **View Simulated Job**.

The Preview window appears. A simulation of the job is displayed with the current imposition template applied.

For more information about the Preview window, see *The Preview Window* on page 202.

Managing Templates

The Imposition Template Builder enables you to:

- Import templates that reside on other CX Print Servers connected to your network

- Export your templates from the CX Print Server on which you are working to other servers connected to your network

- Duplicate templates

- Rename templates

- Edit templates

- Delete templates
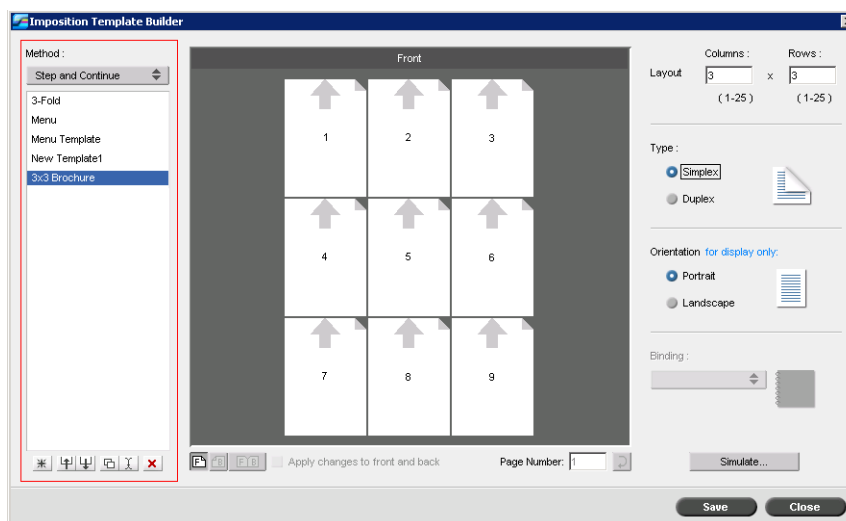
To import a template:

1. In the Imposition Template Builder, click **Import** ![import icon].

2. In the **Look in** list, locate the server and folder where the template resides.
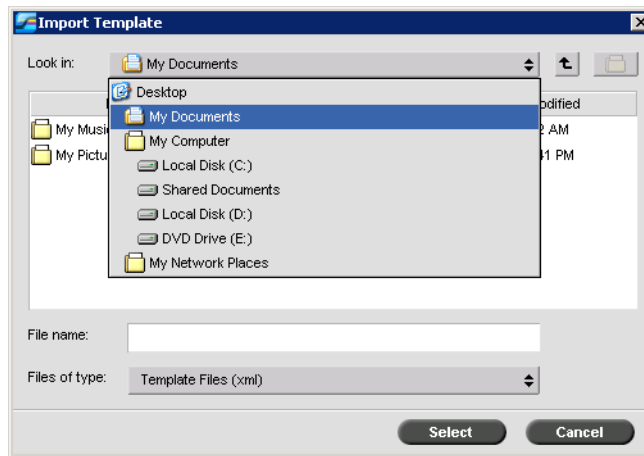
3. Choose the template file, and click **Select**.

    Note: Templates created in Ultimate software cannot be imported or used in the CX Print Server. They must be created using the Imposition Template Builder.

To export a template:

1. In the Imposition Template Builder, from the **Method** list, select the imposition method, and then select the template that you want to export.
2. Click **Export** .
3. In the **Save in** list, locate the server and folder that you want to copy the template to.
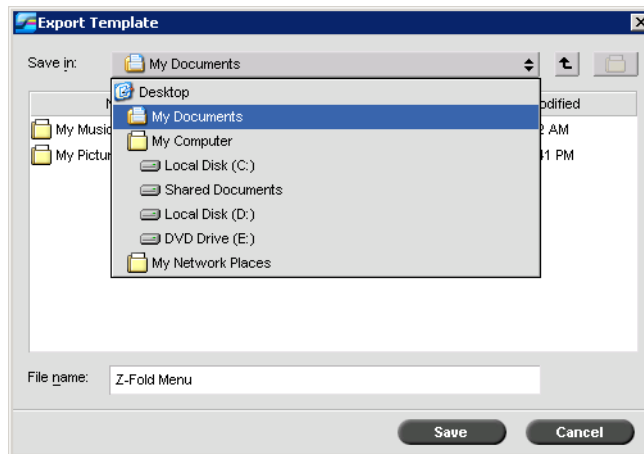
4. Click **Save**.

To duplicate a template:

1. In the Imposition Template Builder, from the **Method** list, select the imposition method, and then select the template that you want to duplicate.
2. Click **Duplicate** .

    A copy of the template is created, with the word, "Copy" at the end of the file name.
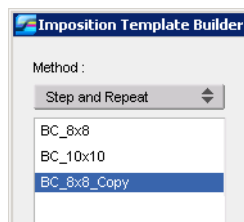
3. To change the file name of the copy, use the **Rename** command. (See the following procedure.)

To rename a template:

1. In the Imposition Template Builder, from the **Method** list, select the imposition method, and then select the template that you want to rename.

2. Click **Rename** .

3. Delete the old name.

4. Type the new name, and press ENTER.

To edit template settings:

1. In the Imposition Template Builder, from the **Method** list, select the imposition method, and then select the template that you want to edit.

2. Change the desired settings.

3. Click **Save**.

To delete a template:

1. In the Imposition Template Builder, from the **Method** list, select the imposition method, and then select the template that you want to delete.

2. Click **Delete** .

3. Confirm that you want to delete the selected template.

High-Resolution Workflow

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

The CX Print Server provides Creo APR (Automatic Picture Replacement) and supports Open Prepress Interface (OPI) image replacement workflows for replacing low-resolution files with high-resolution files during the RIP.

High-Resolution Image File, 5.23 MB   Low-Resolution Image File, 306 KB

Creo APR

Creo APR is an image replacement method for PostScript files. Creo APR 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 CX Print Server checks it for Creo APR instructions. It then searches for the external high-resolution file, performs the specified image replacement and RIPs the PostScript file.

For more information on setting the APR settings, see *The Services Tab* on page 203.

OPI

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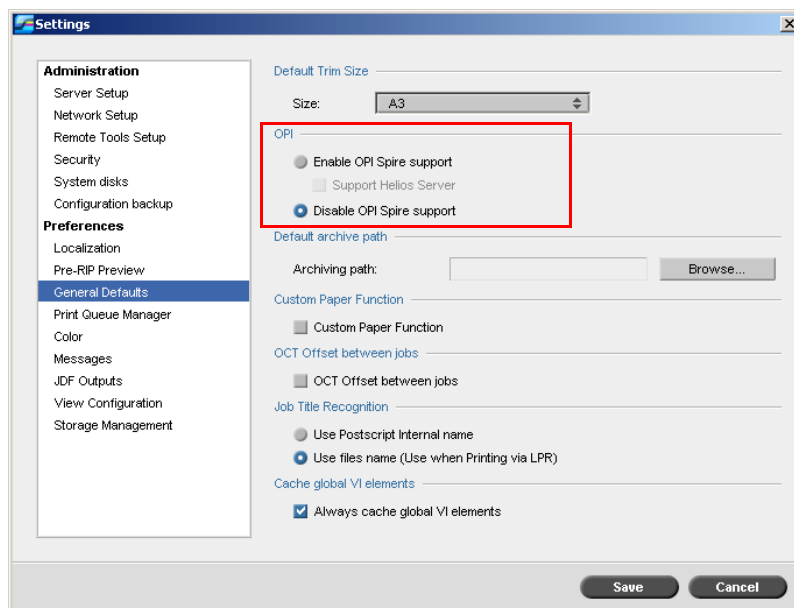
3. In the **OPI** area, select **Enable OPI Spire Support**.

    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

Creo APR and OPI function identically on the CX Print 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 *CX Print 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 CX Print Server searches.

5. Place the high-resolution files in a defined path on the CX Print Server. The CX Print 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 CX Print 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 CX Print 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 82.

Perform the following steps:

1. Print, download, or import the job from the client workstation to the CX Print 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 CX Print Server default folder, specify the APR path(s), see *Setting a High-Resolution Path* on page 205.

2. Double-click the job in the CX Print 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 CX Print Server and sent to the DocuColor 8000AP 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 many times as needed without repeated processing.

For more information on PDF optimization, see *The Services Tab* on page 203.

To distill a PostScript file on the CX Print Server:

1. In your client workstation, copy the desired PostScript file.

2. Locate the CX Print Server on the network, and paste the file to **D:\Shared**.

3. On the CX Print Server station, click the **Start** button and select **Programs** > **Acrobat Distiller.**
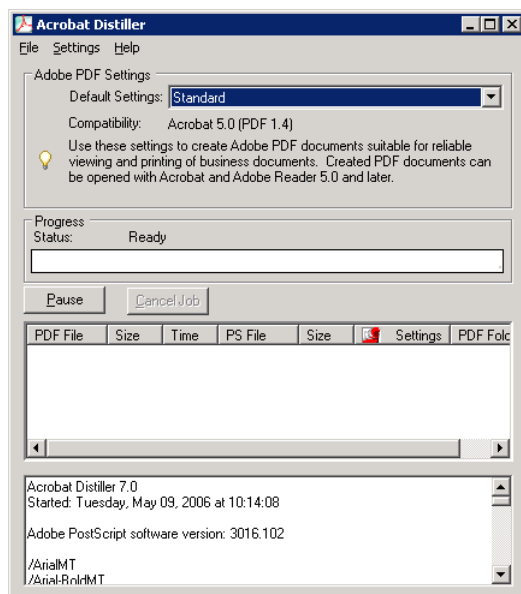
4. From the **File** menu, select **Preferences**.
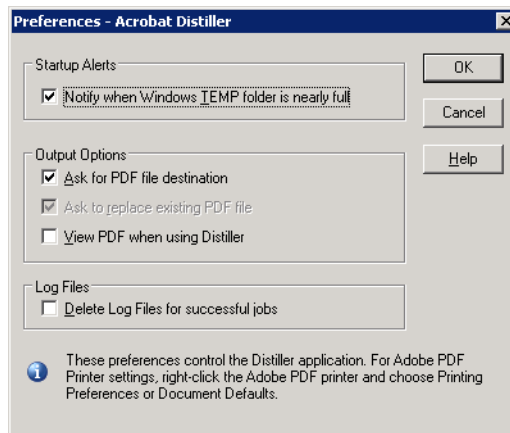
5. In the **Output Options** area, verify that **Ask for PDF file destination** is selected, and click **Cancel**. If this check box is not selected, select it and click **OK.**

6. From the **Settings** menu, select **Edit Adobe PDF Settings**.
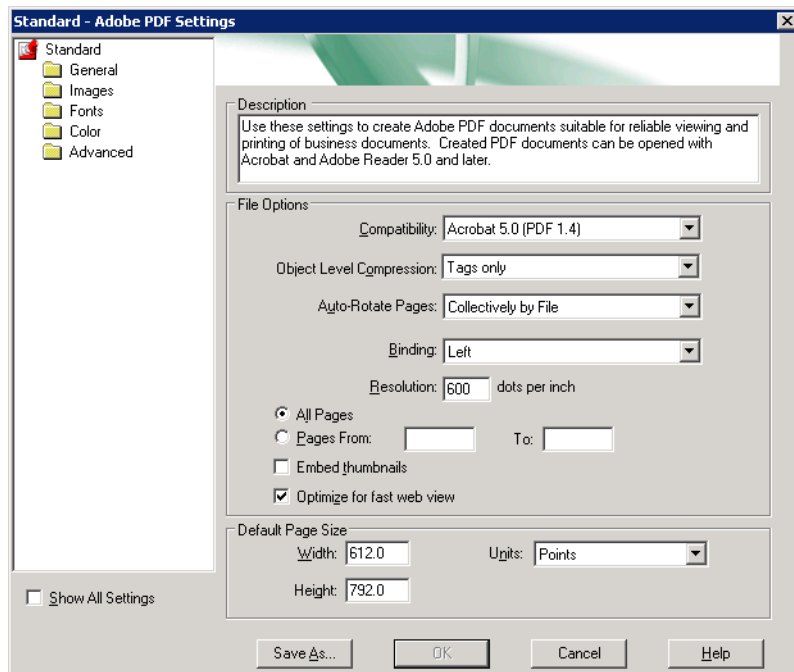
7. In the **General** folder (the default view), verify that **Optimize for fast web view** is selected, and click **Cancel**. If this check box is not selected, select it and click **OK.**

8. From the **File** menu, select **Open**.

   The Acrobat Distiller - Open PostScript File dialog box appears.

9. Locate the desired PostScript file, and then click **Open**.

   The Acrobat Distiller - Specify PDF File Name dialog box appears. The default file name for the PDF file is the PostScript file name.

10. If desired, change the file name in the **File name** box.

11. Verify that the file is saved in **D:\Shared**.

12. Click **Save**.

Your file is distilled, and a PDF file is created.

13. In the CX Print 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 CX Print Server desktop. This shortcut can be used to drag files onto the Distiller software 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 CX Print 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.
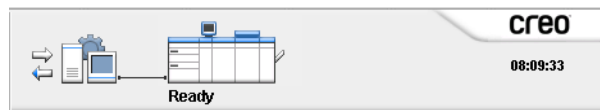
To export as PDF2Go:

1. Right-click a file in the Storage window, and from the menu select **Export as PDF2Go**.
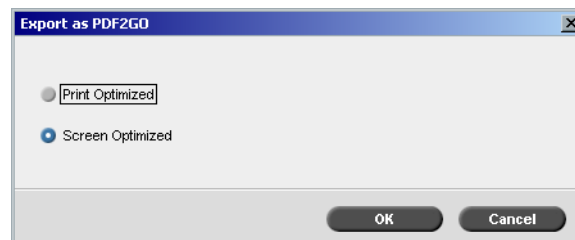
2. Select the **Print Optimized** option to generate a high-resolution PDF file in 300dpi.

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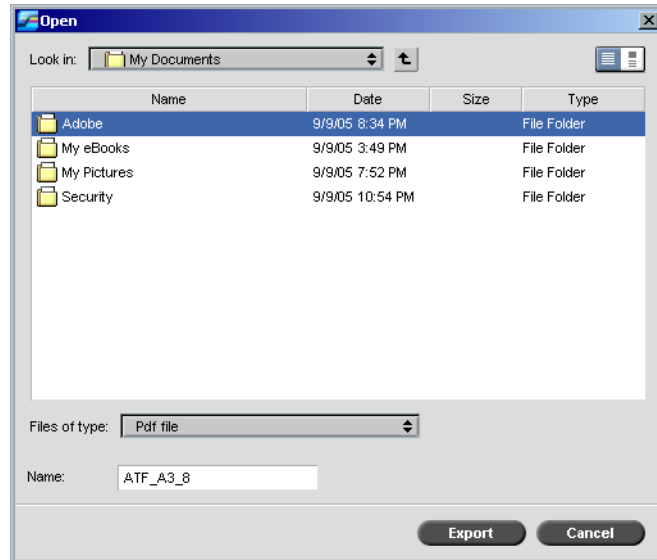
4. Locate the folder in which to save the file, and then click **Export**.

    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 *Distiller* software.

Page Exceptions

A page exception is a paper set that differs from the rest of the paper in a job. For example, you can assign a different paper stock for each chapter in a book.

For information about setting page exceptions, see *The Exceptions Tab* on page 211.

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 44.

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 at 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 **Cut & Stack**.

Printing on Tabs Using Exceptions

The CX Print Server supports the option to print tabs for both regular page exceptions and dynamic page exceptions workflows. This section contains a description of the setup steps you need to perform to print on tabbed stock using the regular page exceptions workflow.

For information about dynamic page exceptions, see *Dynamic Page Exceptions* on page 99.

Note: The DocuColor 8000AP also supports the option to print tabs for both regular page exceptions and dynamic page exceptions workflows.

File Preparation

This example describes how to print a document using Xerox 5 TAB (multipurpose) stock. The tabs are printed on both sides (duplex). The text pages were designed in QuarkXPress and the tabs were designed in Word software.

Note: You can modify this procedure to fit your specific tab requirements.

DocuColor 8000AP Setup

In this example, you can print the PDF file on the following types of stock:

- Text pages on US Letter (8.5 × 11 inches)
- Tabs on tab stock (9 × 11 inches)

Note: Alternatively, you can use the following paper stock, and adjust the settings accordingly:

- Text pages on A4 (210mm × 297mm)
- Tabs on tab stock (223mm × 297mm)

Color Calibration

Use the US Letter paper stock to perform calibration, and then you can use this paper stock for the entire job.

Loading the Paper Stock

Follow these steps when you load the paper stock:

- Load the paper as **Short Edge Feed** for all stocks because the tabbed stock is printed on both sides (duplex), and requires straight edges on both right and left sides. Load the stock with the tabs pointing to the rear end of the tray.

- Although the Text and Tab media can be different weights, you should set the tray controls to 106 - 135 gsm for all media weight. Using the same media weight avoids the automatic image quality adjustment that occurs when you print on different weight ranges of paper stock.

To load the paper stock:

1. Load the letter paper stock in Tray 1.
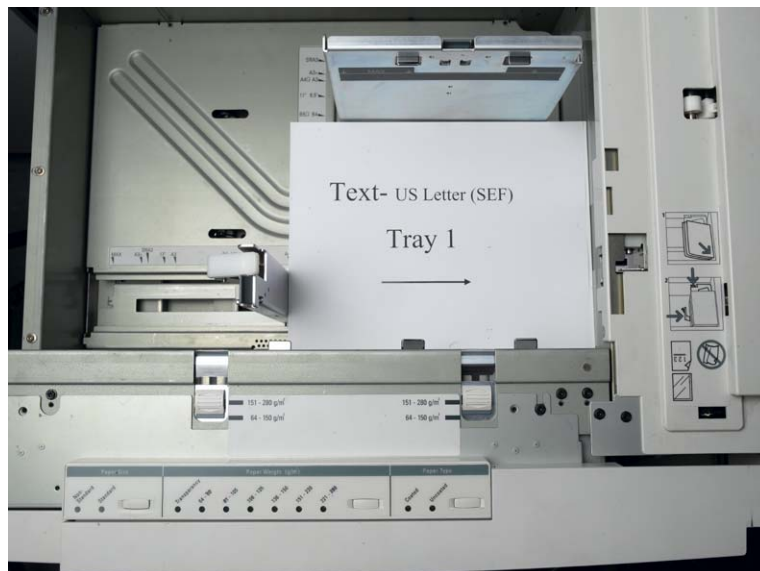
2. Load the tabbed stock:

    a. Place the tabs in Tray 2 in forward collated order—for example, Tab 1 is the top tab when the tab sheets are loaded into the printer.

    b. Make sure that the stock is loaded as **SEF**.

    c. Select **Non-Standard** on the left hand side of the tray controls..

    Notes:

    •   Load the tab stock in Tray 2. This allows for a straight path from this tray onto the imaging belt. You can load other types of stock in any other tray without affecting print production.

    •   Tabs that are duplex printed require that the tab stock be positioned so that both the left and right sides of the media are straight sides going into the engine.

Note: Tabs that are simplex printed can be loaded either portrait (LEF) or landscape (SEF).

Access Panel

You program the custom size for any job through the DocuColor 8000AP Access Panel.

1. On the Access Panel, press the **Access** button and enter the password **11111**.

Access button

2. Navigate to **Tools Pathway > Non-Standard Paper Size**.

3. Select **Tray #2**, **X=11**, **Y=9**.

4. Exit all the windows and return to the main menu.

Creating Paper Sets

On the CX Print Server, in the Printer Monitor window, you can view the paper types that are loaded in the paper tray.
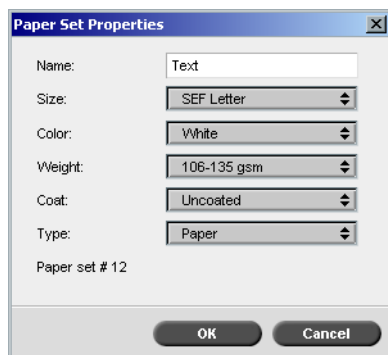
For more information about the Printer Monitor window, see *The Printer Monitor* on page 9.

To create paper sets:

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

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

3. Click **Add**.

    The Paper Set Properties dialog box appears.
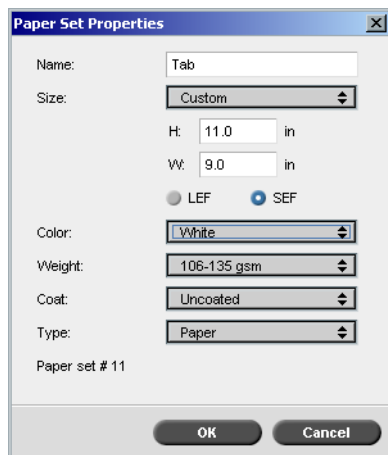
4. Set the parameters for the Text stock.

5. Click **OK**.

6. Click **Add** and set the parameters for the Tab stock.

7. Click **OK**.
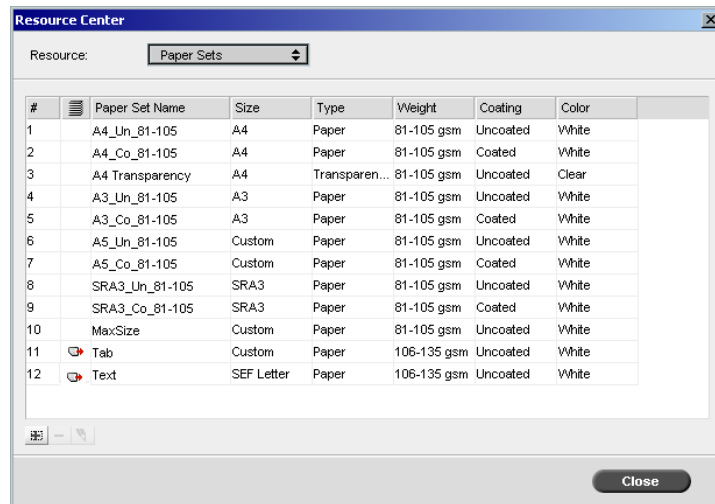
Icons in the **Paper Sets** area provide information about the defined media that is available and the print direction of the media.

Note: If the icon for the Tab and Text media does not reflect the print direction you set, you need to review your paper set definitions.

Printing the Job

The regular (manual) page exception workflow is good for single jobs.

Important: Before you start this workflow, open the PDF file and note which pages are the tab pages.

To set the job parameters for a job with two media trays:

1. In the Job Parameters window, click the **Print Settings** tab and set the following parameters:

    - **Print Method—Duplex head to head**
    - **Delivery—Face Up**
    - **Rotate 180—Yes**

2. On the **Paper Stock** tab do one of the following:

    - Set the **Paper set name** to **Text**
    - Set the following parameters:
        - **Paper set name—Undefined**
        - **Paper size—SEF Letter**
        - **Weight—106-135 gsm**

3. On the **Exceptions** tab, click the **Add** button ⊞, and use Table 11 to add page exceptions:

Table 11: Sample Page Exceptions

Pages	Use Paper Set	Tray
5 -6	Tab	Auto

Table 11: Sample Page Exceptions

19-20	Tab	Auto
31-32	Tab	Auto
59-60	Tab	Auto
103-104	Tab	Auto

Note: The tabs are printed on both sides.
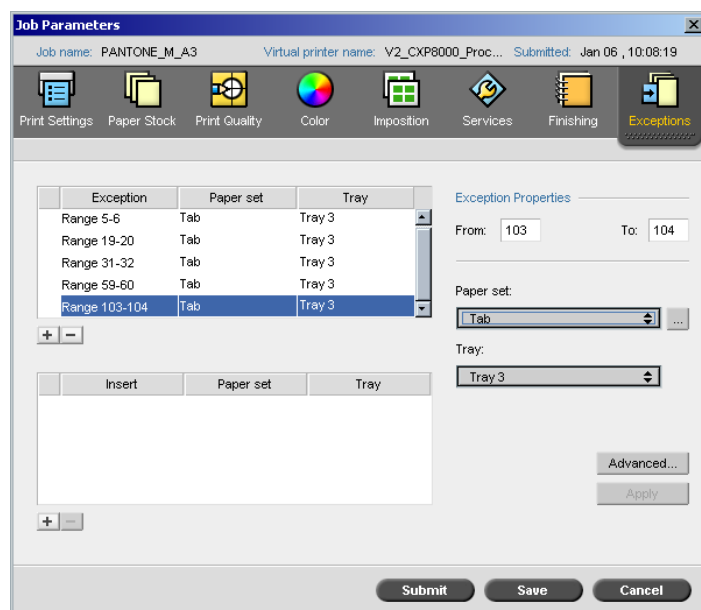
4.   Set any other job parameters as desired, and then click **Submit**.

Further Information

The following list provides useful Web sites about printing tabs and templates:

- Templates: Download the Xerox templates from the following Web site:

  http://www.xerox.com/go/xrx/template/
  Promotions.jsp?view=MP6&active=active&promoID=Laser_Printer_Template
  _tabs&Xcntry=USA&Xlang=en_US

- Design Hints: Some good design hints for printing tabs are available on the
  following Web site:

  http://www.xerox.com/go/xrx/template/
  Promotions.jsp?view=MP6&active=Active&promoID=Printer_Template_Using
  _Graphics&Xcntry=USA&Xlang=en_US

- The Speciality Media Guide can be downloaded from the following Web site:
  http://www.xerox.com/

Printing on Tabs Using the CX Print Server Tabs Plug-In for Acrobat

The CX Print Server Tabs plug-in for Acrobat (version 7.0 or later) enables you to create and place tabs in your unprocessed (PDF or PostScript) jobs, manage the tab and text attributes, and save a set of attributes for future use.

When using the CX Print Server Tabs plug-in to create tabs, it is not necessary to define exceptions on the **Exceptions** tab.

Important: If you add tabs to your job, you need to select the Mixed paper size document check box (in the Job Parameters window, on the Paper Stock tab, under Mixed paper size).

To create tabs with the Tabs plug-in:

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

    Note: The job must be a PDF or PostScript file.

    The job opens in Acrobat software.

2. From the **Plug-Ins** menu, select **Spire Tabs Printing**.

    The Tabs Printing window opens, displaying the **Text Attributes** tab.
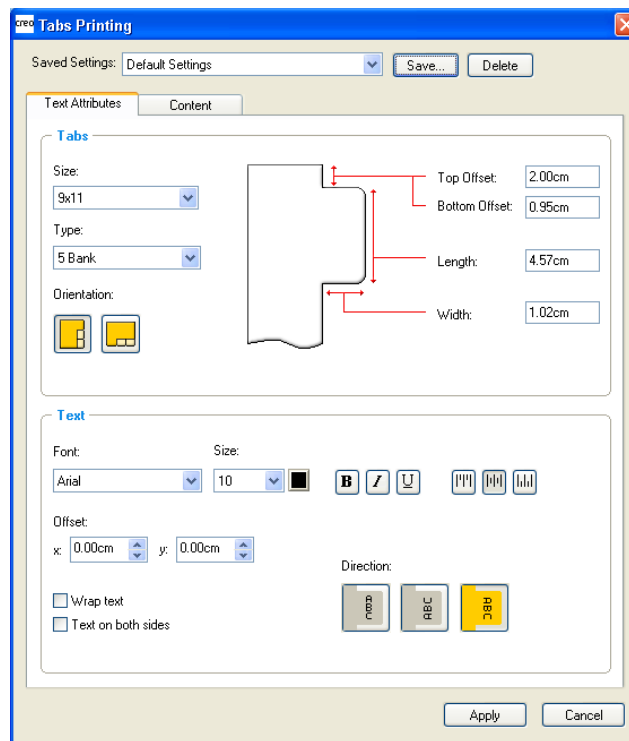
3. In the **Tabs** area, set the tab attributes:

    a. By default, the tab size for letter jobs is set at **9x11**, and for A4 jobs, **A4+**. To change the tab size, select a tab size from the **Size** list.

    b. In the **Type** list, select the number and type of tabs.

        Tip: If you want your tabs to be reversed—that is, for the lowest tab to be the first one—select one of the reverse tab options.

    c.   Select the appropriate orientation of the tab.

    d.   In the **Top Offset** box, type a value for the distance between the upper edge of the paper and the upper edge of the uppermost tab.

        Note: The units in the Tabs plug-in are set in the Acrobat Preferences dialog box.

    e.   In the **Bottom Offset** box, type a value for the distance between the lower edge of the paper and the lower edge of the lowest tab.

    f.   In the **Length** box, type the length of the tab.

    g.   In the **Width** box, type the width of the tab.

4.   In the **Text** area, set the attributes of the text on the tabs:

    a.   (Optional) In the **Font** list, select a font for the text on the tab.

    b.   (Optional) In the **Size** list, select a font size for the text on the tab.

    c.   (Optional) Click the **Color** button ▇ to change the font color for the text on the tab.

    d.   (Optional) Click **Bold** **B** to make the text on the tab bold.

    e.   (Optional) Click **Italic** *I* to make the text on the tab italic.

    f.   (Optional) Click **Underline** U to underline the text on the tab.

    g.   Click the appropriate alignment button as shown in Table 12.

Table 12: Tab alignment buttons

	Portrait	**Landscape**
Align Left		
Align Center		
Align Right		

    h.   (Optional) Under **Offset**, type offset values in the **x** and **y** boxes to adjust the offset of text on the tab. The **x** value moves the text horizontally according to the alignment; the **y** value moves the text vertically.

    i.   (Optional) Select **Wrap text** to automatically run the text onto the following line when the entire text does not fit on one line.

    j.   (Optional) Select **Text on both sides** to have the same text appear on both sides of the tab.

    k.   In the **Direction** area, select the appropriate direction for the text:

        Note: The Direction options are available only for portrait jobs.

5. Click the **Content** tab.
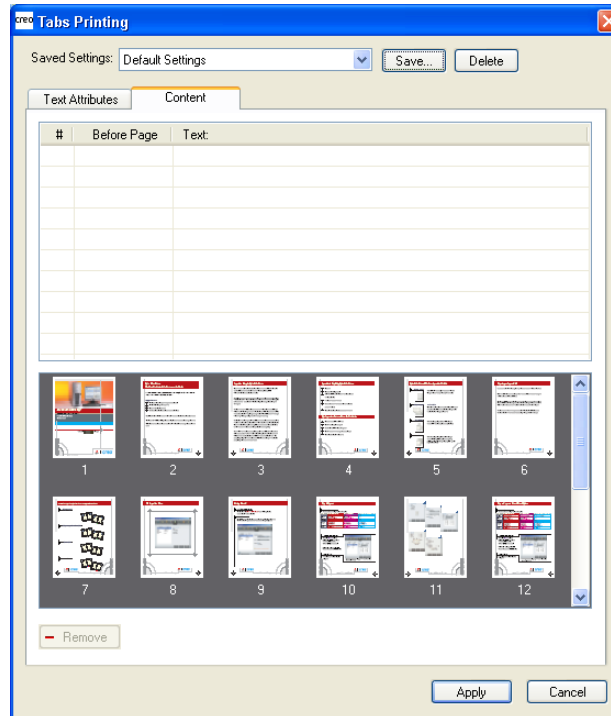
6. In the **Before Page** column, click the first cell and type the number of the page that you want the tab to precede.

7. In the **Text** column, type the text for the tab.

The tab appears in the thumbnail area.
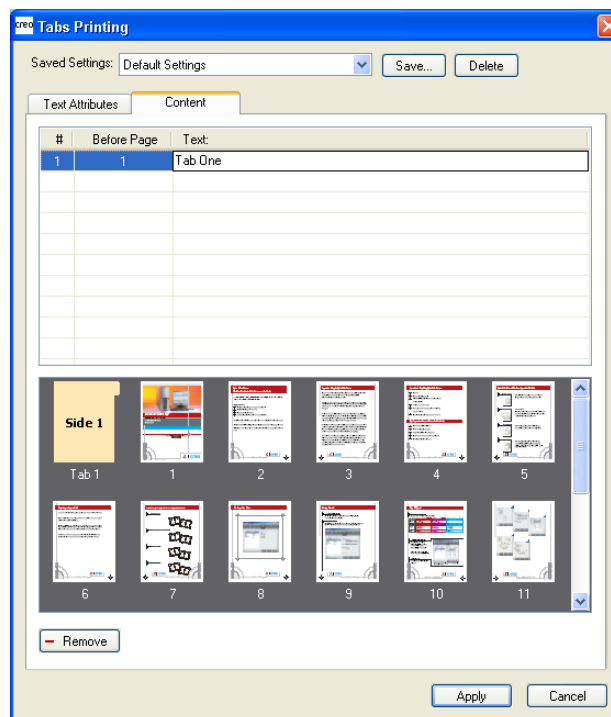
8. To add more tabs, repeat steps 6 and 7.

9. Click **Apply** to apply the tab settings to your document.

   The Tabs Printing window closes, and the tabs that you added become part of the document.

10. From the Acrobat **File** menu, select **Save**.

11. In the CX Print Server, select the **Mixed paper size document** check box on the **Paper Stock** tab, under **Mixed paper size** parameters.

12. Process and print the job.

Managing Tabs in the Tab Printing Window

To change the location of a tab:

➢ In the thumbnail area, click the tab that you want to move, and drag it to the desired location.
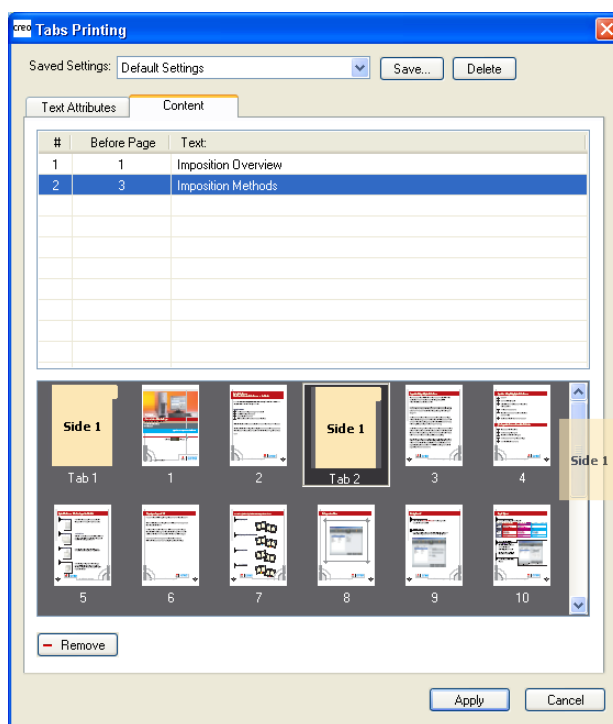
The tab moves to the selected location, and the tab numbers are updated accordingly.

To replace a page with a tab:

1. In the thumbnail area, right-click the page and select **Replace with tab page**.

   The page is deleted from the document and replaced by a new tab.

2. In the table, type the tab text.

To insert a tab before or after a specific page:

➢ In the thumbnail area, right-click the page and select **Insert tab before page** or **Insert tab after page**.

To remove a page or tab from the document:

➢ In the thumbnail area, right-click the page or tab and select **Remove**.

Once you have set the tab parameters for a job, you can save the settings. Saved settings are useful when you want to print different jobs with the same tab settings.

To save tab settings:

1. In the upper part of the Tabs Printing window, click **Save**.
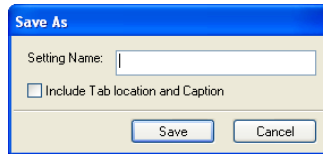
2. Type a name for the tab settings.

3. To save the locations and text of the tabs that you created, select the **Include Tab location and Caption** check box.

    Note: If you do not select this check box, only the text attribute settings are saved.

4. Click **Save**.

To apply saved settings to a job:

➢ In the Tabs Printing window, select the settings from the **Saved Settings** list.

    The saved settings are applied to the job.

    Tip: You can modify any of the settings as desired.

To delete saved settings:

1. In the Tabs Printing window, select the saved settings from the **Saved Settings** list.

2. Click **Delete**.

    The saved settings are deleted.

Dynamic Page Exceptions

Dynamic page exceptions are page exceptions or inserts that you want to include within a file, mainly VI jobs or a very large PostScript file.

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 CX Print Server identifies the dynamic page exception commands and maps them to the selected paper sets. The printer then uses the desired paper sets for the job.

The CX Print Server supports dynamic page exceptions for the following file formats:

- PostScript
- Variable Print Specification
- VIPP
- PDF

Setting the CX Print 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 information about adding a new virtual printer and mapping specific paper sets, see *Managing Virtual Printers* on page 41.

4. Import the file into the CX Print 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.

   - Once you import your file via the dedicated virtual printer (if the virtual printer is either a ProcessStore or SpoolStore virtual printer), you can perform a preflight check before the job is sent to print. For more information, see *Preflight* on page 103.

Tips and Limitations

The following list describes the current 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 regular page exceptions and imposition. In addition, the paper stock selection is limited to the assigned stocks and not the entire database.

For information about defining the paper feed direction, see *The Paper Stock Tab* on page 188.

Fonts

This section explains how to work in the **Fonts** area of the Resource Center.

In addition, this section explains how to download fonts onto your Windows PC or Macintosh client workstation.

Managing Fonts

1. On the toolbar, click the **Resource Center** button .
2. In the **Resource** list, select **Fonts**.
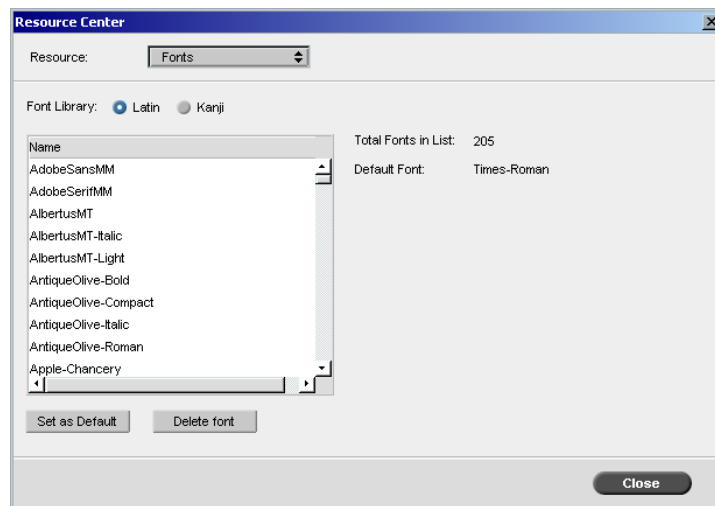
3. Choose a **Font Library** option. The default option is **Latin**.
4. To set the default font, select a font from the list, and click **Set as Default**.
5. To delete a font, select the font, and click **Delete font**.

To add fonts to the CX Print Server:

➢ Copy the new fonts to the **C:\CX8000AP\General\RIP\Font folder**.

   Note: You can substitute fonts. For more information, see *Substituting Fonts* on page 204.

Downloading Fonts Onto Your CX Print Server

Windows PC Client

➢ Drag the new fonts to the **HF_Fontdownloader** Hot Folder.

   The hot folder is located with the other hot folders on your client workstation.
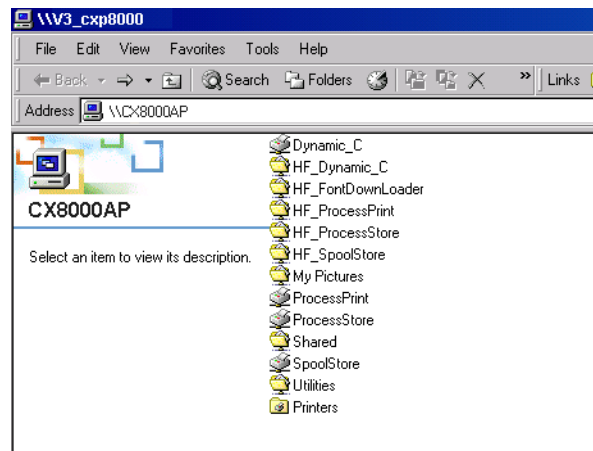
For more information about hot folders, see *Using Hot Folders* on page 59.

Macintosh

➢ Drag the new fonts to the **HF_Fontdownloader** Hot Folder.

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 CX Print 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 CX Print Server queues. The PDF file can be configured and printed as any other PDF file.

Supporting GAP Files

The CX Print Server can import and convert the following file types:

• Brisque jobs

• TIFF

• TIFF/IT

• CT / LW

Note: The CX Print 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 three components:

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

To import a TIFF/IT file to the CX Print Server, first import the FP file. During import, the file is converted to a PDF file, and appears in the CX Print Server queues. The PDF file can be configured and printed as any other PDF file.

Note: Make sure that in the CX Print 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 CX Print 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 CX Print Server, import the assigned file of the job.
- To print a specific page, import the assigned file of the specific page.

Preflight

The following preflight features are available:

- PDF analyzer
- Preflight check
- Preflight report

Note: You cannot use the PDF analyzer or perform a Preflight check on PDF files that are locked or protected. If you do, a message will appear stating that the file is encrypted.

Analyzing a PDF Job

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**.
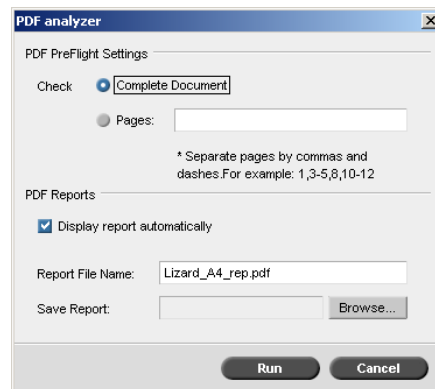
2. In the **PDF PreFlight Settings** area, do one of the following actions:

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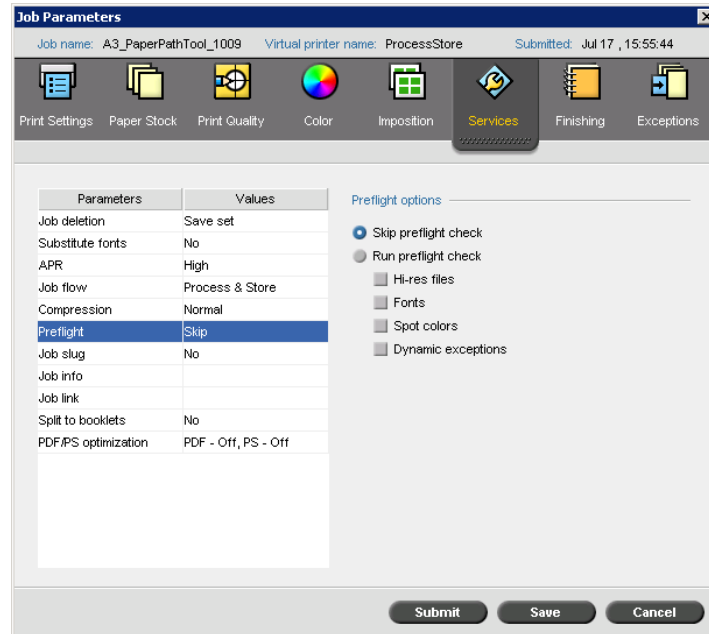
The **Preflight** parameter enables you to check the status of key job components before the job is sent for printing.

Note: You must 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 CX Print 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

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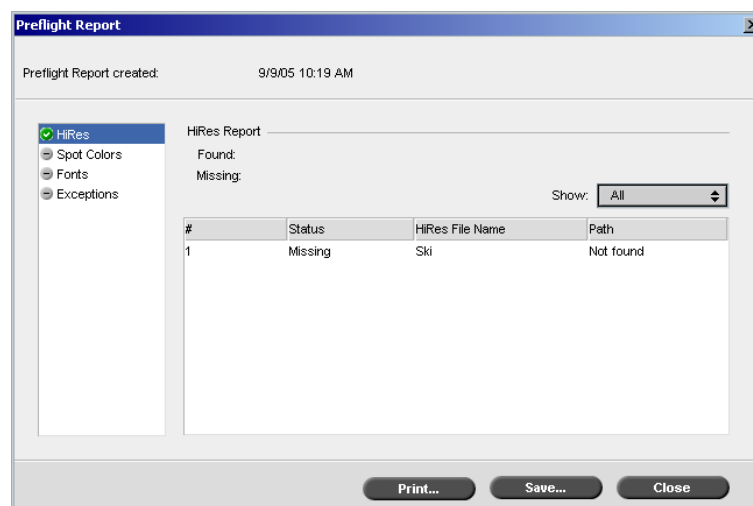
    If there are key components in the job not found, this will be indicated by the **missing** indicator ❌ next to the **HiRes**, **Spot Colors**, and **Fonts** report options.

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 **All Missing**.

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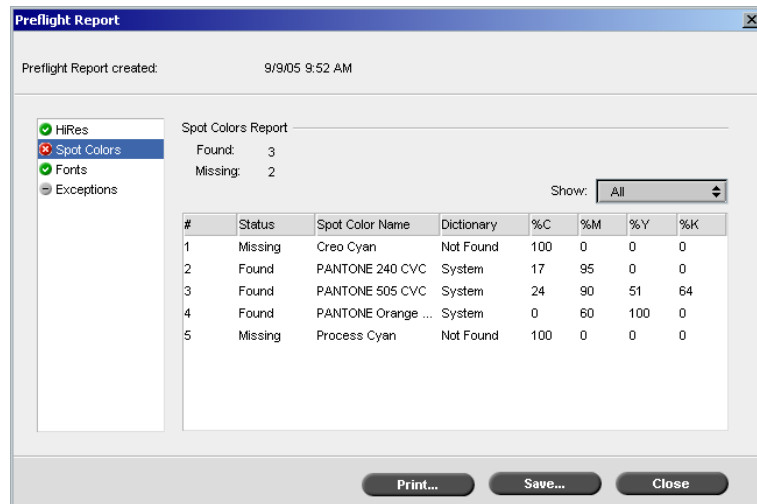
The **Spot Colors Report** area displays the missing spot color names (spot colors which were not found in the spot color dictionary) and the found spot color names (spot colors which were found in the spot color dictionary). The **C**,**M**,**Y**,**K** columns display the spot color CMYK equivalences:

   - If the status is **missing**, the CX Print 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 CX Print Server uses the CMYK values that are in the spot color dictionary**.**

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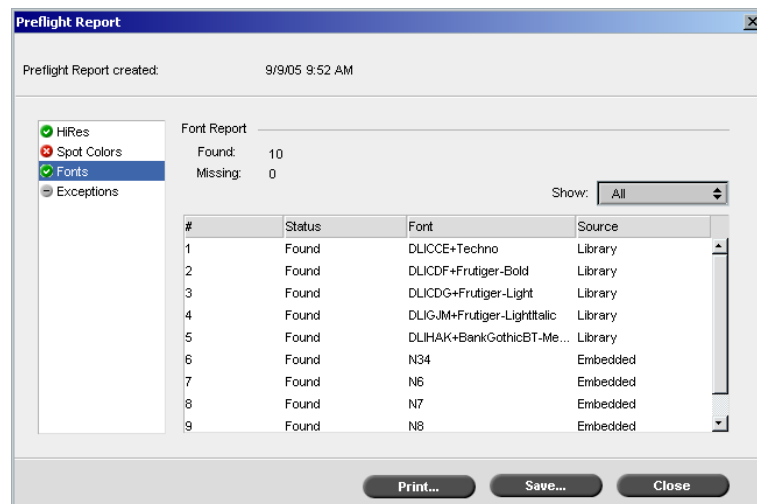
The **Font Report** area displays the name of the missing fonts that are not embedded in the file and that do not exist in the **Font Library**, as well as the found fonts.

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

5. Click the **Exceptions** report option.
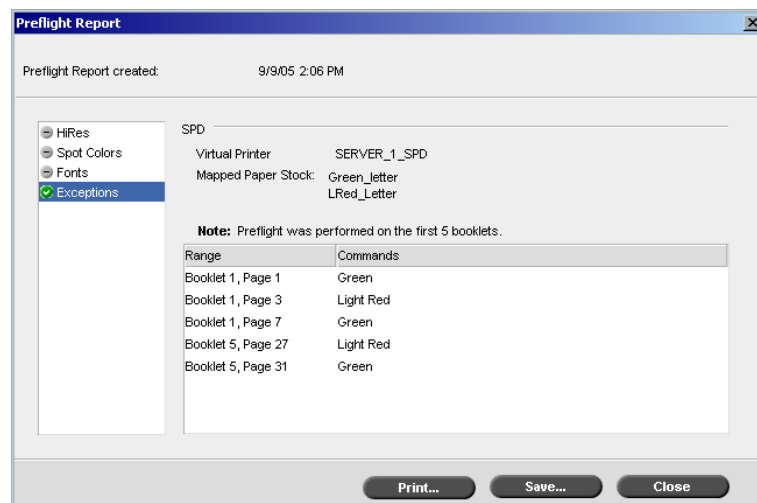
The **SPD** (dynamic exceptions) area displays the dynamic page exception commands found in the file.

For more information about dynamic page exceptions, see *Dynamic Page Exceptions* on page 99.

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**.

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 CX Print 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 during 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

- When drastic ambient changes (temperature and humidity) occur

Important: Perform a different calibration for every combination of media and screen type that 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 DocuColor 8000AP. For more information, see *Calibration Reminder* on page 169.

The GretagMacbeth® Eye-One® Spectrophotometer calibration device is used to calibrate the DocuColor 8000AP.

Guidelines for Successful Calibration

To make your calibration as accurate as possible, follow these guidelines before you calibrate:

1. Ensure that your calibration device is connected properly.

2. Ensure that your calibration device is calibrated. You should calibrate the device at least once a week or whenever the power to the device is interrupted.

3. To warm up the printer, use any media to print at least 25 duplex sheets of any four-color test job.

4. Set the CX Print Server emulation method to the method that you will use to print the customer job (**CSA** or **DeviceLink**).

5. Print a reference job, and use the same media and screen type on which you will print the final job.

6. 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.

The Calibration Process

The calibration process consists of the following steps (explained in detail in the next few sections):

1. Calibrate the calibration device.

2. Set the calibration method.

3. Load the paper set that you are going to use for printing in the DocuColor 8000AP.

4. In the CX Print Server, from the **Tools** menu, select **Calibration**.

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 that you set the screen type to the one that you are going to use to print the job—for example, **200 dot**.

7. Measure the calibration chart.

8. When the calibration is complete, print the job using the calibration table.

Tip: Including the specific paper name and screen method in the calibration table file name helps you identify the appropriate calibration table in the job setup.

Preparing the Calibration Device for Calibrating Your Printer

The Eye-One spectrophotometer is a high-speed color measurement instrument that reports densitometer and dot data.

Perform the following steps before using your calibration device for the first time:

1. Familiarize yourself with the Operator's Manual.

   You can also use the Device Tutorial to learn how to use the device correctly. To access the tutorial, select **Tools > Calibration**, and then click **Calibrate**. In Step 1 of the Color Calibration wizard, click Device Tutorial - Click & Learn.

2. Connect the device.

3. Calibrate the device.

Connecting the Eye-One Spectrophotometer to the CX Print Server

1. Connect one end of the Eye-One spectrophotometer cable to the CX Print Server USB 2 (USB port).

2. Connect the other end of the spectrophotometer cable to the spectrophotometer.

Calibration Procedure

➢ To calibrate the Eye-One spectrophotometer, place the spectrophotometer on the plate.

Calibrating the CX Print Server

Setting the Color Calibration Method

The CX Print Server provides you with two color calibration methods:

- **Target Calibration**

   This calibration method enables you to calibrate the DocuColor 8000AP according to the following fixed, predefined density values

   Table 13: Fixed density values for uncoated paper

Toner	Density value
Cyan	1.75
Magenta	1.34
Yellow	0.868
Black	1.65

   Table 14: Fixed density values for coated paper

Toner	Density value
Cyan	1.9
Magenta	1.45
Yellow	0.913
Black	1.75

   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 DocuColor 8000AP 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 CX Print Server is target calibration. You can change the setting, if necessary, before calibrating the CX Print Server.

To specify the calibration method:

1. In the Settings window, select **Preferences > Color**.
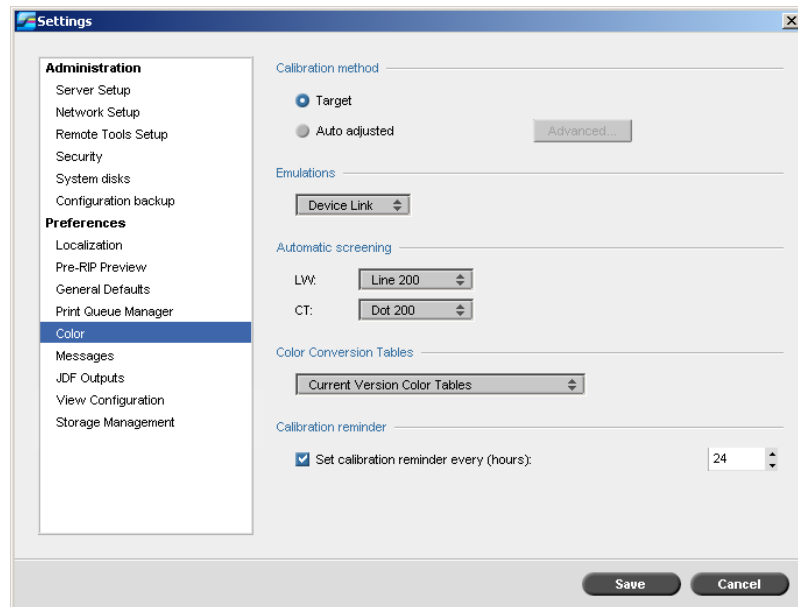
2. In the **Calibration Method** area, select the desired calibration method, **Target** or **Auto Adjusted**.

3. If you selected **Auto Adjusted** and you would like to change the default settings, click **Advanced**.

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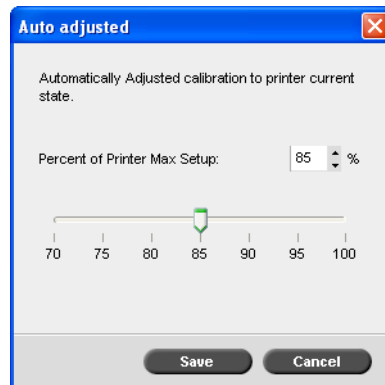
4. Change the **Percent of Printer Max Setup** density if desired, by moving the slider, or by typing a percentage value in the corresponding box.

    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 CX Print 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 CX Print 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 CX Print 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 Edit Calibration window appears.
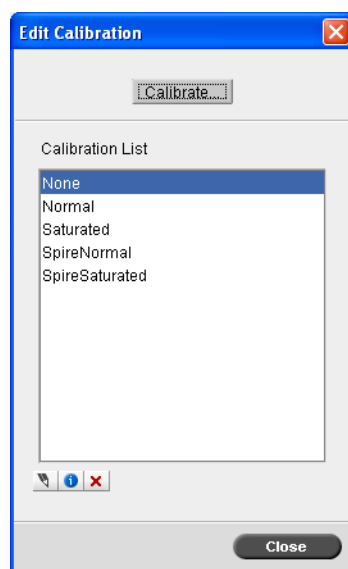
The following options are available:

- Click **Calibrate** to run the Color Calibration Wizard. This wizard guides you in the use of the calibration device to create calibration tables.

- 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 118.

  ❑ Click **Delete** ✖ to delete the calibration table.

  ❑ Click **Info** ⓘ for the Density Graph. See *Reading Color Density Data* on page 121.

  ❑ Click **Close** to end a test job and close the Calibration window.

Creating a Calibration Table

1. In the CX Print Server software, from the **Tools** menu, select **Calibration**.

2. In the Calibration window, click **Calibrate**.

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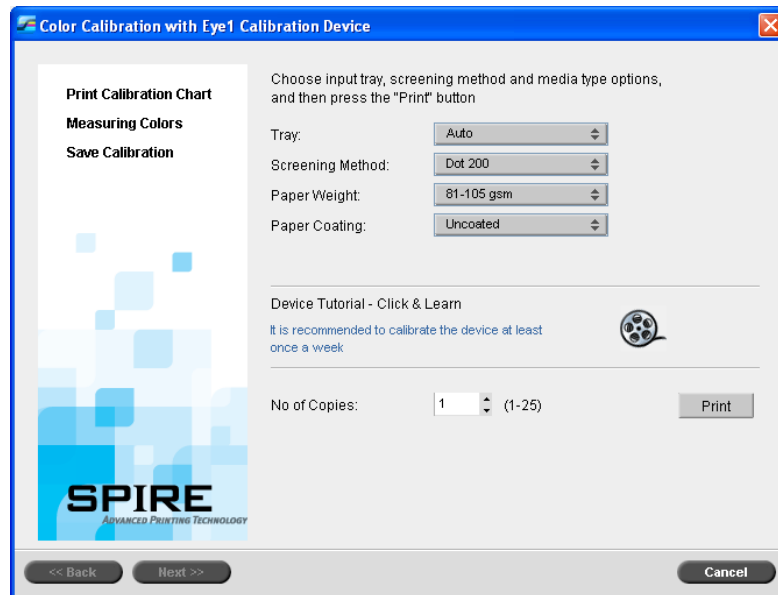
   The first step in the wizard is **Print Calibration Chart**. This step enables you to detect the point where you start to see toner on the paper.

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 DocuColor 8000AP 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 Image Density Calibration chart is printed.

    Note: If you selected **Automatic** as the **Screening Method** option in step 1 of the wizard, the DocuColor 8000AP prints two charts, the Image Density Calibration chart and the Text/Line Art Density Calibration chart.

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

    Step 2 of the Color Calibration Wizard appears. In this step, you scan the Image Density Calibration chart so that the wizard can measure each separation and find the point at which the toner appears on the paper.
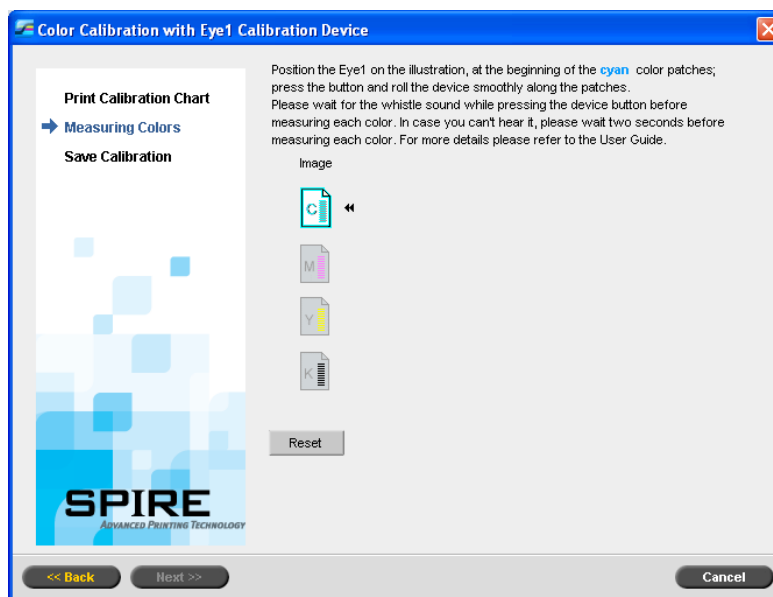
    If you selected **Automatic** as the **Screening Method** option in step 1 of the wizard, you need to calibrate the CX Print Server using two charts. In such cases, step 2 of the Calibration Wizard appears as follows:
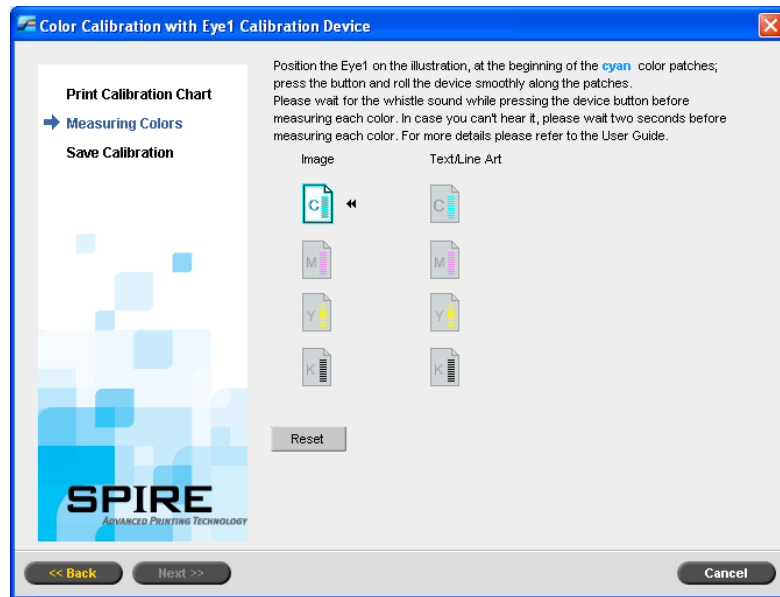
10. On the Eye-One spectrophotometer, press the button on the side, and align the head with the cyan arrow's tip. The arrow is to the left of the cyan column on the Image Density Calibration chart. Its tip intersects the semi-dotted line.

11. Sweep the Eye-One spectrophotometer across the cyan column.

    A check mark appears next to 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 in which they appear in the Calibration Wizard: **Cyan > Magenta > Yellow > Black**.

    When all of the separation columns have been successfully scanned, a check mark appears next to all the 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.
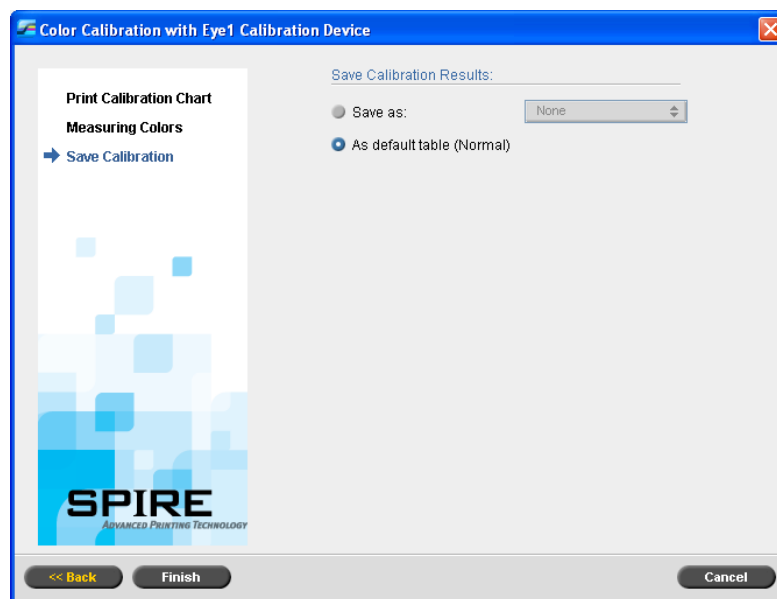
13. Select **Save as** and select the desired name for the calibration table. Do one of the following:

    - Type your own or select one from the list.

    - 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 Normal look up table, and once as the Saturated look up table. The CX Print 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.
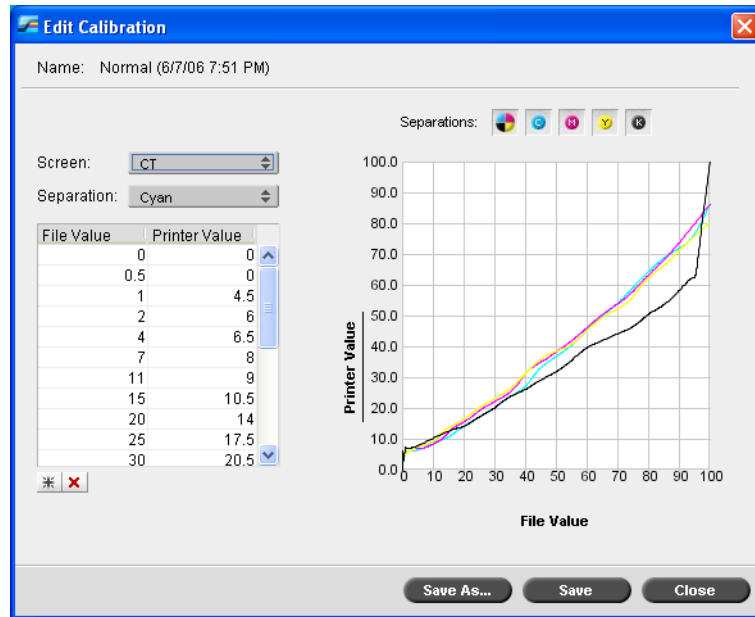
The Edit Calibration window includes the following:

*   **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 CX Print 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.
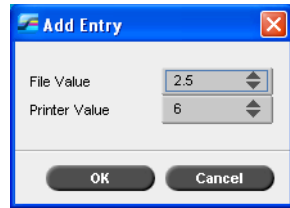
3. From the **File Value** and **Printer Value** lists, select the desired values.

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, **SpireNormal** and **SpireSaturated**.

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:\CX8000AP\General\ColorCalibration\ColorCalibrationDB**.
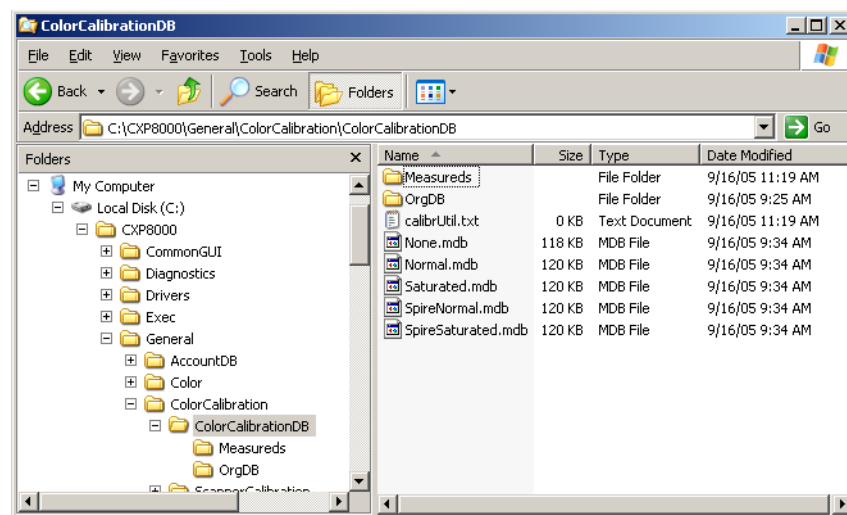
2. Open the **ColorCalibrationDB** folder.

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.
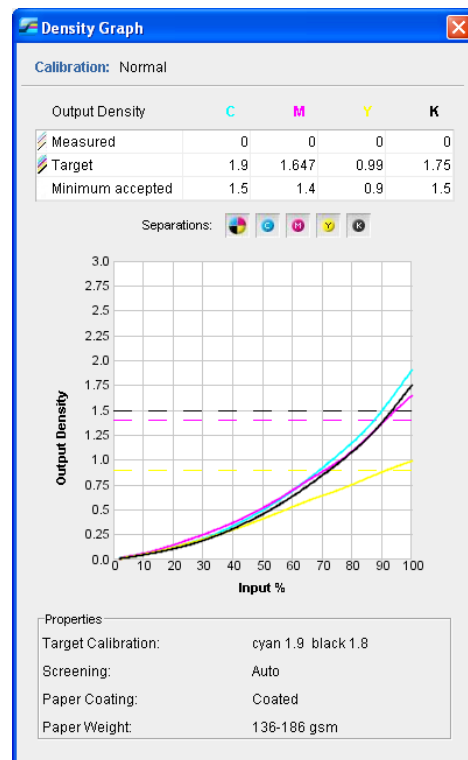
The Density Graph contains the following data:

- 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 DocuColor 8000AP 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 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 CX Print 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 123.

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 Queue** and **Print Queue**, 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

Color job parameters are located on the **Color** tab in the Job Parameters window. 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 CX Print 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 CX Print Server supports the following color formats:

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

To submit jobs for color adjustment:

1. Import the job to the CX Print 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 match 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 CX Print Server and sent to the DocuColor 8000AP for printing.

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

For more information about submitting jobs to the CX Print Server, see *Importing and Printing Jobs* on page 22.

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.

Note: 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 193 and *CMYK Workflow* on page 193.

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 194.

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 CX Print 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 **Resource Center** .

    The Resource Center opens.

2. In the **Resource** list, select **Profile Manager**.
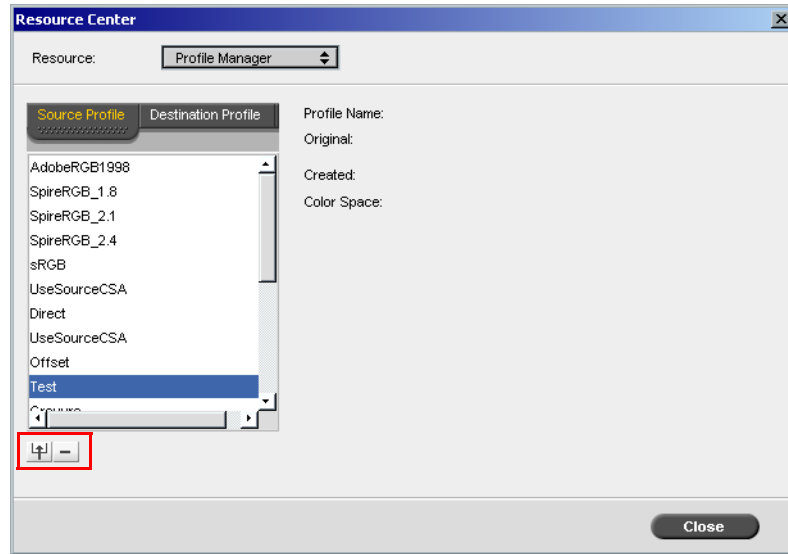
The **Source Profile** tab appears and the predefined source ICC profiles are displayed.

3. Click **Import** [icon].

The Import Source ICC Profile dialog box appears.
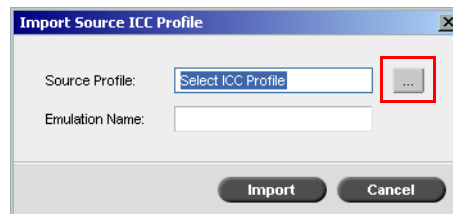
4. In the **Source profile** area, click **browse** [icon]. Locate and select the desired source profile, and then click **Open**.

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 194.

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

The predefined ICC profiles are displayed.
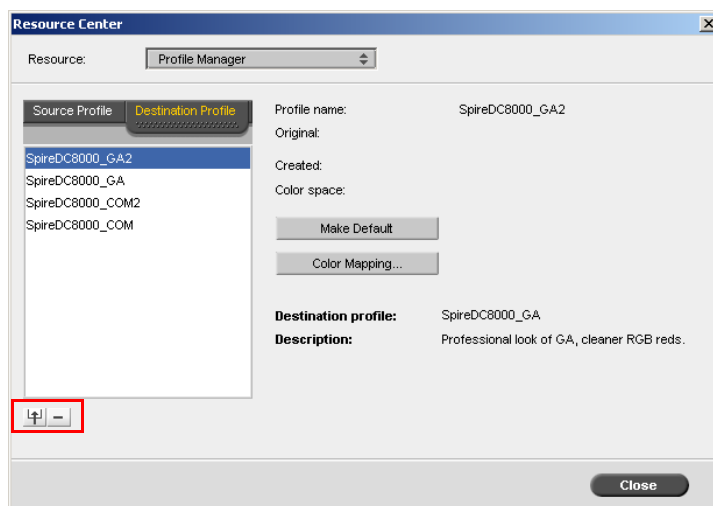
2. Click **Import** ⊞.

    The Import Destination ICC Profile dialog box appears.
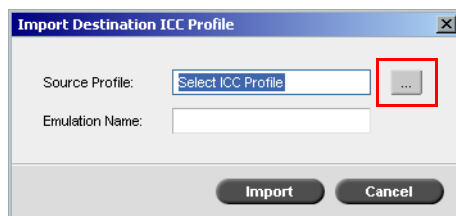
3. In the **Destination profile** area, click **browse** ⊡. Locate the desired source
    profile, and then click **Open**.

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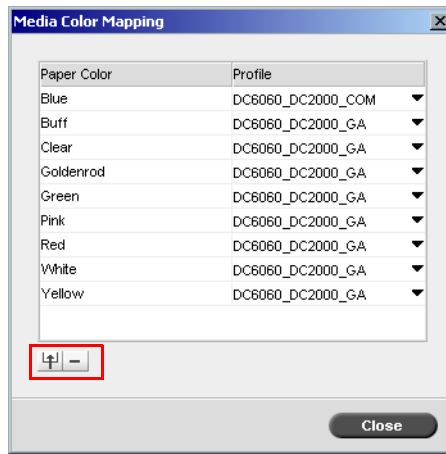
b. In the **Profile** column, select the desired profile for each paper color.

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

> **Note:** If you don't map a destination profile to a paper color, the CX Print Server uses the default profile, which is for white paper.
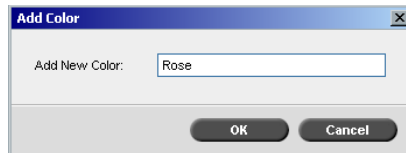
d. In the **Add New Color** box, type the name of the new color and click **OK**.

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

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 **delete** ⊟.

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 or CYMK colors that you want to protect.

Editing the Spot Color Dictionary

Individual job pages can contain RGB, CMYK, and spot color elements. The CX Print Server Spot Color Editor enables you to edit the CMYK values of every spot color in the Spot dictionary. You can edit these values 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 CX Print Server supports HKS and PANTONE 2000 spot colors.

Note: Spot colors—for example PANTONE—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 CX Print Server's entire collection of colors listed.
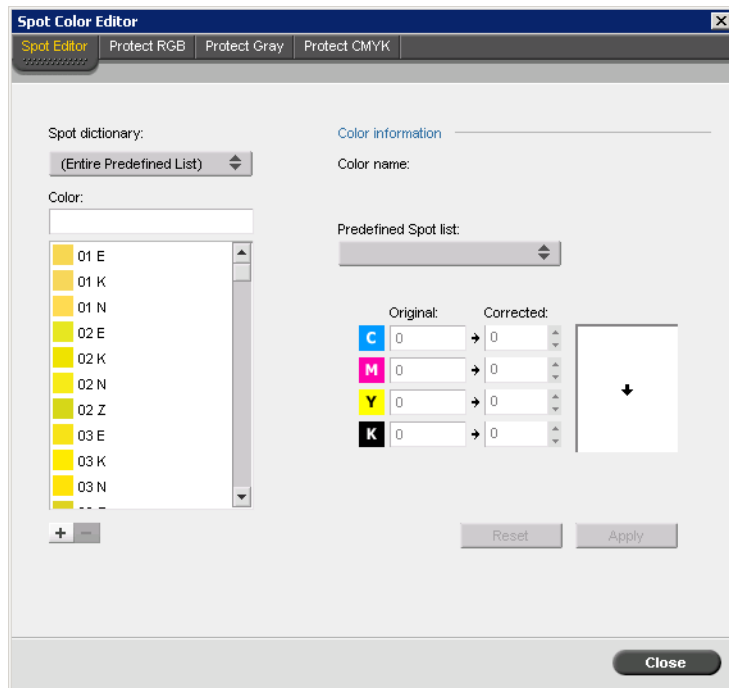
2. To find the color that you want to edit, do one of the following:

    *   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 box. For example, if you are searching for Cool Gray 4 and type c, the mouse pointer locates the first color in the list that begins with the letter *c*.

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

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

3. Select the desired spot color.

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

4. Change the CMYK values as desired.

5. 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 **add** .

    The Spot Editor dialog box appears.
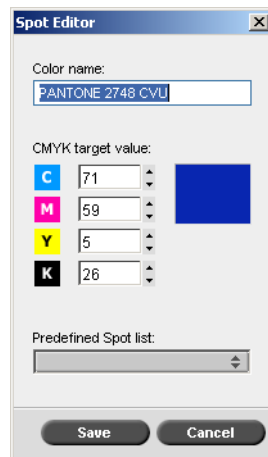
2. Type the new spot color name as it appears in the PostScript file.

    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 or CMYK spot color and enter a fixed CMYK target for it, the CX Print 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.
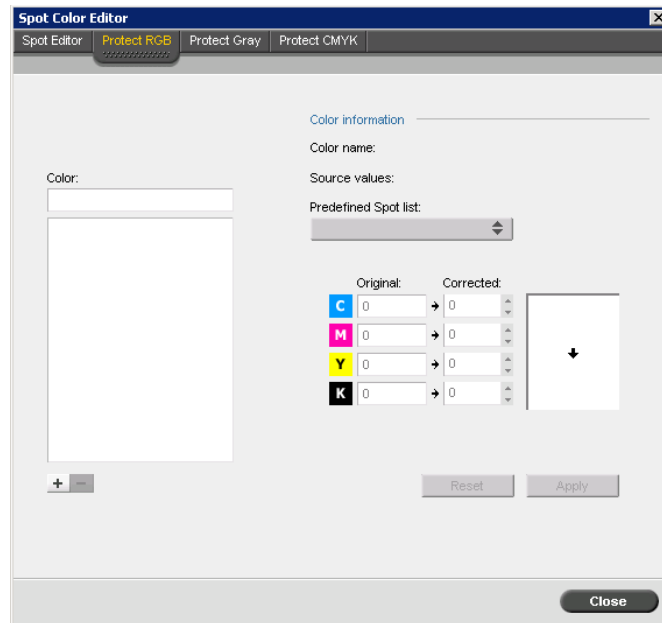
2. Click **add** .
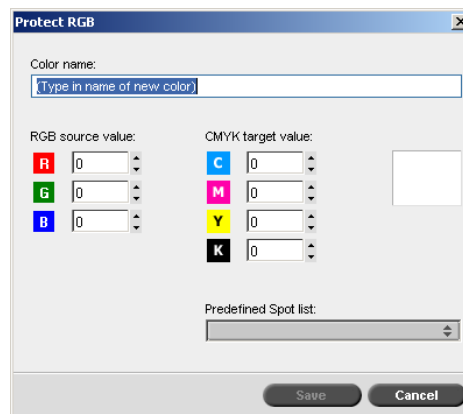
3. In the **Color name** box, type a name for your color.

4. Type the RGB source values and the CMYK target values, or select a spot color from the **Predefined Spot** list.

5. Click **Save**.

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

    The color information appears.
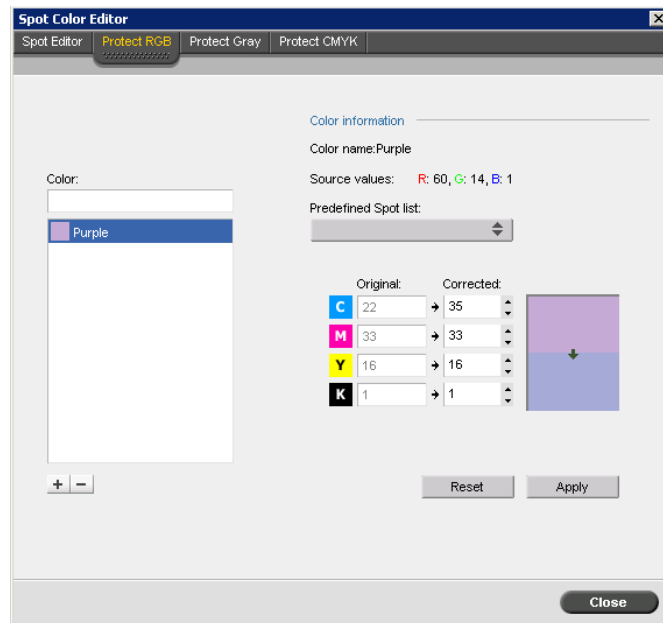
7. If necessary, in the **Corrected** column, adjust the CMYK values.

8. Click **Apply**.

To define a CMYK color as a spot color:

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

2. Click **add** .
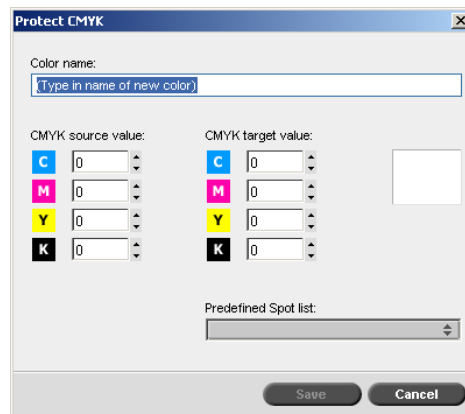
3. In the Protect CMYK dialog box, in the **Color name** box, type a name for your color.

4. Enter the CMYK source values or select a spot color from the **Predefined Spot** list.

5. Click **Save**.

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

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

8.   Click **Apply**.

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 CX Print Server also enables you to visually check the effect of different gradation adjustments on RTP jobs prior to printing.

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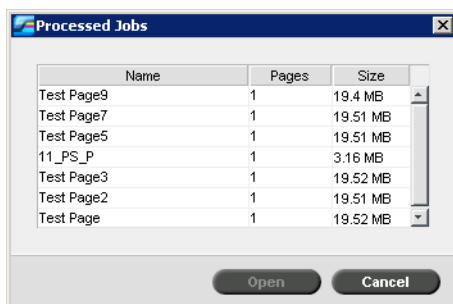
2. Select the job you wish to preview, and then click **Open**.

The job appears in the Gradation dialog box.
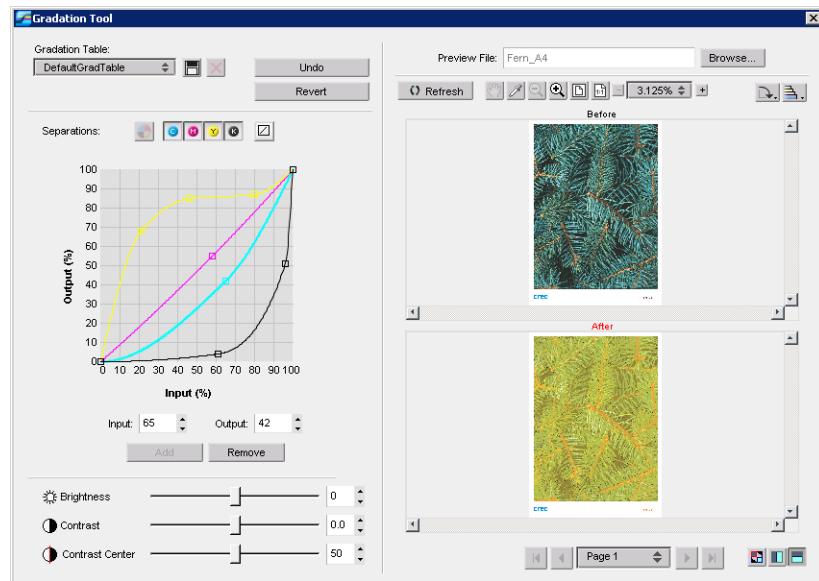
Editing Gradation Tables

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 196), the predefined settings are immediately applied to the processed job that you are working with.
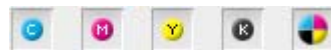
The separations buttons enable you to select one, all, or any combination of separations to edit for a specific gradation table. Selecting a specific separation enables you to change the color balance for a specific tonal range.

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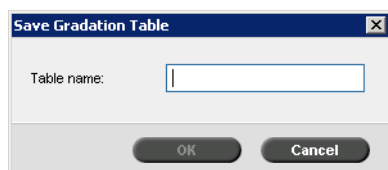
3. In the **Table name** box, type the desired name for the new gradation table, and click **OK**.

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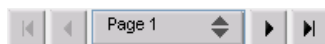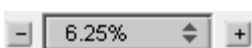
The navigation buttons enable you to select a specific booklet or page to view, and to browse the pages of the current job.

Using the Preview Tools

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

Table 15: 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
6.25%	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
Before/After view	Toggle between the **Before** and **After** views

This button:	Enables you to:
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 lightens 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 CX Print 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. If an element is used more than once, it is cached for further use. You can manage these elements in the Resource Center in the **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 146.

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 CX Print Server, its page size is automatically recognized. The page size is displayed in the CX Print 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 CX Print 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 CX Print 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.
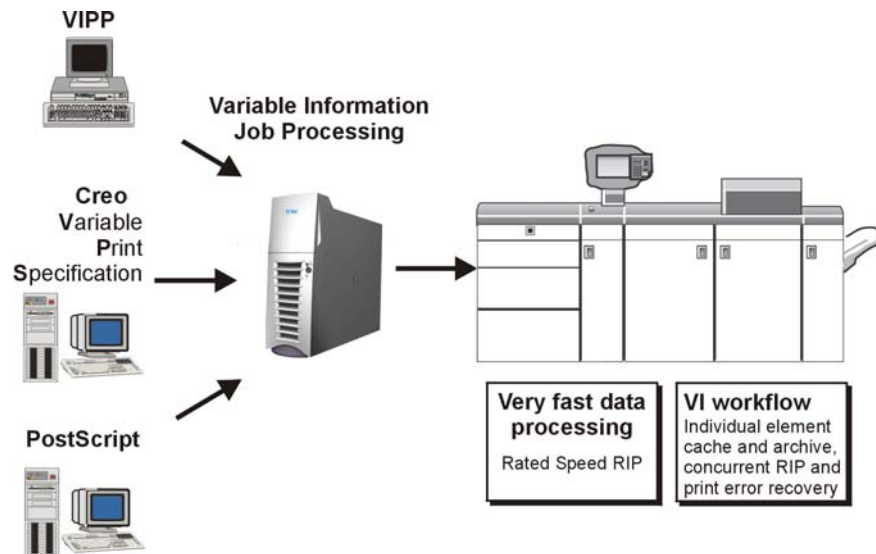
Creo Variable Print Specification

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 CX Print 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 CX Print Server and the DocuColor 8000AP billing meters.

  Reusable elements can be used repeatedly in different pages, booklets and jobs. On the CX Print 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 CX Print 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 CX Print Server, the number of pages per booklet is automatically recognized.

VIPP jobs are composed of the following four files:

Table 16: 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 17 lists in which sub-folders you should store VIPP job files.

Table 17: 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 CX Print 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 CX Print 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 CX Print Server
- Import VI elements to the CX Print 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 Word document or an Excel spreadsheet.

Using Creo Variable Print Specification to Print a VI Job

The CX Print 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 CX Print 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 80.

To print a VI job:

1. Copy VI graphic elements to one of the defined APR folders on the CX Print Server.

2. Submit your job to the CX Print Server.

   For more information about how to print files, see *Importing and Printing Jobs* on page 22.

Reusable elements are identified, processed, and placed in the Resource Center under the **CachedVI Elements** area. They are ready for rapid assembly into pages and for reuse during the printing stage.

Your VI job is processed and printed on the CX Print Server. The DocuColor 8000AP 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 CX Print 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 CX Print Server. The DocuColor 8000AP 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 187.

Job Deletion

When you are printing a large VI job that takes up a substantial amount of the CX Print 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 204.

Imposition

When you impose VI jobs, every booklet must have the same number of pages.

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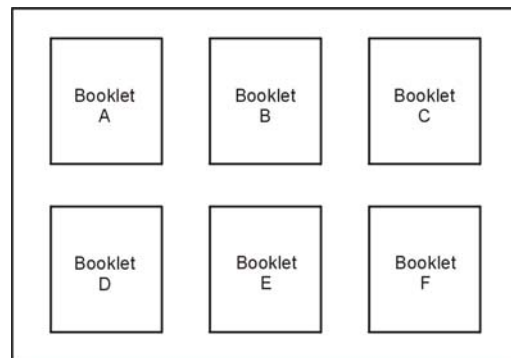
For a booklet with several pages, the pages are printed in order along the length of the sheet. The next booklet is printed beside the first. After the sheets are cut, the booklets are aligned with their pages in the proper order.

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 197.

Managing VI Elements

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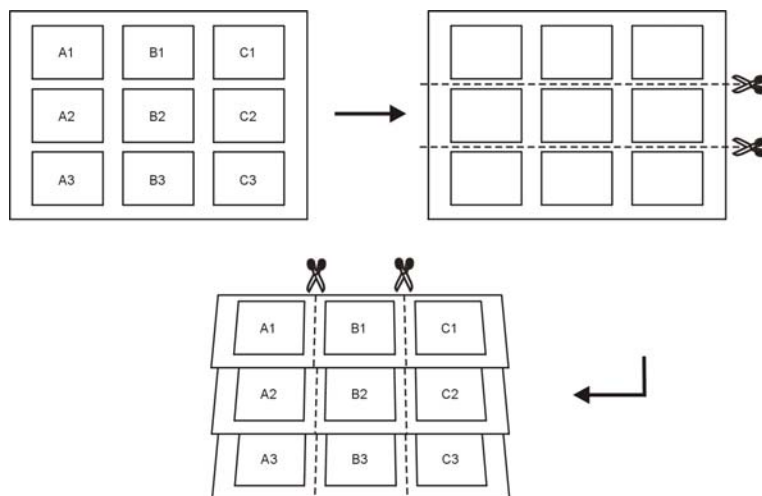
In the Resource Center, use the **Cached VI Elements** area to manage the VI elements on your system and to perform the following tasks:

- 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 CX Print Server. To free up disk space, you can delete the VI elements you no longer need.

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

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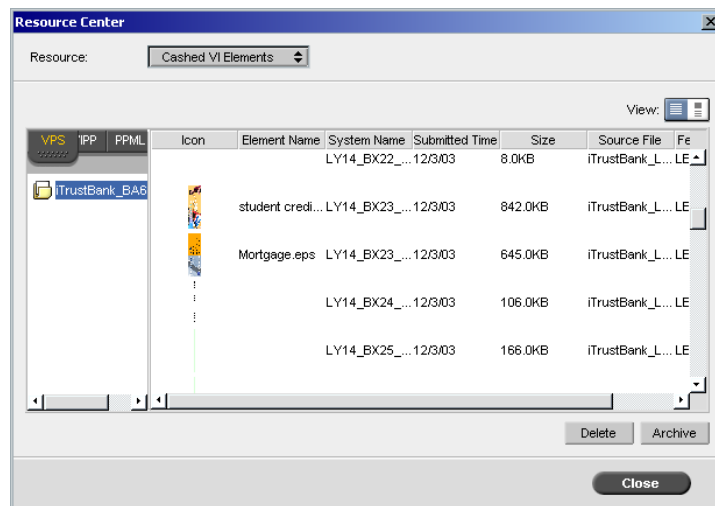
Your VI jobs are listed in the left pane. In the right pane, you can see all of the VI elements that are associated with your job. In addition, a thumbnail viewer lets you check elements visually.

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 Archive dialog box appears.
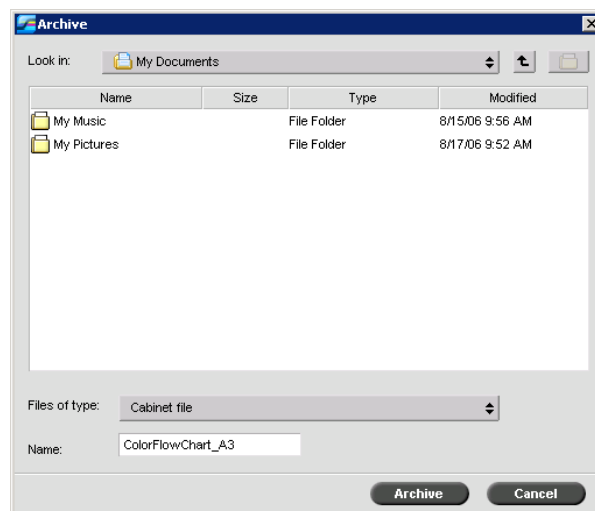
4. Find the location in which to archive your VI elements, and then click **Archive**.

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 Retrieve dialog box appears.
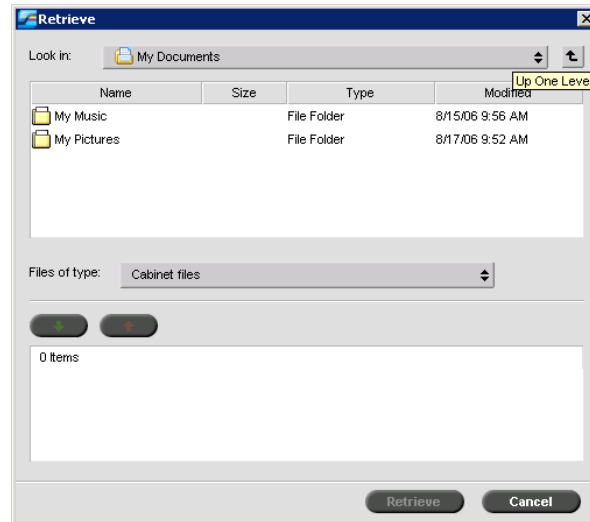
2. Select the folder in which your VI elements are archived.

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 CX Print 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 CX Print Server

Basic system configuration and settings are defined in the CX Print 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 CX Print Server as a guest, the Settings window is unavailable.

To save changes in the Settings window:

➢ In the Settings window, click **Save**.

Server Setup
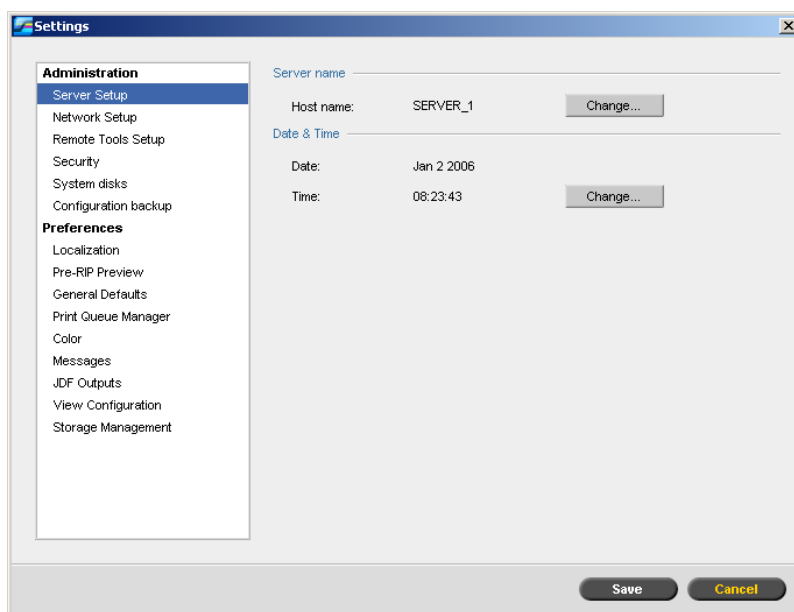
Changing the Server Name

1. In the Settings window, select **Server Setup**.

2. In the **Server Name** area, click **Change**.

   The System Properties dialog box appears.
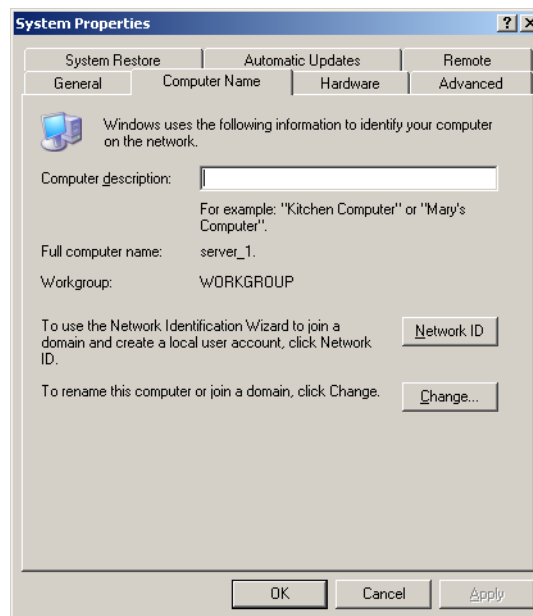
3. On the **Computer Name** tab, click **Change**.

   The Computer Name Changes dialog box appears.
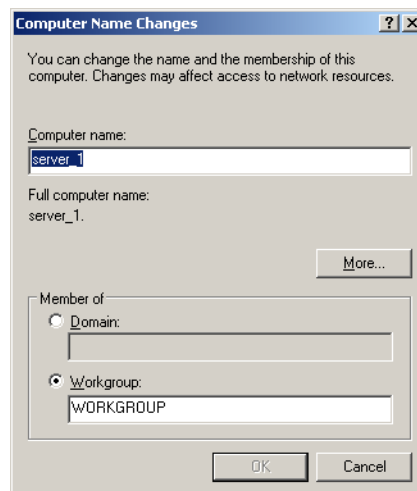
4. In the **Computer name** box, type a new name for the computer.

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**.

   A message appears notifying you that you must restart your computer for the new settings to take effect.

7. Click **OK**.

8. Click **OK** in the System Properties window.

   The computer automatically restarts.

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.
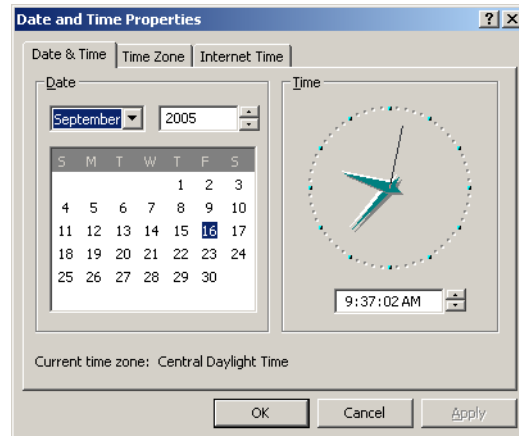
3. On the **Date & Time** tab, select your local time settings.

4. Select the **Time Zone** tab and set the correct time zone.
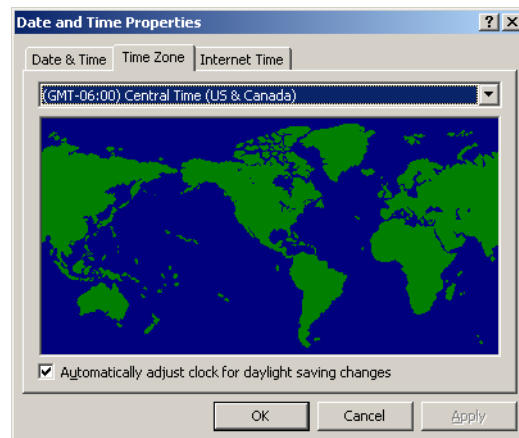
5. Click **OK**.

Network Setup
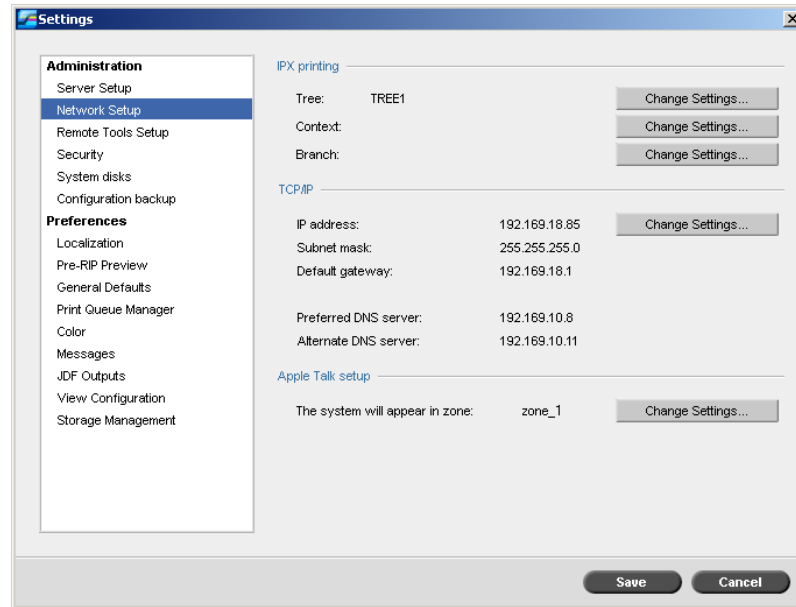
IPX Printing

IPX Printing enables the CX Print 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 CX Print 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.
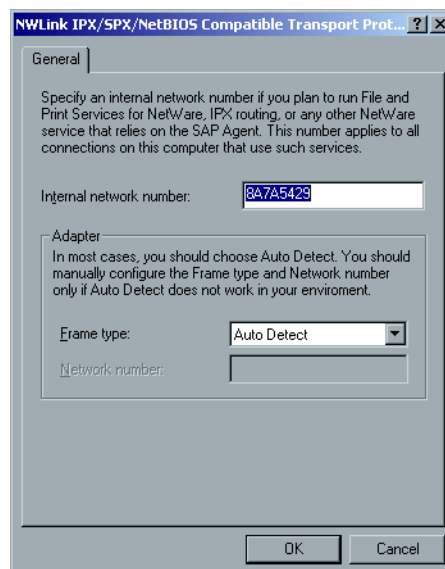
3. To change the frame type, select a frame type from the **Frame type** list and click **OK**.

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 CX Print 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.
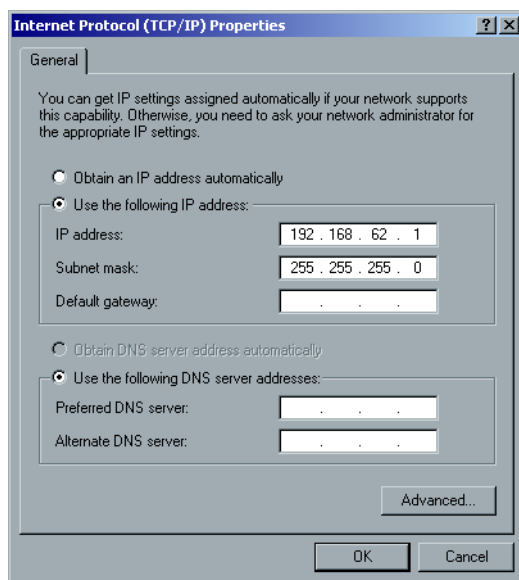
3. To change the IP Address, do one of the following:

   • 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.

Restart the CX Print Server for changes to take effect.

AppleTalk Setup

The **AppleTalk Setup** utility enables you to change the AppleTalk zone in which your CX Print 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.
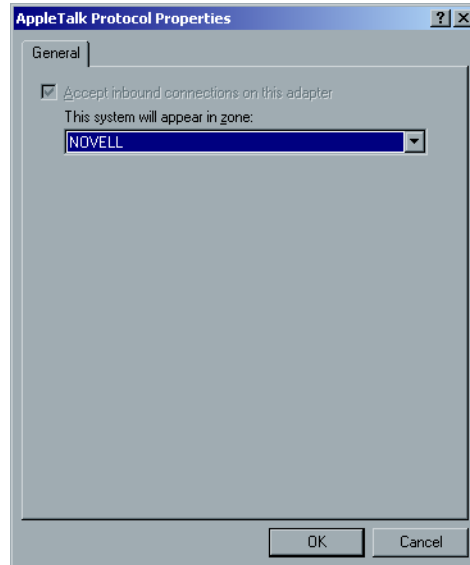
3. From the zone list, select the desired AppleTalk zone for your computer, and click **OK**.

4. In the Local Area window, click **OK**.

    After you have exited the CX Print Server software, a message appears indicating the Apple Talk zone has been changed. You must restart the CX Print Server for changes to take effect.

Remote Tools Setup

The **Remote Tools Setup** parameter includes setup for the **Remote Admin** tool and enables the connection of clients to the CX Print Server over the network using the **Spire Web Center**.
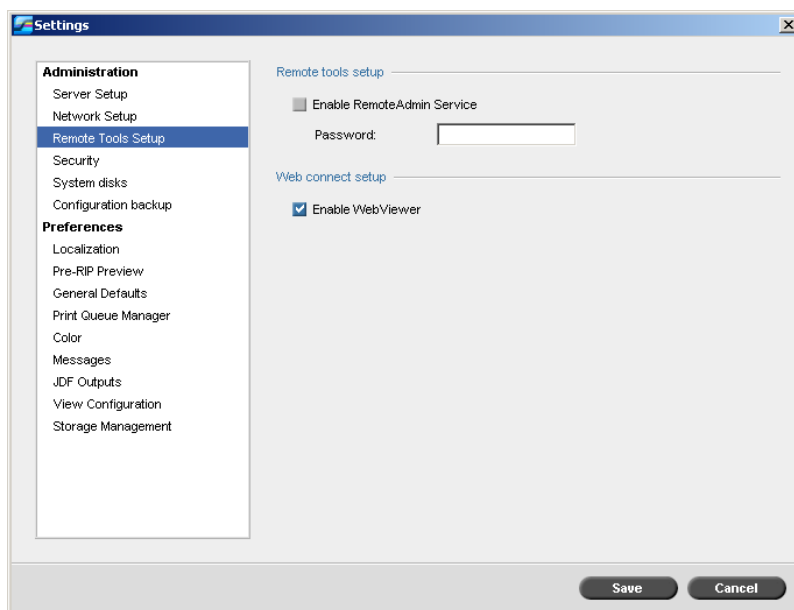
Remote Admin

The **Remote Admin** utility enables the system administrator to connect, view, operate and perform administration actions on the CX Print Server from a client workstation. While this remote connection and operation takes place, the regular operation of the CX Print Server is not affected. In fact, the only indication the Spire operator has that such connection takes place is in the **DFE and Printer Animation** and in DFE Monitor window.

The following graphic shows the **DFE and Printer Animation** as it is presented when the remote session is active (for administrator only).
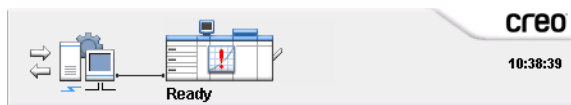
To secure the remote connection, a password should be assigned by the system administrator.

Note: This tool is designed for the exclusive usage of the system administrator. Clients who would like to connect to the CX Print Server from their workstations may do so by using the **Spire Web Center**, which enables you to view and monitor your jobs in the CX Print Server queues.

For more information about viewing and monitoring your jobs from a client workstation, see *Spire Web Center* on page 57.

The remote admin setup process includes the following stages:

1. On the CX Print 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 CX Print 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.
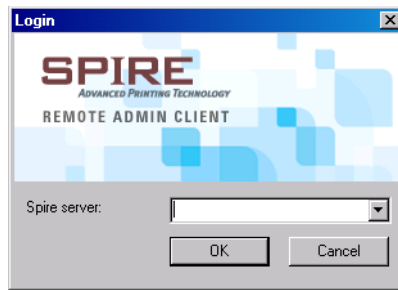
2. From the **Spire Server** list, select the desired CX Print Server.

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 CX Print Server workspace appears on your screen.

Web Connect Setup

The **Web Connect Setup** enables clients to connect to the CX Print 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 57.

To enable web connections:

1. In the Settings window, select **Remote Tools Setup**.

2. In the **Web connect setup** area, select **Enable WebViewer**.

3. Click **Save**.

Security
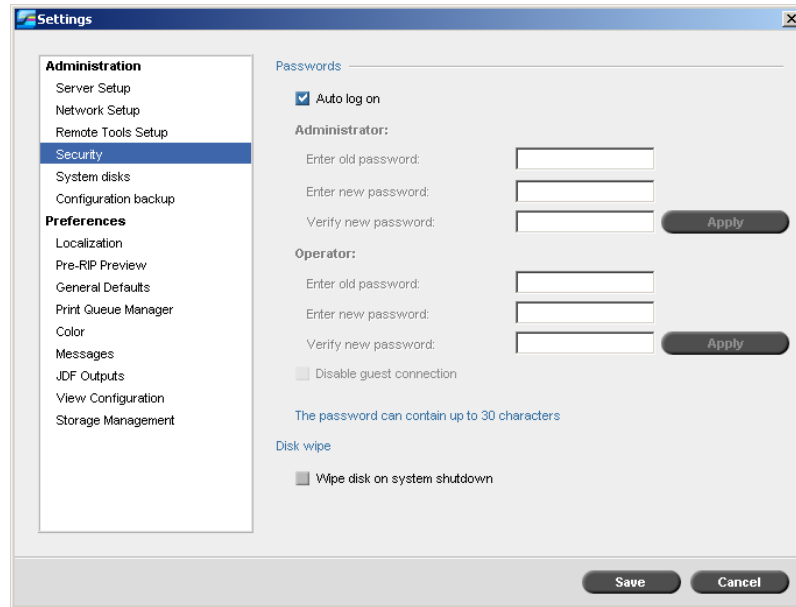
User Passwords

The system administrator assigns each user an access level, as follows:

- **Operator (default):** Enables the user to operate the CX Print Server and configure the **Preferences** area in the Settings window

- **Administrator:** Enables the user to access all features and settings on the CX Print 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 CX Print 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. This 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. When you exit the CX Print Server software, 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. Click **Save**.

4. Quit the CX Print Server software.

    The Spire Disk Wipe dialog box appears.
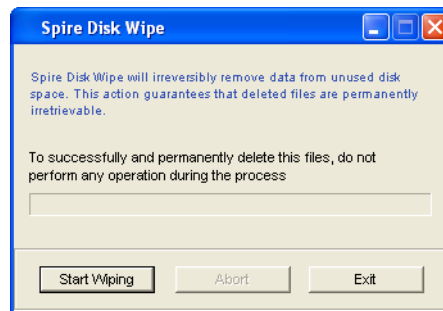
5. Perform one of the following actions:

    *   Click **Start Wiping** to begin the disk wipe procedure

    *   Click **Exit** to not perform the disk wipe procedure and close the Spire Disk Wipe dialog box.

Notes:

*   The disk wipe operation permanently deletes files

*   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 CX Print 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 are 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
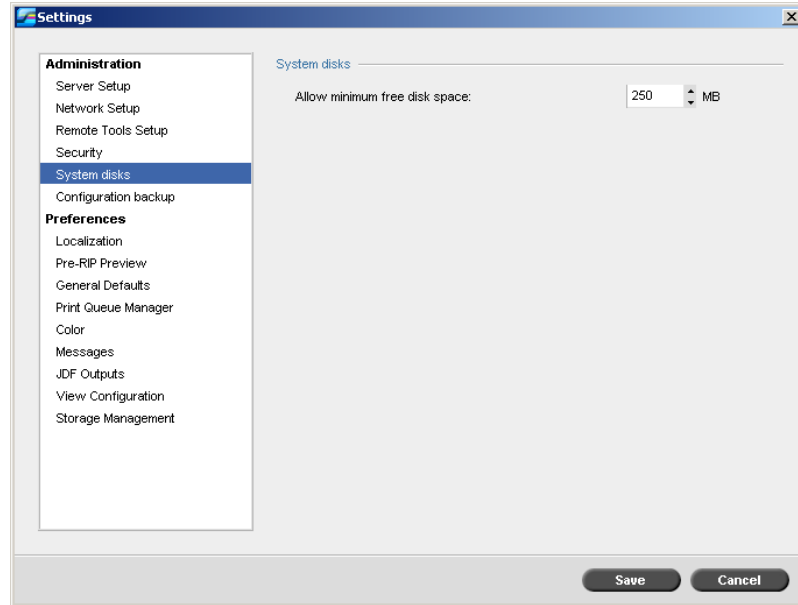
When the printer or user disks reach a pre-defined threshold of minimum available space (the default is 250 MB), RIP is suspended and a system warning message appears. The RIP resumes automatically only after disk space is available.

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.

3. Click **Save**.

Backing up the Configuration

The **Configuration Backup** item enables you to back up your CX Print 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 CX Print Server.
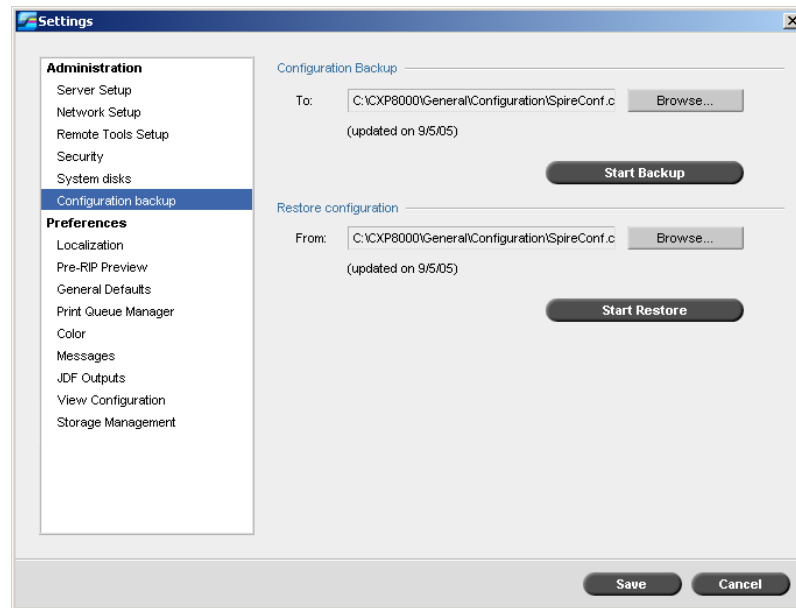
Configuration Backup

To back up the configuration of your CX Print 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:/CX8000AP/General/Configuration**.

6. When the backup procedure has been completed, the following dialog box
    appears:

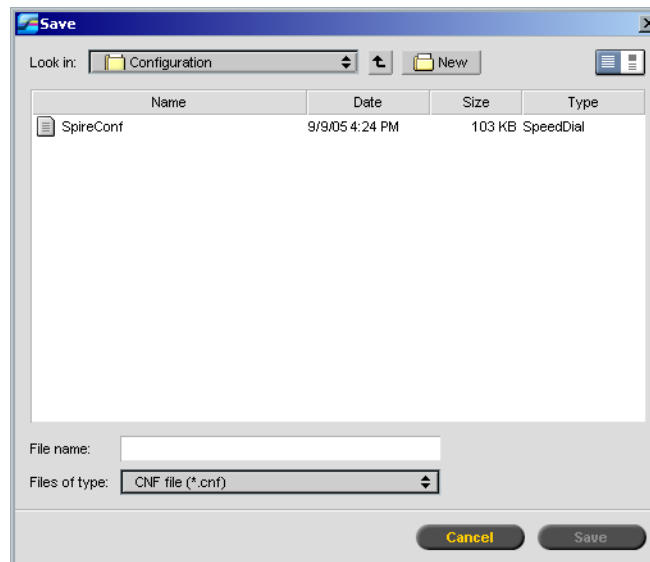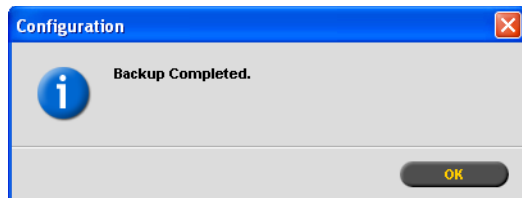
7. Click **OK**.

    Note: Two files are created during the backup procedure, SpireConf.Cab
    and SpireConf.CNF.

Configuration Restore

To restore the configuration on your CX Print Server:

1. In the Settings window, select **Configuration Backup**.

2. In the **Restore Configuration** area, click **Browse** and locate the directory path
    from which to restore the configuration.

    Notes:

    • The configuration file name will always be **SpireConf** (CNF file).

    • You may also restore the configuration from an external media.

3. Click **Start Restore**.

    The Restore Configuration window appears.
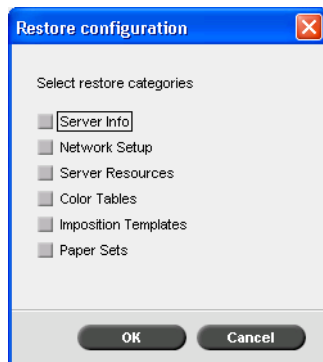
4. Select the categories that you want to restore and click **OK**.

    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:
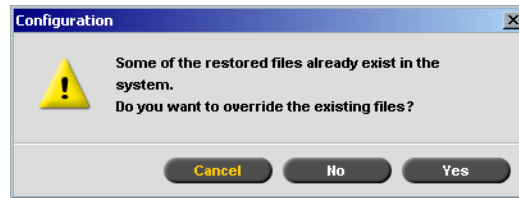
5. Click **Yes** if you would like the restored files to replace the current ones. Click **No** if you do not want the restored files to replace the existing files.

If you selected **Yes**, the following message appears:
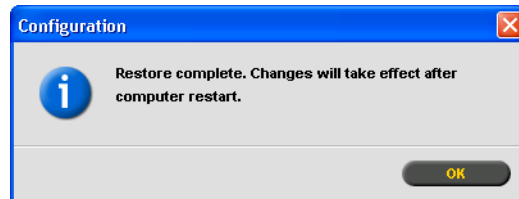
6. Click **OK**.

Your changes will take effect once you have restarted the CX Print Server.

Note: The Restore Configuration date is updated in the Configuration Backup window.

Localization
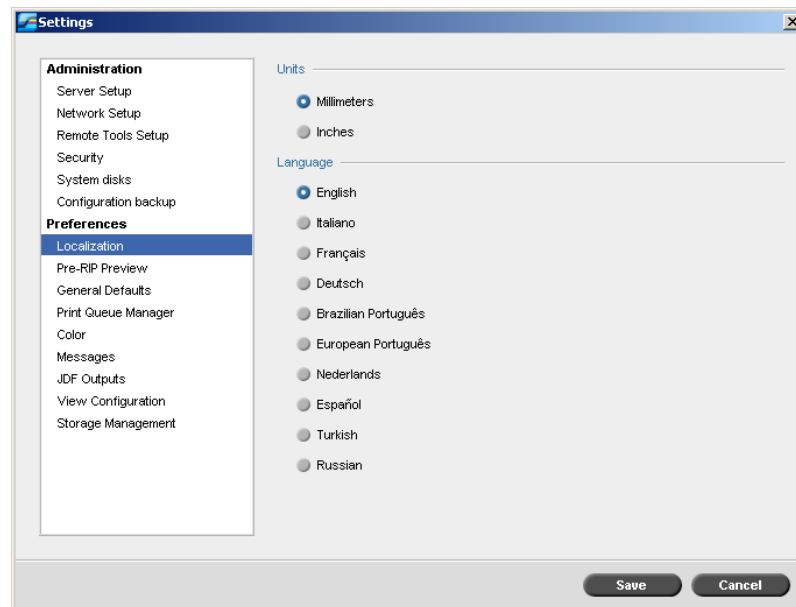
Setting the Local Units of Measure

1. In the Settings window, select **Localization**.

2. In the **Units** 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 CX Print Server software.

When configuring the CX Print Server interface for Russian localization, several steps must be performed manually to define Russian as the default language.

1. Close the CX Print Server and turn off the DocuColor 8000AP**.**

2. On the desktop, go to **Start** > **Settings** > **Control Panel**.

3. Double-click **Regional and Language Options** and select the **Advanced** tab.
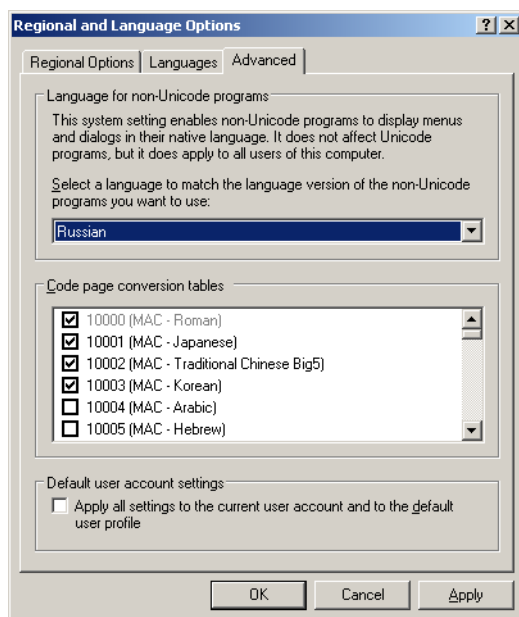
4. In the **Language for non-Unicode programs** area, select **Russian** from the list.

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.
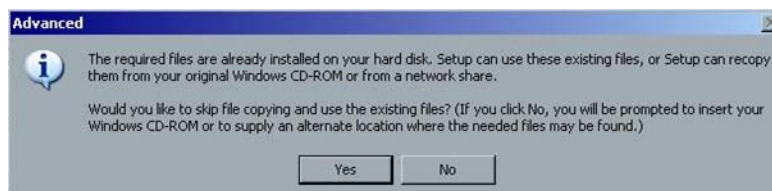
9. Restart the CX Print Server.

10. Wait until the CX Print Server workspace appears, and then turn on the DocuColor 8000AP.

Pre-RIP Preview
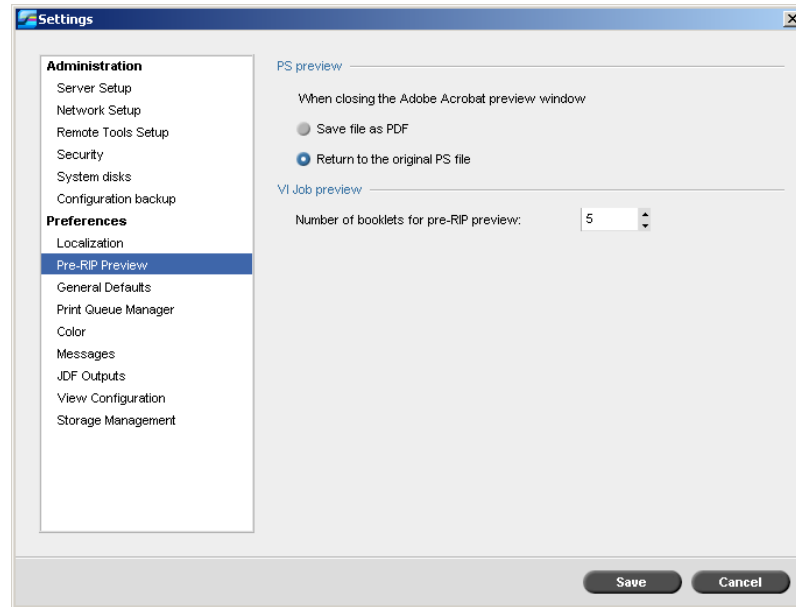
1. In the Settings window, select **Pre-RIP Preview**.

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.

4. Click **Save**.

General Defaults
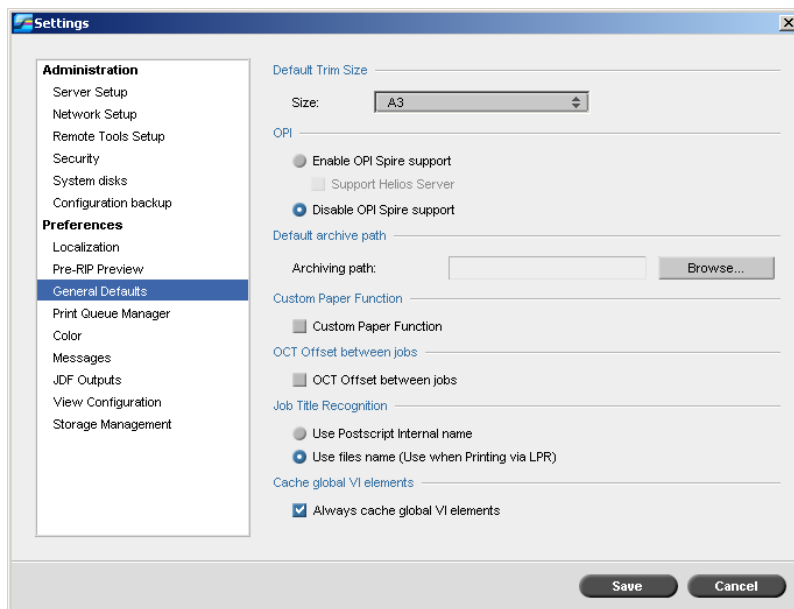
1. In the Settings window, select **General Defaults**.

2. In the **Default Trim Size** area, select the **Size**.

3. In the **OPI** area, select the desired **OPI** setting.

    For more information about setting the OPI, see *OPI* on page 81.

4. In the **Default archive path** area, set the archiving path.

    For more information on the default archive path, see *Archiving and Retrieving Jobs* on page 30.

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 44.

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 CX Print 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.

9. Click **Save**.

Print Queue Manager
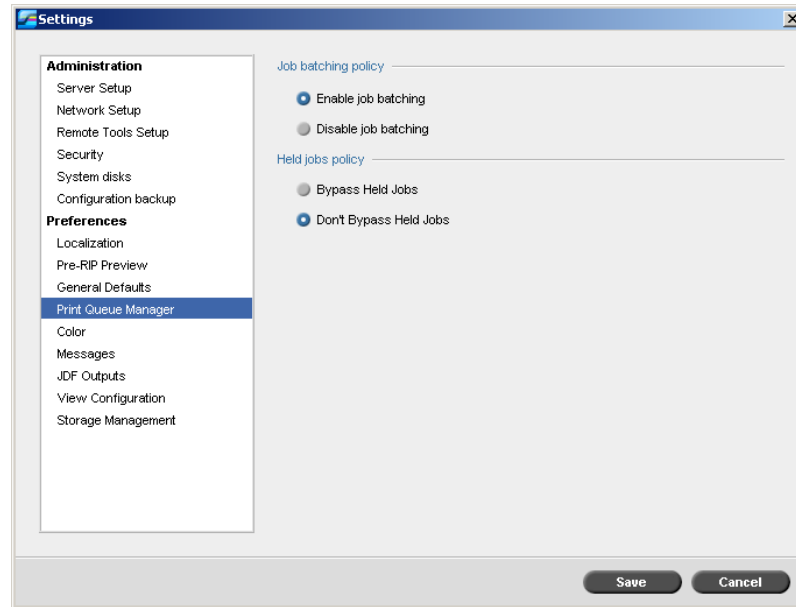
Job Batching

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.

3. Click **Save**.

For more information about job batching, see *Batching Jobs* on page 24.

To set the desired held jobs option:

1. 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

2. Click **Save**.

Color
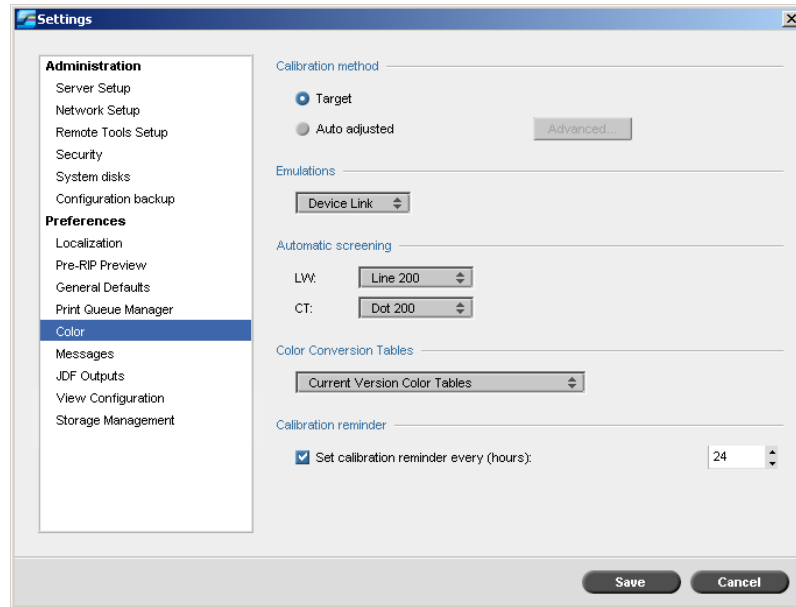
Calibration

For more information on setting the calibration method, see *Setting the Color Calibration Method* on page 112.

Emulations

Using this utility, you can select the desired emulation method:

- Device Link (default)

- CSA

Note: The emulation profiles that are displayed in the Job Parameters window are related to the selected emulation method. For more information on emulation, see *CMYK Workflow* on page 193.

To specify the emulation method:

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

2.   In the **Emulation** area, select the desired emulation method from the list.

Automatic Screening

The CX Print Server supports Dot and Stochastic screening. When you print a job from the CX Print Server, on the **Color** tab, under the **Screening** parameter, select the desired screening method or choose **Automatic**. 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 195.

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.
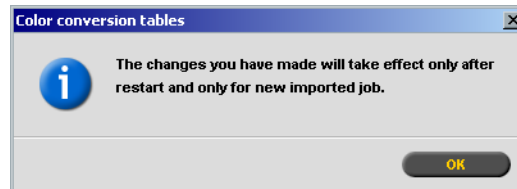
3. Click **OK**.

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

Accounting Log Setup

By default, all the jobs that were handled during the past 90 days are listed in the CX Print 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**.
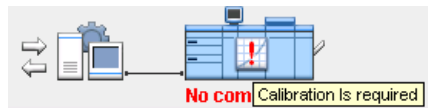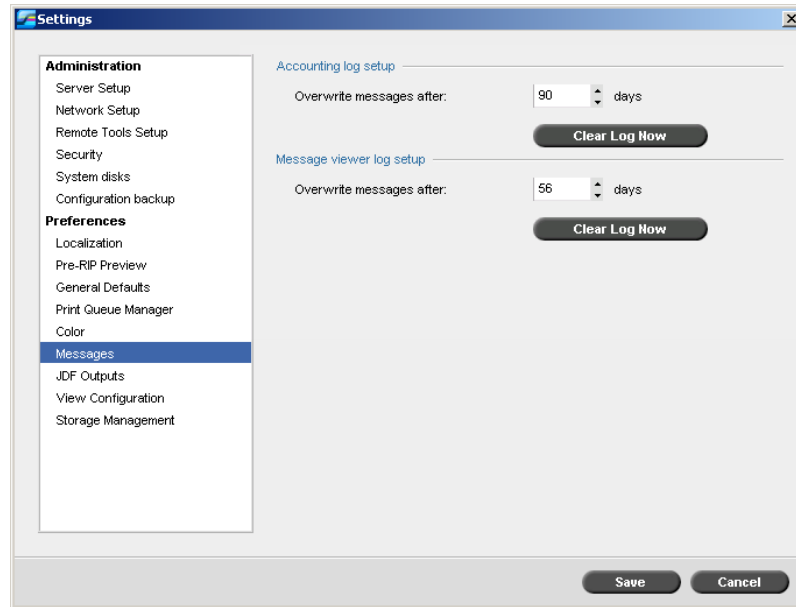
3. To remove all the existing information from the windows, whenever desired, click **Clear Log Now**.

For more information about the Accounting window, see *Job Accounting* on page 177.

Message Viewer Log Setup

By default, all the jobs that were handled during the past 56 days are listed in the CX Print 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**.

For more information about the Message Viewer, see *Job Accounting* on page 177.

JDF Outputs
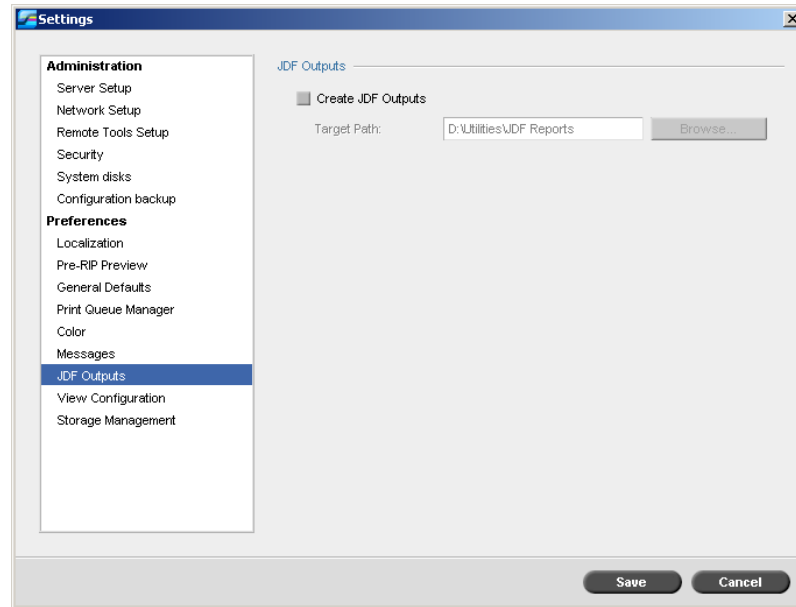
The CX Print Server receives the JDF job ticket via hot folders, returns JDF output with job accounting information, and submits JMF (Job Messaging Format) signals with the job's status.

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
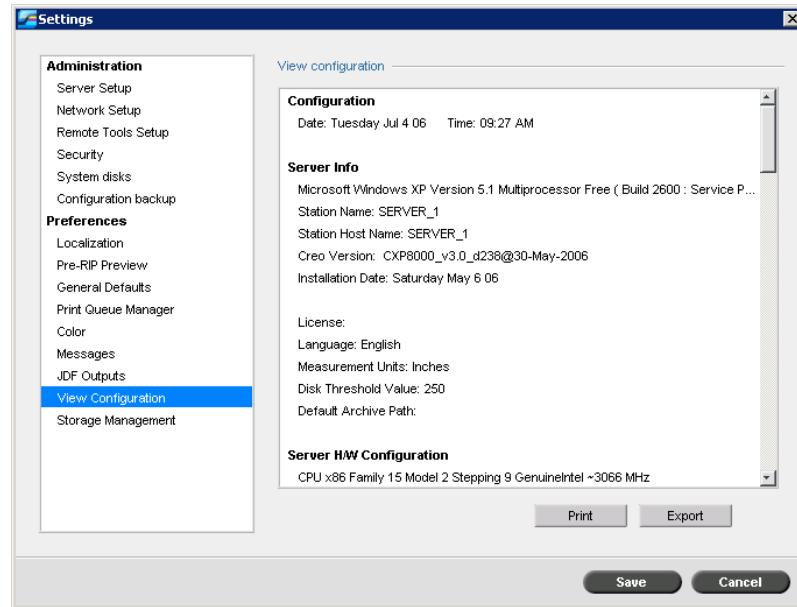
The **View Configuration** utility enables you to view the configuration of your CX Print Server and to print it to any printer on the network connected to your CX Print Server. In addition, you can save the configuration in the network or export it to an external media as a text file.

To print your configuration:

1. In the Settings window, select **View Configuration**.

2. Click **Print**.

    The Page Setup dialog box appears.

3. Set the printing options as desired and click **OK**.

    The Print dialog box appears.

4. From the **Printer** list, select a printer and click **OK**.

To export your configuration:

1. Click **Export**.

    The Save window appears.
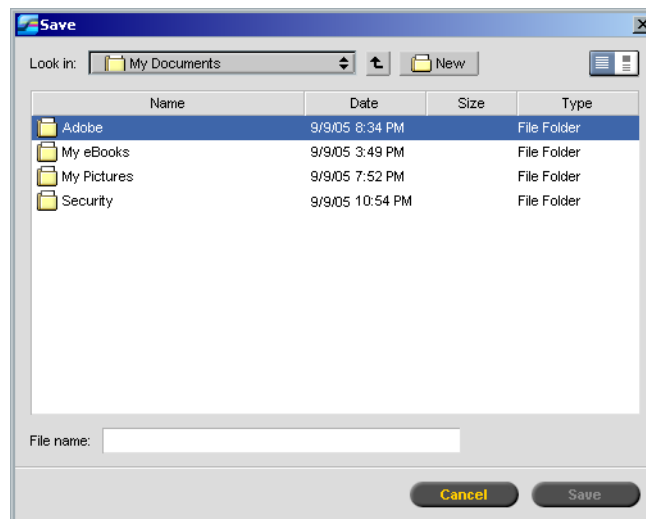
2. Locate the desired folder, and click **Save**.

Storage Management
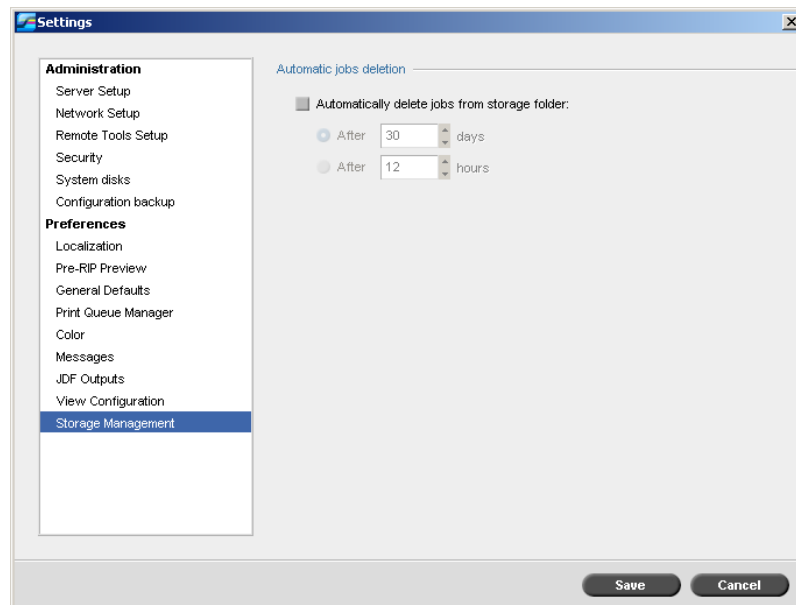
The **Storage Management** utility enables you to set a deletion policy for the Storage folder.

1. Select the **Automatically delete jobs from storage folder** check box.

2. Select the **After...days** or **After...hours** option, and enter the number of days or hours after which the CX Print Server should delete jobs from the Storage folder.

3. Click **Save**.

System Messages

While jobs are being handled by the CX Print 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 CX Print 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.

➢ 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.
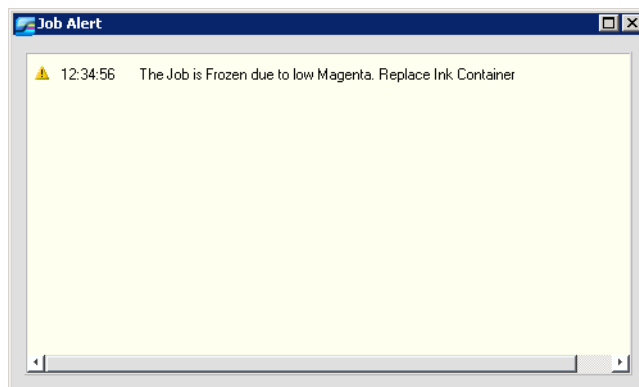
For more information about setting the system disk's threshold, see *System Disks* on page 160.

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).
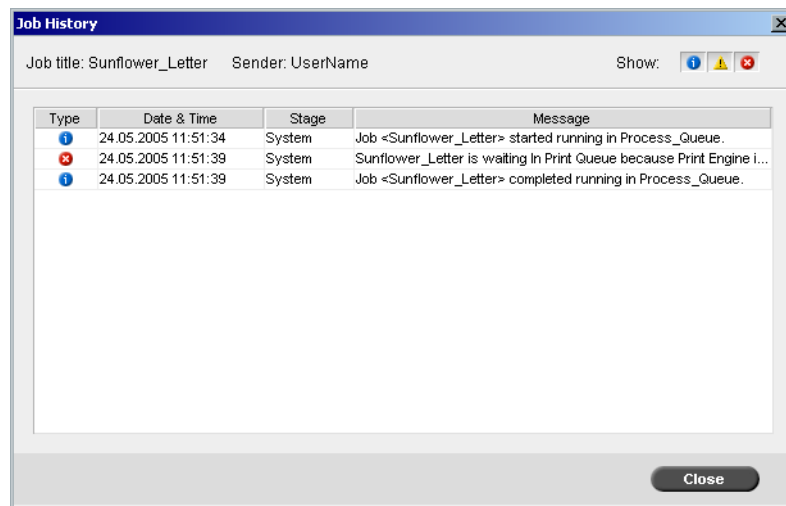
Message Information

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, Process, or System)
- 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 174.

By default, all the jobs that were handled during the last 56 days are listed.

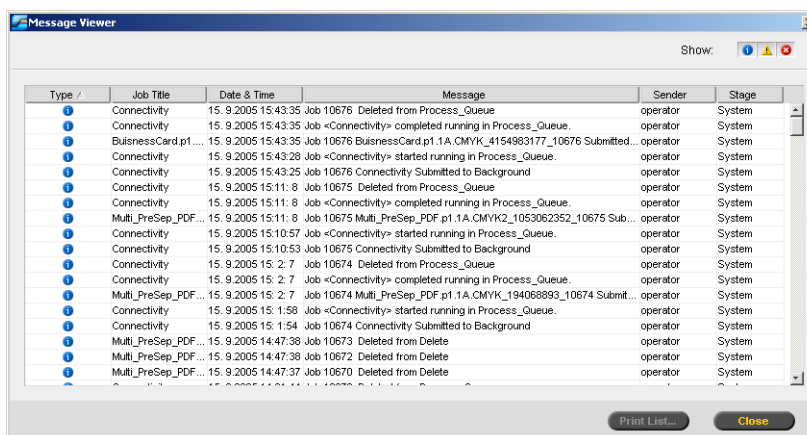The default may be changed in the Settings window under **Messages**. For more information about changing the default setting, see *Messages* on page 170.

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.
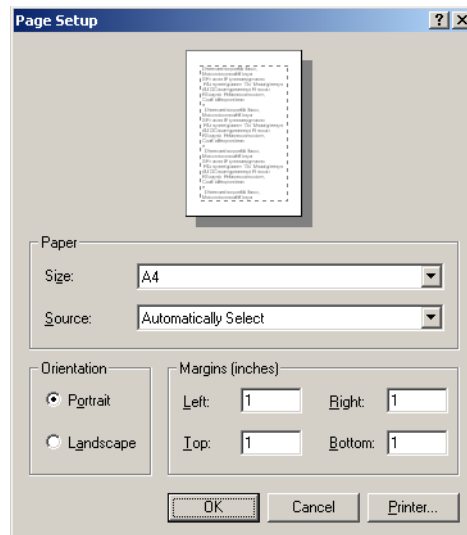
3. Set the printing options as desired, and then click **OK**.

Job Accounting

The Accounting feature provides information about all the jobs that were printed successfully via the CX Print 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, 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 CX Print 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 three 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 18: Description of columns in the Accounting Viewer

Column name	Indicates the
Title	Original name of the file related to this job (that is, without the extension)
Job Size	Job size in MB
Sender	User name of the person who submitted the job when the CX Print Server is logged on to a domain controller. If the CX Print Server is not logged on to a domain controller, "guest" will be displayed in the Sender column.
Started Process	Date and time on which the job started processing
Processing Time	Total time during which the job was processed
Started Printing	Date and time on which the job first started printing
Printing Time	Total time during which the job was printed
Paper Size	Size of the media set for the job—for example, Letter, A3, A4
Paper Weight	Paper weight in gs/m

Table 18: Description of columns in the Accounting Viewer

Column name	Indicates the
Coating	Paper stock coating status (Coated or Uncoated)
B/W Pages	Number of black-and-white pages in the original PDL file
Color Pages	Number of color pages in the original PDL file
Purged B/W Pages	Number of B/W pages that were already in the paper path, and were cleared due to job abort, or paper jam
Purged Color Pages	Number of color pages that were already in the paper path, and were cleared due to job abort, or paper jam
Total Pages	Number of pages that were printed
Sets	Actual number of printed copies
Account	[Optional] string of text, if such was entered in Job Parameters
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 CX Print Server Accounting window. Also, all jobs that were handled during the past 56 days are listed in the CX Print 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 170.
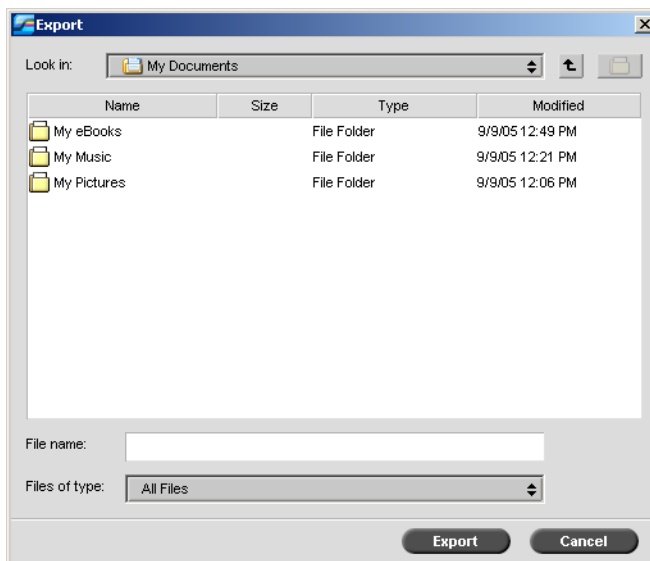
Printing and Exporting the Accounting Log

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 window appears.

3. Locate the folder in which to save the report.

4. In the **File name** box, type a name for the file.

5. Click **Export**.

   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, use SHIFT or CTRL to 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 CX Print Server (that is, it will still be displayed in the Job Accounting window).

6. If desired, open the *.txt file in a text editor or in a spreadsheet software—for example, 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, use SHIFT or CTRL to select the desired rows. The printed report will include only these rows.

2. Click **Print List**.

    The Page Setup window appears.
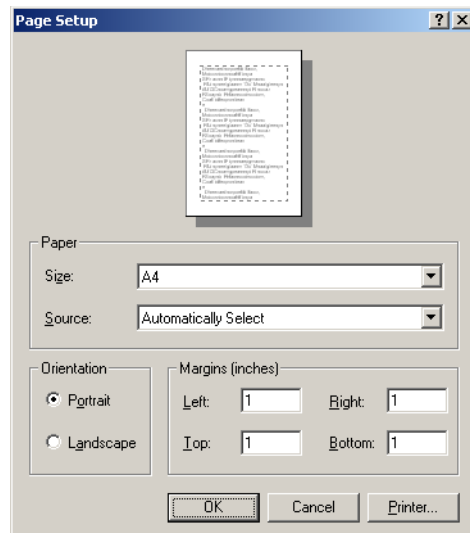
3. Set the printing options as desired and click **OK**.

    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.

9

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 17.

The Print Settings Tab
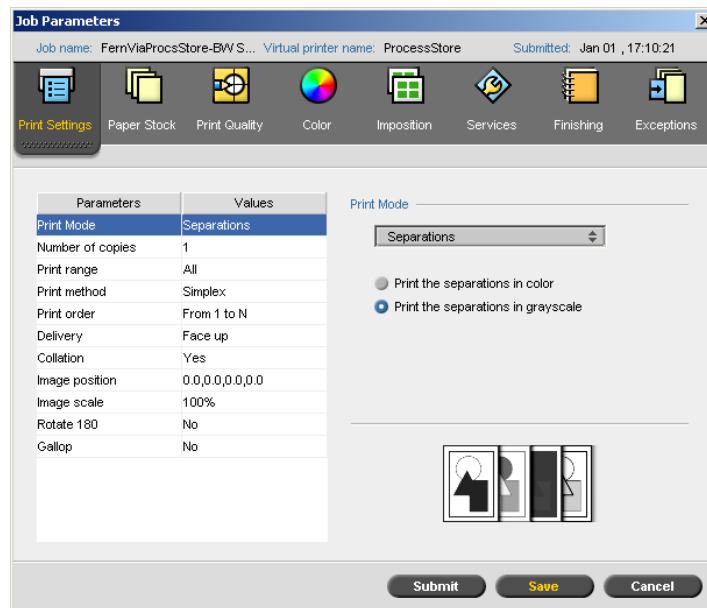
Print Mode

➢ 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 separations, each page in the job is printed separately in four colors: cyan, magenta, yellow, and black. If you select grayscale, each page in the job is printed separately four times in different shades of grayscale (K).
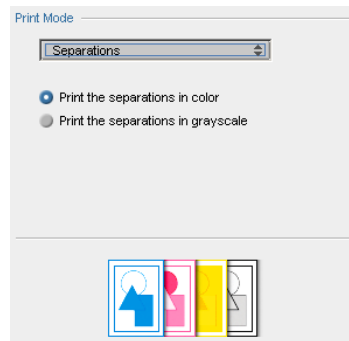
❒ **Progressive**—prints each page of the job four times in progressive color separations:

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**—enables you to select the separations that you want to print for each sheet for each page of the job.

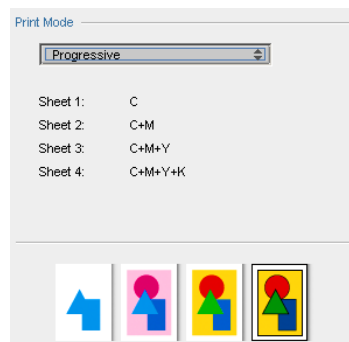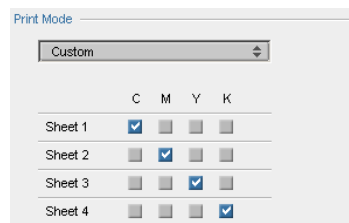## Number of Copies

➢ 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 > HCSS 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 44.

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 44.

   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 DocuColor 8000AP, 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 mismatches with 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 166), in the **Custom Profile** list, select the custom profile.

Mixed Paper Size

➢ Select the **Mixed paper size document** check box if the job contains different paper sizes.

The Print Quality Tab
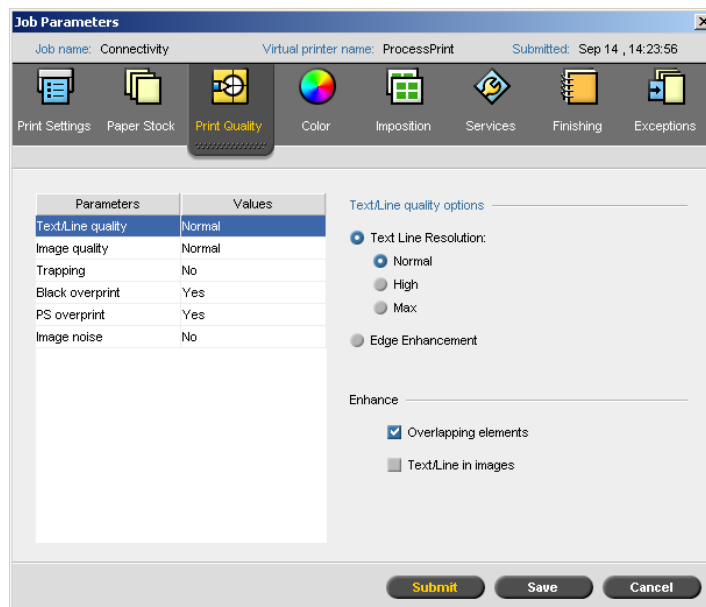
Text /Line Quality

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 edge quality of overlapping vector and image elements—for example, text on top of a transparent image

        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—for example, scanned images or screen captures

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 CX Print 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
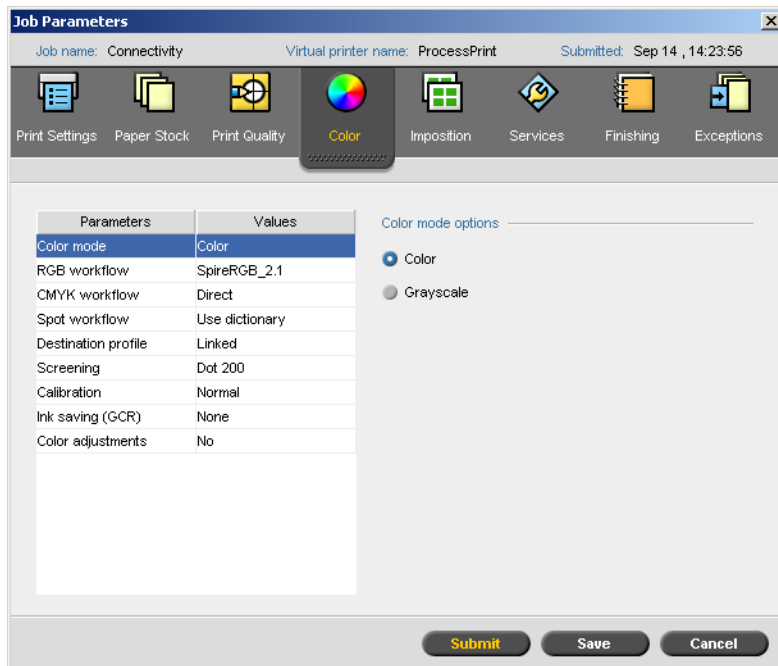
Color Mode

➢ 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 the CX Print Server and DocuColor 8000AP billing meters count the grayscale images as black and white instead of color.

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.

To select RGB workflow options:

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 a definition of "rendering intent", see page 222.

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 result in slightly different values (R+/-4=G+/-4=B+/-4) to produce gray.

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: The CMYK workflow optios does affect RGB colors.

Under **CMYK workflow**, you can also specify the desired rendering intent for CMYK elements.

To select CMYK workflow options:

1. In the **Original** list, select one of the following options:
    *   **Direct** to print the CMYK elements without any color transformation
    *   **Use Source CSA** to use the embedded CSA from the PostScript file

2. In the **Emulation** list, select the desired emulation.

    Note: The system emulates the selected option during the RIP process. GCR and CMYK emulation do not affect the processed job.

    *   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 emulation method.
        *   When you select the **Emulate source paper tint** check box, the CX Print Server applies the absolute colorimetric rendering method.

    *   To convert RGB elements according to the selected CMYK emulation method, select **Emulate RGB elements** . The RGB elements receive the same look as the CMYK elements, creating a consistent appearance.

    *   To preserve pure cyan, magenta, yellow, and black during transformation, select the **Preserve pure colors** check box .

3. In the **Rendering intent** list, select the desired option.

    For a definition of "rendering intent", see page 222.

Spot Workflow

By default, the CX Print Server searches the spot color dictionary for the correct value for each recognized spot color.

For more information about the Spire spot color dictionary, see *Spot Color Editor* on page 128.

➢ Select the relevant options:

  ❑ Select **Use Spire spot color dictionary** to have the CX Print Server use spot colors in the dictionary

  ❑ Select **Protect RGB colors** to retain RGB colors as defined

  ❑ Select **Protect CMYK colors** to retain CMYK colors as defined

Note: If you protect RGB or CMYK colors, all colors in the job with that specific combination 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's color as well as that of the logo, sometimes producing 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 are four predefined CX Print Server profiles:

- **DC7000_DC8000_GA**—professional-look graphic arts profile
- **DC7000_DC8000_GA2**—professional-look graphic arts profile with enhanced, cleaner RGB reds
- **DC7000_DC8000_COM**—gives pure appearance for blues and reds in CMYK emulation (for commercial use)
- **DC7000_DC8000_COM2**—COM profile with a modified RGB gamut (for commercial use)

For more information on managing destination profiles, see *Profile Manager* on page 125.

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 CX Print 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 115 and *Editing Calibration Tables* on page 119.

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
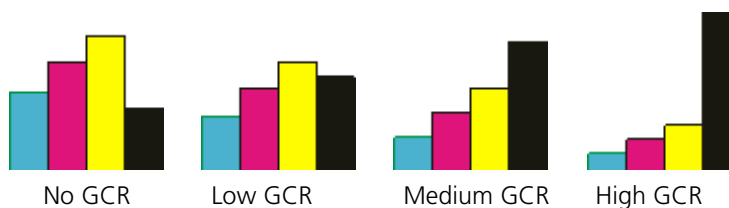
- ☐ **None:** no GCR is performed on the file, and the printer applies maximum dry ink coverage

- ☐ **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 CX Print 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 133.

➢ 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 99.
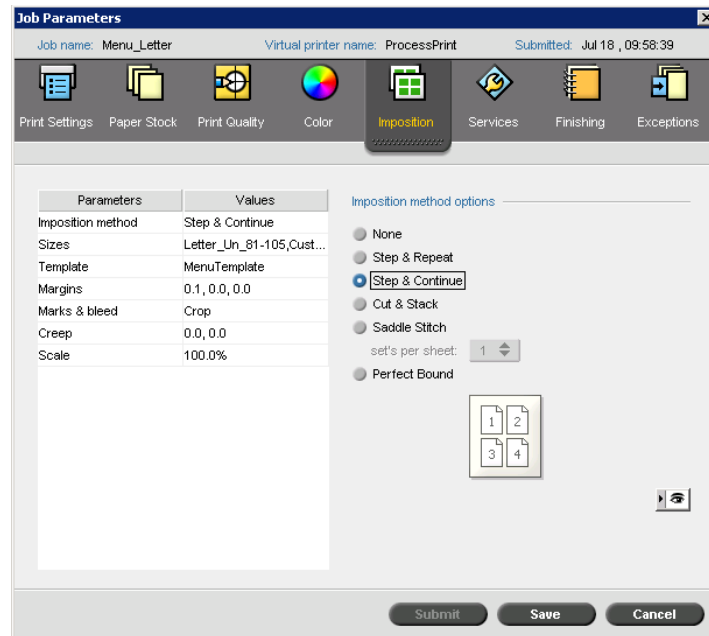
Imposition Method

The **Imposition Method** parameter specifies the method with which printed sheets are imposed.

➢ Select one of the following options:

❑ **None** for no imposition (this is the default option).

The imposition parameters become unavailable and the thumbnail viewer does not display an image.

❑ **Step & Repeat** to print multiple copies of the same image on one sheet so that the sheet is filled to capacity. This method is used mainly for printing business cards.

Note: You can use specific step-and-repeat templates to print several different images on one sheet.

❑ **Step & Continue** to print different pages of a job on one sheet so that the sheet is filled to capacity.

❑ **Cut & Stack** to print, cut, and stack jobs in the most efficient manner while preserving the original page order. 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 change settings on the **Exceptions** tab or define any exceptions.

❑ **Saddle Stitch** to print pages that are ready for the saddle-stitching book-finishing technique. With this technique, the pages of a book are attached through stitching or stapling in the spine fold. The technique is usually used for printing brochures.

When using the saddle-stitch imposition method, you can select the **sets per sheet**. This option enables you to select how many sets of the job will print on one press sheet.
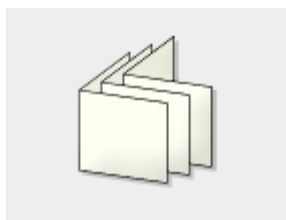
❑ **Perfect Bound** to print pages that are ready for the saddle-stitching book-finishing technique. With this technique, the pages of a book are attached by trimming the spine fold, roughening the edges of the gathered pages, and gluing them together. The technique is usually used for hardcover books.

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 CX Print 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 44.

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.
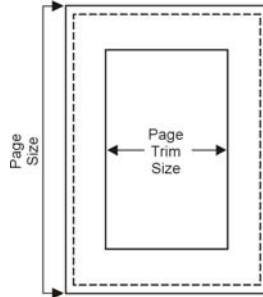
3. Select the desired **Orientation** (**Portrait** or **Landscape**) for the trim size. If you specify the wrong orientation, an unsuitable template might be selected and the job might be cropped.

Template

The **Imposition method** option that you select determines which layouts appear in the **Layout** list. There are two types of layouts:

*   System layouts

    ❑ The **Custom** option enables you to set up custom imposition parameters for this job. This layout is available for all imposition methods.

    ❑ When the **Best Fit** option is selected, the server determines how many columns and rows will best fit the sheet and whether the pages need to be rotated 90 degrees according to the imposition method and paper size that you have chosen. The **Best Fit** layout is available for the **Step & Repeat**, **Step & Continue**, and **Cut & Stack** imposition methods.

*   User-defined templates (created in the **Imposition Template Builder**)

For more information about user-defined templates, see *Creating, Viewing and Modifiying Imposition Templates* on page 72.

Note: If you select **Best Fit** or a user-defined layout, some or all of the other parameters are unavailable.

To select Template options:

1. From the **Layout** list, select the desired layout.

2. Set the number of columns and rows. The columns and rows indicate how the pages will be placed on the sheet.

   a. From the **Columns** list, select the number of pages to place horizontally.

      The template preview area displays your settings.

   b. From the **Rows** list, select the number of pages to place vertically.

      The template preview area displays your settings.

3. From the **Print Method** list, select an option.

4. From the **Binding** method list, select an option.

   Note: The **Binding** option is available only when **Saddle Stitch** or **Perfect Bound is selected** as the **Imposition** method.

5. Select the **North South** check box to place pages 180 degrees from each other, on the same side of the imposed sheet.

   Note: This option is available only when the **Step & Repeat** method is selected and the number of columns and rows is 2×1 or 1×2.

6. Select the **Rotate 90 deg.** check box to rotate all pages 90 degrees to the right. This rotation can help correct imposition conflicts.

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 CX Print 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 163.

Scale

➢ Under **Scale**, select one of the following options:

❑ **Scale by**, to change the scale of all imposed sheets. This is the default option, set to 100%. In the **%** box, type a value from 25% to 400% for how you want to change the scaling of the imposed sheets.

Note: Changing the scaling percentage affects the margins of the job. The margins are updated in proportion to the percentage that you choose.

❑ **Fit layout to sheet size**, to fit the page layout to the sheet size.

The Preview Window

The Preview window enables you to view your imposition layout and settings.

You can open the Preview window at any time and keep it open to check your imposition settings as you select them. The Preview window dynamically reflects any changes that you make.

Note: The Preview window is not available if the **Imposition method** is set to **None**.

To open the Preview window:

➢ Click **preview** ![icon].

In the Preview window, you can perform the following functions:

- Click **Front** ![icon] to view the front pages**.**
- Click **Back** ![icon] to view the back pages.
- Move between sheets by clicking the navigation arrows ![icons]
- Jump to a specific sheet by typing a number in the navigation box.

Gray arrows indicate the direction of the pages on the sheet. The sequence of pages is indicated by the page numbers.

If any parameters conflict, `Imposition Conflict` appears in red in the Preview window and also on the **Imposition** tab.
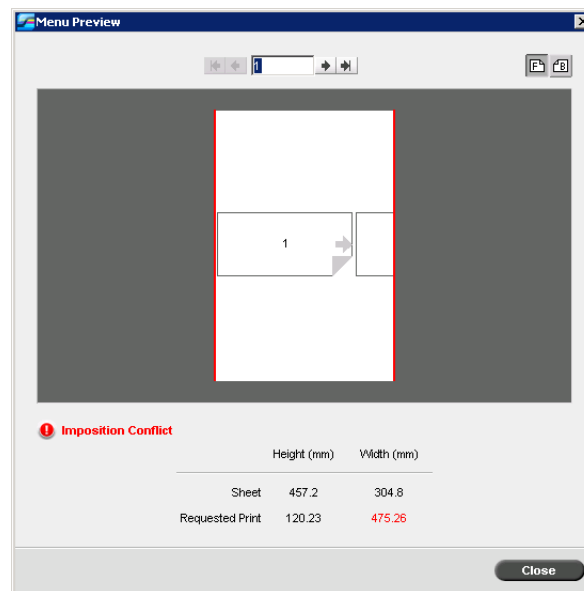
A red border along the edge of the page indicates where the conflict exists.

- If the red border appears along the upper and lower edges of the page, a conflict exists in the **Height** value.

- If the red border appears along the left and right edges of the page, a conflict exists in the **Width** value.

Problematic values appear in red.

> **Note:** To preview the imposed job in the Job Editor window, **Imposed sheets** tab, see *Viewing and Editing Job Parameters* on page 28.

The Services Tab
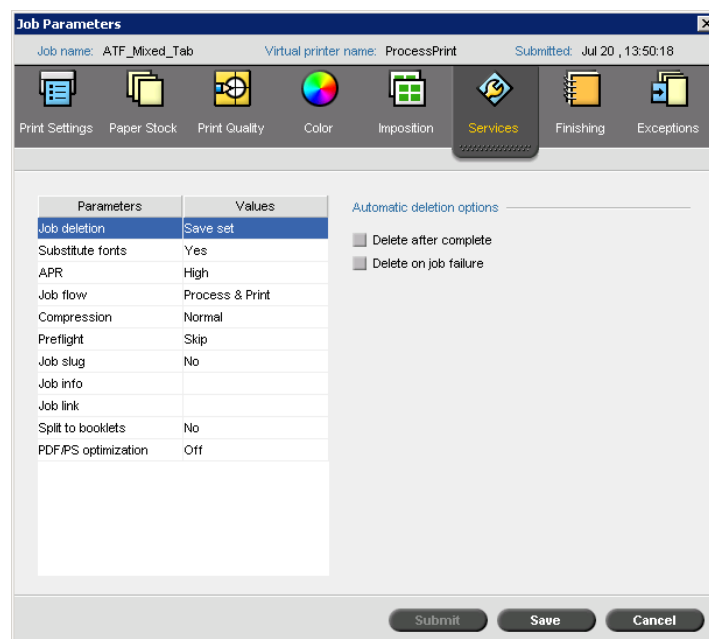
Job Deletion

Select this parameter to delete each page on the fly after it has been successfully printed. In this way, the CX Print 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 101.

APR

For more information on APR, see *Creo APR* on page 81.

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 CX Print Server searches for high-resolution images:

- **Search in the input folder:** The CX Print 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 CX Print 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 CX Print 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 ![pencil].

   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 CX Print Server from the network or from the CX Print Server folders.

➢ Select the desired job flow option:

  ❑ **Process & Print** to set the CX Print 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

➢ Select **Run Preflight check** to check the status of key job components before the job is sent for printing.

    Your job is RIPed and the missing components are identified.

    You can set the preflight check to detect the status of the following key job components:

  ❑ High-resolution images

  ❑ Incorrect links to the high-resolution images folder

  ❑ Missing fonts

  ❑ Spot colors that are not defined in the CX Print Server spot color dictionary

Note: If a job component is missing, the job fails before it is RIPed and an alert message appears. The job is transferred to the Storage window. Information about missing components appears in the Job History window.

The results of the preflight check are displayed in a **Preflight Report**. To issue this report, right-click the RTP job in the Storage window and select **Preflight Report**.

For information on the Preflight Report, see *Preflight Report* on page 106.

Job Slug

1. To print a slug in the margins of your job, select the desired options:

    *   **Color bar** to print a measurable color bar. Looking at this bar, you can tell the state of the printer and whether the quality is consistent. You might need to calibrate the printer or perform color proofing.

    *   **Job name**

    *   **Sheet number and side (front/back)**

    *   **Date and Time**

2. In the **Comment** box, type comments 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**— 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.

➢ 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

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 Distiller software settings, **Optimize for Fast Web View** is selected (in Acrobat 4.0 the corresponding option is **Optimize PDF**).

The Finishing Tab
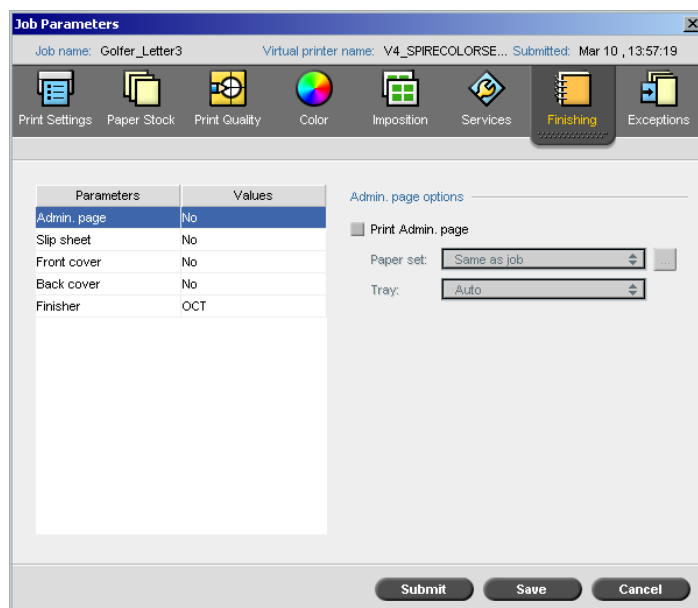
Administration Page

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 44.

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 44.

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 44.

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** checkbox 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).

□ **HCSS** (high capacity 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
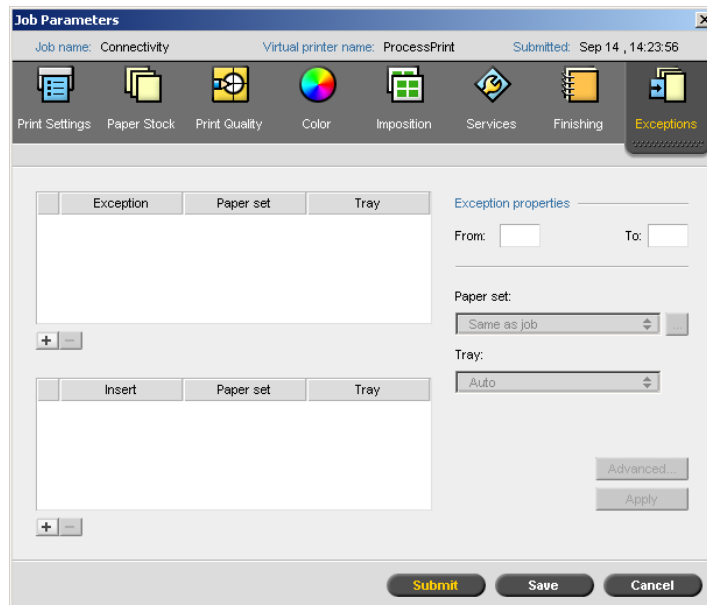
The **Exceptions** tab enables you to add and delete page exceptions and inserts.

Note: You also 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 99.

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 more information about adding paper sets, see *Managing Paper Sets* on page 44.

    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 more information about adding paper sets, see *Managing Paper Sets* on page 44.

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 in three ways:

- Through a virtual printer with predefined PPD file settings

- Through the CX Print Server PPD file

- Through the CX Print Server Print Driver software (for more information, see *CX Print Server Print Driver Software* on page 62

Viewing the PPD File

To print a file from Windows, first set up a CX Print Server virtual 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 available PPD file parameters.

Table 19: PPD parameters

PPD Parameter	Printing Options
Print Method	See *Print Method* on page 186.
Image orientation for imposition	See *Sizes* on page 198.
Reverse Print Order	See *Print Order* on page 186.
Face Up	See *Delivery* on page 186.
Collation	See *Collation* on page 186.
Image Scale	See *Image Scale* on page 187.
Rotate 180	See *Rotate 180°* on page 187.
Paper Set	See *The Paper Stock Tab* on page 188.
Type	See *Type* on page 188.

Table 19: PPD parameters

PPD Parameter	Printing Options
Weight	See *Weight* on page 189.
Coating	See *Coating* on page 189.
Text/Line Quality	See *Text /Line Quality* on page 190.
Image Quality	See *Image Quality* on page 191.
Trapping	See *Trapping* on page 191.
Black Overprint	See *Black Overprint* on page 192.
PS Overprint	See *PS Overprint* on page 192.
Image Noise	See *Image Noise* on page 192.
Color Mode	See *Color Mode* on page 193.
RGB Workflow	See *RGB Workflow* on page 193.
Gray RGB	See *RGB Workflow* on page 193.
Rendering Intent for RGB	For setting this parameter, see *RGB Workflow* on page 193. For more information on rendering intent, see *rendering intent* on page 222.
CMYK Workflow	See *CMYK Workflow* on page 193.
Emulate Source Paper Tint	See *CMYK Workflow* on page 193.
Emulate RGB Elements	See *CMYK Workflow* on page 193.
Preserve Pure Colors	See *CMYK Workflow* on page 193.
Rendering Intent for CMYK	See *CMYK Workflow* on page 193.
Use Spire Spot color dictionary	See *Spot Workflow* on page 194.
Destination profile	See *Destination Profile* on page 194.
Calibration	See *Calibration* on page 195.
Screening Method	See *Screening* on page 195.
Ink Saving (GCR)	See *Ink Saving (GCR)* on page 196.
Brightness	See *Color Adjustments* on page 196.
Contrast	See *Color Adjustments* on page 196.
Automatic Deletion	See *Job Deletion* on page 204.
APR	See *APR* on page 204.
Job Flow	See *Job Flow* on page 206.

Table 19: PPD parameters

PPD Parameter	Printing Options
Split to booklets	See *Split to Booklets* on page 207.
Admin Page	See *Administration Page* on page 208.
Slip Sheet	See *Slip Sheet* on page 209.
Finisher Module	See *Finisher* on page 210.
Finisher Offset	See *Finisher* on page 210.
Staple Options	See *Finisher* on page 210.
Mixed paper size document	See *Mixed Paper Size* on page 189
Account	See *Job Info* on page 207.
Recipient	See *Job Info* on page 207.
Job Comments	See *Job Info* on page 207.

Glossary

24-bit/3-byte image An image that is either CMY or RGB and uses 8 bits for each CMY or RGB pixel. Since 3 bytes equal 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 pixel, or 8 bits for each RGB pixel and 8 pixels for a mask layer or other future use. Since 4 bytes equal 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 A 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 either 256 tones of one color or 256 different colors. Since 1 byte equals 8 bits and each bit has two choices, 1 byte equals 256 possibilities.

absolute colorimetric A method of color matching during the translation of files from one device to another. The absolute colorimetric method refers to the use of device-independent color space.

additive color model A color system in which the picture is composed of a combination of red (R), green (G), and blue (B) light transmitted by the original subject. This system is effective for monitors and televisions but not for print. Scanners normally scan in RGB, which is then converted to CMYK for printing. See also *CMYK*, *process colors*, and *RGB*.

aliasing A steplike effect in which angled lines or curved edges of elements in an electronic image look broken or jagged. Aliasing occurs when an image is produced in a grid format. You can reduce the effect by increasing the resolution or using a technique called antialiasing, which softens the edges.

amplitude-modulated (AM) screening A type of halftone screening in which the size of the dots varies but the spacing between dot centers is constant. For darker areas, the dots are bigger, and for lighter areas, they are smaller. Compare to *frequency modulated (FM) screening*.

anti-aliasing A technique to soften the jagged appearance of the edges of an aliased image. See *aliasing*.

Automatic Picture Replacement (APR) Creo technology in which two versions of a file are created-a high-resolution file and a low-resolution file called PSImage. You use the latter file for positioning and manipulating images in DTP software. The high-resolution file automatically replaces the low-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	Contraction of *binary digit*, the smallest unit of information in a computer. The information consists of one of two values-1 (representing true, or on) or 0 (representing false, or off). See also *byte*.
bitmap	One-bit images composed of individual pixels. Bitmaps can be used on-screen or printed on paper.
bleed	An extra amount of a printed image that extends beyond the trim edge of the sheet or page.
booklet	In a variable information (VI) job, a personalized copy of a document. A booklet can consist of several pages, but the entire document is targeted at a specific individual or address. VI jobs contain elements that differ from booklet to booklet, including text, graphics, pictures, and page backgrounds. See also *variable information (VI) job*.
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 of 256 distinct shades.
CMYK	Cyan, magenta, yellow, and black, the printing colors for process color production.
color gamut	The range of possible colors in any color system.
color separation	The process of splitting a file into single-color components. For example, a CMYK file is separated into four files, each containing only one color-cyan, magenta, yellow, or black. *Color separation* also refers to the data for a single-color channel used to create an image. See *CMYK*.
color space array (CSA)	A three-dimensional or four-dimensional lookup table that contains data for translating a device-dependent color space into a device-independent L*a*b* color space.
Commission Internationale de l'Eclairage (CIE)	In English, *International Commission on Illumination*. This commission established a color specification based on the perception of an "average standard observer" in different types of lighting (illuminants). CIE color coordinates specify proportions of the three additive colors required to produce any hue and are used for comparative color measurement.
composite mode	A mode of operation in which all the color information associated with a particular page is described on one page of a PostScript file. During RIP, the file is separated into process colors and spot colors, one file for each color. This mode of operation is the fastest and most efficient in most cases.
continuous-tone image	An image that is represented by a series of evenly graduated tones rather than by pure black and white. In some Creo systems, gradient tones and continuous-tone data are converted to CT format.

creep	The extension of middle pages of a folded signature slightly beyond outside pages. Shingling compensates for creep.
crop	To eliminate portions of an illustration or photograph so the remainder is clearer, more interesting, or able to fit in the layout.
degradé	A gradual blend or transition between colors. Also known as *vignette* or *graduated blend.*
desktop color separation (DCS)	An EPS format containing five files: four of the files contain the separated color information for each of the CMYK colors and the fifth is a low-resolution composite file for use in electronic page layout. DCS1 format has five separate files. One file acts as the preview and the other four contain the information for printing the different channels of CMYK color.
desktop publishing (DTP)	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.
digital front end (DFE)	In electronic publishing, the workstation or group of workstations containing the software for preparing pages of type and graphics; in prepress, the workstation that gives access to the user for the operation of hardware-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 percent to a solid ink density at 100 percent. The size of a single dot is stated in a percentage of the area it occupies.
encapsulated PostScript (EPS)	A subset of the PostScript language. EPS describes images in a format that can be imported into other documents.
finishing stage	Stage following the press process, which may include procedures such as laminating, perforating, and varnishing.
font	A set of type characters used in a textual printing job. Fonts typically contain alphabetical and numerical type, as well as common special symbols, such as marks of punctuation.
frame	A thin line surrounding an image. Also known as *keyline*. Also a color overlap created intentionally at a color border so as to minimise the effects of misregistration. Also known as *trap* or *grip*. See also trapping.
frequency modulated (FM) screening	A method of creating halftones where the spots are all the same size, but the frequency or number of dots 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, size, or weight.
graduated blend	See *degradé.*
gray component replacement (GCR)	A method for reducing the CMY amounts that produce the gray component in a color, without changing the color hue.
grayscale	Describing a progression of gray tones from white to black. Digital grayscale images have up to 256 levels of gray. See also *8-bit/1-byte image.*
halftone	A negative or positive image whereby detail of the image is reproduced with dots varying area but of uniform density. Creates the illusion of continuous tone when viewed with the naked eye. The density of the dot pattern depends on the fineness of the screen (measured in lines per inch). The process of removing the screen (and reverting to a continuous tone image) is descreening.
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 percent. See also *midtones* and *shadows.*
imposition	The arrangement of pages on the front and back of a press sheet that will ensure the correct order of pages after the printed sheet is folded, bound, and trimmed.
job flow	The job parameter settings of selected virtual printers, which are automatically applied to all jobs printed using those virtual printers. 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 Folder. A file sent to a Process & Store job flow virtual printer will be RIPed and stored, without printing.
LaserWriter driver	A part of the Mac OS software that generates PostScript instructions from a file when the Print command is selected. A *LaserWriter* is an *Apple* laser printer.
line work	Data characterized by sharply defined lines and very clear transitions from one color to another-for example, text. Line work is stored in the computer as a series of geometric (vector) drawing instructions.
long edge first (LEF)	A printer page orientation where pages are delivered to the printer with the long edge of the paper going in first.
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.

metamerism   Metamerism occurs when two colors match under one light source, but appear different under another light source. Those two colors are called a metameric match. A metameric match might cause problems when trying to match proofs to press-sheets under different lighting conditions.

midtones   Density values of an image (original or reproduction) between the highlights and shadows. In a reproduction, midtones are printed with dot areas between approximately 40 percent and 60 percent coverage. See also *highlights* and *shadows*.

misregistration   A situation common during printing, where one or more color separations is slightly misaligned with regard to the others on press. Misregistration shows up as white gaps or tinted overlaps at the borders of color pairs. Trapping is intended to ensure that white gaps do not appear when misregistration occurs. On contone images, misregistration can lead to blurring. See also *overprint* and *trap (verb)*.

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.

OPI   Abbreviation for Open Prepress Interface. A term relating to the use of low-resolution placeholder versions of high-resolution images. Low-resolution images are automatically replaced with high-resolution images when a page layout is output. It minimizes high-resolution file travel across networks and offers faster page layout.

output resolution   The number of separate image points (spots) that a device is physically able to write, expressed in lines per millimeter or lines per inch. Also called *exposure resolution* and *plotter resolution*.

output tone curve   A graph showing the relationship of original input densities and the corresponding dot percentages on film.

overprint   To print over an area that has already been printed.

perceptual rendering intent   A compression of the total gamut from a source device's color space into the gamut of a target device's color space, when one or more colors in the original image are out of the gamut of the target color space. This preserves the visual relationship between colors by shrinking the entire color space and shifting all colors-including colors that are in-gamut. It is primarily used for photographic images.

PICT   A file format used with Macintosh graphics and page-layout software as an intermediary for transferring files between software.

pixel   A contraction of the words *picture element*. The smallest unit of a bitmapped image that appears on-screen.

PostScript   A page description language developed by Adobe Systems, Inc. that describes the appearance (graphics and text) of a printed page. Also called PostScript Level 1. See also *encapsulated PostScript (EPS)*.

prepress	The steps necessary to prepare a design for final printing on a printing press. May include preflight, color correction, color trapping, imposition, color separation, proofing, and imagesetting. Also called *digital prepress*.
printer description file	A PPD file or PDF file that is used to prepare pages and documents for specific output devices.
Printer Description Language (PDL)	A computer language, such as PostScript, that describes an entire page as a series of codes, allowing for viewing or output on any device that can decode the language. Also called *page description language*.
process colors	The four ink colors that are used to reproduce full-color images: cyan, magenta, yellow, and black (CMYK). Combinations of CMYK are used to reproduce many colors of the spectrum.
PSImage	A low-resolution EPS file (also known as a *Scitex.e* file) that is part of the Automatic Picture Replacement (APR) workflow. You use PSImage files to position images in page layout. You can create and edit a PSImage file in various applications, such as PSImage Exporter in *Photoshop*, Copydot Toolkit, and oXYgen software. If you edit a PSImage file (for example, you add a mask or a clipping path), the Creo workflow software applies your changes to the high-resolution file and automatically replaces the PSImage file during the RIP process. See also *Automatic Picture Replacement (APR)*.
quartertone	Tonal values seen around the 25 percent range in tonal gradation between highlights and shadows. A quartertone is midway between a highlight and a midtone. See also *highlights*, *midtones*, and *shadows*.
raster	Images or type that has been input, processed, and output line-by-line. Also called a *bitmap*.
rasterization	The process of converting a vector-based image to a bitmap. See also *RIP (verb)*.
register (verb)	To position two or more colors, images, or plates in exact alignment with each other.
register mark	A small pattern (for example, a circle with a cross through it) positioned in non-imaged areas of negatives, positives, color separations, and plates to ensure correct alignment (register) of colors and/or images that will be printed in succession. Also called an *angle mark*. See *register (verb)*.
relative colorimetric	A method of color matching. When translating colors from one device to another, it retains the colors that fall within the range of both devices.
rendering intent	The compression method-a mathematical algorithm-used when mapping and translating colors from one color gamut to another. It allows for compression of out-of-gamut colors into the color capability of the press used.

resolution	The number of pixels, points, or dots per unit of linear measurement- for example, pixels per millimeter on a video display or dots per inch or millimeter on film or paper. Resolution usually describes the same number of pixels on the vertical and horizontal axes-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 is.
RGB	Abbreviation for the additive primaries-red, green, and blue. These colors are the predominant colors in the visible light spectrum that the human eye can detect. The RGB colors are used, for example, in video monitors, scanners, and other devices in which the light is direct and not reflected.
RIP (noun)	A hardware and software configuration that is used with output devices to convert a vector-based image to a raster (bitmap) image. See also *raster* and *vector drawing*.
RIP (verb)	To convert PostScript data to raster data.
saturated color	A color in which the high and medium values approach 100 percent. In a clean, saturated color, the values of the wanted colors are near 100 percent and the value of the unwanted color is near 0 percent. For example, for red, a combination of 5 percent cyan, 90 percent magenta, and 80 percent yellow is more saturated than 30 percent cyan, 90 percent magenta, and 80 percent yellow.
saturation	The strength (chroma or purity) of a color.
screen angle	The angle of rows of halftone dots, expressed in degrees. During the printing process, the dot arrangement of each separation is placed at a different angle to the other separations. See also *moiré*.
screen ruling	The density of dots on a halftone screen, commonly measured in lines per inch (lpi); also called *line frequency*, *raster*, or *mesh*.
shadows	The darkest part of an image (original and reproduction). A shadow has densities near the maximum. In a reproduction, shadows are printed with dot areas between 80 percent and 100 percent. Compare to *highlights* and *midtones*.
short edge first (SEF)	A printer page orientation where pages are delivered to the printer with the narrow edge of the paper going in first.
signature	A printed sheet folded into 4, 8, 16, or 32 pages to form a section of a book or pamphlet. Also called a *form*. Signature also refers to the flat printed sheet that will later be folded.
solid	An area of an image that is printed with a dot area of 100 percent. See also *highlights*, *midtones*, and *shadows*.
spectrophotometer	An instrument that takes spectral readings of color wavelengths from a color sample.

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. Graphic artists sometimes use spot colors to define corporate colors or company logos. In the CX Print Server, spot colors are translated into CMYK values by means of a dictionary in which userscan edit the CMYK values.

step and repeat   The procedure of copying the same image by stepping it in position both horizontally and vertically according to a predetermined layout.

three-quartertone   Tone area of an image that has density values between the midtone and the dark point. Three-quartertone is typically printed with a dot area near 75 percent.

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. Tone reproduction curves are used to correct for press-related effects such as dot gain and to control image tonality.

trap (verb)   To slightly overlap adjacent printed colors to ensure that white space does not appear between them due to misregistration.

unsaturated color   A color whose highest value is less than approximately 80 percent.

variable information (VI) job A job in which printed materials such as bills, targeted advertising, and direct mailings are individualized for specific recipients or purposes.

variable print specification (VPS) Formal language designed for effective production of variable information documents.

vector drawing   The geometric system used to define lines and curves in computer graphics. It is most often used for line drawings.

vignette   See *degradé*.

virtual printer   A printer that contains 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 three to five percent).

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